

# MONITORAMENTO EM BIOTECNOLOGIA

## Desenvolvimento científico e tecnológico

### Foco – Brasil

### 2º Relatório

Executor:

Sistema de Informação sobre a Indústria Química (SIQUIM)

Escola de Química (EQ)

Universidade Federal do Rio de Janeiro (UFRJ)



Janeiro / 2005



EQUIPE:

**Coordenação Geral:**

Profª Dra. Adelaide Antunes

**Coordenação Técnica:**

Dra. Cláudia Canongia

**Pesquisadores:**

Simone Alencar

Nicomedes Déscio Pereira Neto

Andressa Gusmão

Daniel Hoefle

Fernando Tibau

Max Arnor

Engenheira Química, Doutoranda EQ/UFRJ

Químico Industrial, Mestrando EQ/UFRJ

Estagiária, Escola de Química EQ/UFRJ

Estagiário, Escola de Química EQ/UFRJ

Estagiário, Escola de Química EQ/UFRJ

Estagiário, Ciências Atuariais IM/UFRJ

## SUMÁRIO

<b>Introdução</b> .....	<b>5</b>
<b>1. Artigos em biotecnologia</b> .....	<b>8</b>
<b>I - Artigos relacionados com a Amazônia</b> .....	<b>10</b>
1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO .....	11
2. TEMA: DEFESA AGROPECUÁRIA.....	13
3. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS.....	20
4. TEMA: PROGRAMAS DE DESCOBERTA.....	21
<b>II - Artigos relacionados com o Brasil</b> .....	<b>23</b>
1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO .....	24
2. TEMA: BIOECONOMIA .....	26
3. TEMA: BIORREMEDIAÇÃO .....	26
4. TEMA: DEFESA AGROPECUÁRIA .....	27
5. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE .....	46
6. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS .....	46
7. TEMA: PROGRAMAS DE DESCOBERTA.....	47
8. TEMA: SEGURANÇA BIOLÓGICA .....	50
<b>III - Artigos publicados por autores vinculados a instituições brasileiras</b> .....	<b>51</b>
1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO .....	52
2. TEMA: BIOECONOMIA.....	58
3. TEMA: BIOINDÚSTRIA .....	58
4. TEMA: BIOINFORMÁTICA .....	59
5. TEMA: BIORREMEDIAÇÃO .....	60
6. TEMA: CERTIFICAÇÃO DE QUALIDADE BIOLÓGICA .....	61
7. TEMA: DEFESA AGROPECUÁRIA .....	61
8. TEMA: FARMACOGENÉTICA .....	68
9. TEMA: FERTILIDADE E REPRODUÇÃO ANIMAL.....	68
10. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE .....	69
11. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS .....	70
12. TEMA: PROGRAMAS DE DESCOBERTA .....	73
13. TEMA: SEGURANÇA BIOLÓGICA.....	96
14. TEMA: SUSTENTABILIDADE AMBIENTAL .....	98
<b>2. Patentes em biotecnologia</b> .....	<b>100</b>
<b>I. Patentes relacionadas com a Amazônia</b> .....	<b>101</b>
1. TEMA: BIOINDÚSTRIA .....	101
2. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE .....	103
3. TEMA: PROGRAMAS DE DESCOBERTA.....	106
4. TEMA: SUSTENTABILIDADE AMBIENTAL.....	108
<b>II. Patentes relacionadas com o Brasil</b> .....	<b>111</b>
1. TEMA: BIOINDÚSTRIA .....	111
2. TEMA: BIORREMEDIAÇÃO .....	128
3. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE .....	130
4. TEMA: PROGRAMAS DE DESCOBERTA.....	139

5. TEMA: SUSTENTABILIDADE AMBIENTAL.....	147
<b>III. Patentes depositadas no Brasil .....</b>	<b>155</b>
1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO .....	156
2. TEMA: BIOECONOMIA.....	156
3. TEMA: BIOINDÚSTRIA .....	157
4. TEMA: BIORREMEDIAÇÃO.....	173
5. TEMA: CERTIFICAÇÃO DE QUALIDADE BIOLÓGICA .....	173
6. TEMA: FERTILIDADE E REPRODUÇÃO ANIMAL .....	174
7. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE .....	175
8. TEMA: PROGRAMAS DE DESCOBERTA.....	181
9. TEMA: SEGURANÇA BIOLÓGICA.....	195
10. TEMA: SUSTENTABILIDADE AMBIENTAL .....	195

## Introdução

Este relatório tem como objetivo apresentar os títulos de artigos e patentes, do período de 1994-2004, que contém no título ou no resumo os temas e respectivos termos solicitados pelo CGEE e estão relacionados com a Amazônia e Brasil. Desta forma tem-se três sub-conjuntos de artigos e patentes:

- Relacionados com a Amazônia
- Relacionados com o Brasil
- Artigos publicados por autores de instituições brasileiras e patentes depositadas no Brasil.

As fontes bibliográficas para este estudo foram a *Web of Science* para identificação de artigos científicos e *Derwent Innovation Index* para identificação de patentes.

As pesquisas foram realizadas a partir dos temas e termos propostos pelos especialistas em biotecnologia e entregue pelo Prof. Sérgio Salles (UNICAMP representando o CGEE), apresentados na tabela a seguir.

**Tabela – Temas e termos de busca para monitoramento em biotecnologia**

BIOTECNOLOGIA	
TEMAS	TERMOS
1. Biodiversidade/ Bioprospecção	Bancos de germoplasma
	Herbários e demais formas de conservação ex situ
	Legislação ágil e eficiente
	Plantas/Animais e Microbiota
	Biodiversidade marinha
	Acesso ao patrimônio Genético
	Conhecimento tradicional
	Mercado de produtos da floresta
	Propriedade intelectual
	Fitomedicamentos
2. Bioeconomia	Mercado Nacional e Internacional
	Patentes
	Cadeia produtiva
	Inovação tecnológica
	Projetos pré-competitivos
3. Bioindústria	Produtos orgânicos
	Cadeia produtiva
	Produtos pré-competitivos
	Valor agregado
	Bioprodutos
	Produtos com alta, média e baixa incorporação de (bio)tecnologia
	Marketing de Biotecnologia
<i>Branding</i>	

<b>BIOTECNOLOGIA</b>	
<b>TEMAS</b>	<b>TERMOS</b>
	<i>Designing</i>
4. Bioinformática	Redes
	Software
	Gestão do conhecimento
	Aplicações para Genomas, proteomas e biodiversidade
5. Biorremediação	Meio ambiente
	Indústrias com passivo ambiental alto
	Microorganismos
6. Bioterrorismo	Legislação
	Capacitação de pessoal
	Inteligência
7. Certificação de qualidade biológica	Coleções certificadas
	Qualidade industrial
	Microorganismos
8. Competitividade da Economia Nacional	Fertilidade e Reprodução Animal
9. Defesa Agropecuária	Controle de pragas
	Espécies invasoras
	Normas internacionais
	Infra-estrutura para biossegurança
	Normas de qualidade
	Capacidade Antecipativa
	Leitura de Cenários
	Capacidade de Integração de Órgãos e Arcabouços Legais
	Sistemas Efetivos de Monitoramento
	Recursos Humanos
10. Farmacogenética	Fármacos
	Fitomedicamentos
	Custo/benefício
	Genoma de populações
11. Fertilidade e reprodução animal	Melhoria genômica
	Competitividade
	Clonagem
	Células tronco
	Novos fármacos
12. Financiamento	Capital de risco
	Eficiência das agências públicas
	Formas ágeis de avaliação
	Capitalização das empresas
	Espaço para micro-empresas
13. Gestão de Informação Biológica	Bancos de dados
	Propriedade da informação
	Pessoal qualificado
	Desenvolvimento de <i>software</i>
	Integração de Sistemas
	Redes Cooperativas
14. Integração: alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)
	Novas formulações
	Alimentos especiais para populações especiais
	Qualidade de vida
	Bem estar
	Produtos orgânicos
	Organismos Geneticamente Modificados
	Produção de Vacinas em Plantas e Animais
Produção de Hormônios	

<b>BIOTECNOLOGIA</b>	
<b>TEMAS</b>	<b>TERMOS</b>
15. Inteligência Quarentenária	Informação
	Espécies invasoras
	Qualidade agropecuária
16. Metagenômica/ Prospecção Gênica	Ver Biodiversidade/ Bioprospecção
	Remediação ambiental
17. Mudanças climáticas globais	Monitoramento
	Mudanças nos padrões de produção
	Processos Evolutivos
	Vetores de Transformação Gênica
	Expressão Gênica e Ambiente
	Erradicação de sensibilidade a fotoperíodo
18. Programas de Descoberta	Incentivos de P&D voltado para produtos
	Novas formas de abordagens do material biológico
	Clonagem
	<i>Stem Cells</i>
	Genômica Funcional
	Farmacogenética
	Engenharia Genética
	Nanobiotecnologia
	Proteômica
	Evolução direcionada
	<i>In silico biology</i>
Biologia de sistemas	
19. Segurança Biológica	Informação
	Banco de dados
	Níveis de segurança
	Laboratórios existentes
	Normas internacionais
	Pessoal qualificado
	Qualidade da Segurança Biológica
	Fluxo Gênico
	Percepção Pública
20. Sustentabilidade Ambiental	OGMs
	Biodisponibilidade de Nutrientes
	Bioinseticidas
	Biofungicidas
	Controle Biológico

## 1. Artigos em biotecnologia

Na tabela a seguir estão assinalados os temas/termos onde foram localizados documentos nos três subconjuntos: artigos relacionados à Amazônia, artigos relacionados ao Brasil e artigos de autores vinculados à instituições brasileiras, com a ocorrência dos termos no título (tit) ou resumo (res).

### Artigos - Distribuição por temas e termos dos artigos em biotecnologia

TEMAS/TERMOS		Relacionados à Amazônia		Relacionados ao Brasil		Autores de Instituições brasileiras	
		TIT	RES	TIT	RES.	TIT	RES
TEMA: Biodiversidade/ Bioprospecção		X	X	X	X	X	X
Termos da Biodiversidade/ Bioprospecção	Bancos de germoplasma		X		X	X	X
	Herbários e demais formas de conservação ex situ		X	X	X	X	X
	Legislação ágil e eficiente		X	X	X		X
	Biodiversidade marinha		X	X	X	X	X
	Acesso ao patrimônio Genético		X		X		X
	Conhecimento tradicional	X	X		X		X
	Mercado de produtos da floresta		X		X		X
	Propriedade intelectual		X		X		X
	Fitomedicamentos	X	X	X	X	X	X
TEMA: Bioeconomia			X	X	X	X	X
TEMA: Bioindústria							
Termos da Bioindústria	Bioprodutos		X		X	X	X
TEMA: Bioinformática			X		X	X	X
Termos da Bioinformática	Aplicações para Genomas, proteomas e biodiversidade				X		X
TEMA: Biorremediação			X			X	X
Termos da Biorremediação	Meio ambiente		X			X	X
	Microorganismos		X			X	X
TEMA: Bioterrorismo					X		X
TEMA: Certificação de qualidade biológica							
Termos da Certificação de qualidade biológica	Coleções certificadas		X		X		X
	Microorganismos				X	X	X
TEMA: Defesa Agropecuária		X	X	X	X	X	X
Termos da Defesa Agropecuária	Sistemas Efetivos de Monitoramento		X	X	X	X	X
TEMA: Farmacogenética					X	X	X
TEMA: Fertilidade e reprodução animal			X		X	X	X
Termos da Fertilidade e reprodução	Clonagem						X
TEMA: Integração: alimentação, nutrição e saúde			X		X		X



TEMAS/TERMOS		Relacionados à Amazônia		Relacionados ao Brasil		Autores de Instituições brasileiras	
		TIT	RES	TIT	RES.	TIT	RES
Termos da Integração: alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)				X	X	X
	Qualidade de vida						X
	Produção de Vacinas em Plantas e Animais		X	X	X	X	X
TEMA: Metagenômica/ Prospecção Gênica					X		X
TEMA: Mudanças climáticas globais		X	X	X	X	X	X
TEMA: Programas de Descoberta		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Termos da Programas de Descoberta	Clonagem	X	X	X	X	X	X
	<i>Stem Cells</i>			X	X	X	X
	Genômica Funcional				X	X	X
	Farmacogenética						X
	Engenharia Genética				X	X	X
	Proteômica	X	X		X	X	X
TEMA: Segurança Biológica			X	X	X	X	X
Termos da Segurança Biológica	Níveis de segurança				X		X
	Fluxo Gênico						X
TEMA: Sustentabilidade Ambiental			X		X		
Termos da Sustentabilidade Ambiental	OGMs				X		X
	Bioinseticidas				X	X	X
	Biofungicidas				X		X

## I - Artigos relacionados com a Amazônia

A tabela a seguir mostra a frequência de artigos que citam a Amazônia no título e no resumo, para os temas e termos deste estudo.

TEMA/TERMOS DE BIOTECNOLOGIA		Relacionados à Amazônia	
		TITULO	RESUMO
TEMA: Biodiversidade/ Bioprospecção		19	290
TERMOS da Biodiversidade/ Bioprospecção	Bancos de germoplasma	0	1
	Herbários e demais formas de conservação ex situ	0	13
	Legislação ágil e eficiente	0	4
	Biodiversidade marinha	0	2
	Acesso ao patrimônio Genético	0	1
	Conhecimento tradicional	1	3
	Mercado de produtos da floresta	0	43
	Propriedade intelectual	0	1
	Fitomedicamentos	2	10
TEMA: Bioeconomia		0	2
TEMA: Bioindústria		0	0
Termos da Bioindústria	Bioprodutos	0	2
TEMA: Bioinformática		0	2
TEMA: Biorremediação		0	1
Termos da Biorremediação	Meio ambiente	0	1
	Microorganismos	0	1
TEMA: Certificação de qualidade biológica		0	0
Termos da Certificação de qualidade biológica	Coleções certificadas	0	1
TEMA: Defesa Agropecuária		103*	730*
Termos da Defesa Agropecuária	Sistemas Efetivos de Monitoramento	0	42
TEMA: Fertilidade e reprodução animal		0	2
TEMA: Integração: alimentação, nutrição e saúde		0	8
Termos da Integração: alimentação, nutrição e saúde	Produção de Vacinas em Plantas e Animais	0	21
TEMA: Mudanças climáticas globais		10	270
TEMA: Programas de Descoberta		n.a.	n.a.
Termos da Programas de Descoberta	Clonagem	3	43
	Proteômica	1	2
TEMA: Segurança Biológica		0	1
TEMA: Sustentabilidade Ambiental		0	3

\* Estes números se referem à artigos sobre agropecuária e Amazônia  
n.a. = não se aplica. O tema programas de descoberta não é um termo de busca.

Nos itens que se seguem são apresentados os títulos, autores e instituição de correspondência dos artigos relacionados aos temas/termos deste estudo. Utilizou-

se a instituição de correspondência como referência do local de realização da pesquisa.

Embora não tenha sido feita análise de conteúdo dos artigos localizados, cabe destacar que através dos títulos observa-se que há artigos relacionados com a região amazônica de outros países.

## 1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO

Apresenta-se a seguir os títulos dos 19 artigos que citam Amazônia no título, sobre o tema *biodiversidade/bioprospecção*, com seus respectivos autores e instituição de correspondência.

Título	Autores	Instituição de correspondência
The impact of global climate change on tropical forest <b>biodiversity</b> in <b>Amazonia</b>	Miles, L Grainger, A Phillips, O	Univ Leeds
A multi-scale study of soil macrofauna <b>biodiversity</b> in <b>Amazonian</b> pastures	Mathieu, J Rossi, JP Grimaldi, M Mora, P Lavelle, P Rouland, C	IRD
Malocas and barracones. Tradition, <b>biodiversity</b> , and participation in the Colombian <b>Amazon</b>	Serje, M	-
Traditional knowledge and areas of <b>biodiversity</b> in Brazilian <b>Amazonia</b>	Pinton, F	Univ Paris
Multivariate mapping of spatial variation in <b>biodiversity</b> in Peruvian <b>Amazonia</b>	Rose, S Grainger, A	Univ Leeds
A <b>biodiversity</b> assessment of bats (Chiroptera) in a tropical lowland rainforest of Central <b>Amazonia</b> , including methodological and conservation considerations	Sampaio, EM Kalko, EKV Bernard, E Rodriguez-Herrera, B Handley, CO	Univ Ulm
Prospects for conserving <b>biodiversity</b> in <b>Amazonian</b> extractive reserves	Moegenburg, SM Levey, DJ	Smithsonian Inst
Environmental impacts generating <b>biodiversity</b> : Ecological behaviors of the Hoti of the Maigualida Mountain Range, Venezuelan <b>Amazon</b>	Zent, EL Zent, S	Inst Venezolano Invest Cient
<b>Biodiversity</b> as an environmental service in Brazil's <b>Amazonian</b> forests: risks, value and conservation	Fearnside, PM	Natl Inst Res Amazon
<b>Amazonian biodiversity</b> : assessing conservation priorities with taxonomic data	Kress, WJ Heyer, WR Acevedo, P Coddington, J Cole, D Erwin, TL Meggers, BJ Pogue, M Thorington, RW Vari, RP Weitzman, MJ	Smithsonian Inst

Título	Autores	Instituição de correspondência
	Weitzman, SH	
Resources lacking to save <b>Amazon biodiversity</b>	Kauffmann-Zeh, A	
What satellite imagery and large-scale field studies can tell about <b>biodiversity</b> patterns in <b>Amazonian</b> forests	Tuomisto, H	Univ Turku
The role of ecological knowledge in explaining biogeography and <b>biodiversity</b> in <b>Amazonia</b>	Tuomisto, H Ruokolainen, K	UNIV TURKU
<b>Amazon biodiversity</b> - a renewable natural-resource	SEIDL, PR	UFRJ
Future-oriented mapping of <b>biodiversity</b> in <b>amazonia</b>	GOTTLIEB, OR	FIOCRUZ MS
Dissecting <b>amazonian biodiversity</b>	TUOMISTO, H RUOKOLAINEN, K KALLIOLA, R LINNA, A DANJOY, W RODRIGUEZ, Z	UNIV TURKU
The <b>amazon</b> rain-forest, sustainable development and the <b>biodiversity</b> convention - a political-economy perspective	DORE, MHI NOGUEIRA, JM	CORNELL UNIV
Relating patterns of land-use change to faunal <b>biodiversity</b> in the central <b>amazon</b>	DALE, VH PEARSON, SM OFFERMAN, HL ONEILL, RV	OAK RIDGE NATL LAB
Monitoring <b>biodiversity</b> - analysis <b>amazonian</b> rain-forest sounds	RIEDE, K	UNIV FREIBURG

Em relação aos termos referentes ao tema biodiversidade/bioprospecção, em dois termos (conhecimento tradicional e fitomedicamentos) foram localizados artigos que referem-se em seu título à Amazônia. Os títulos dos artigos, seus autores e instituição de correspondência são apresentados a seguir.

#### a. Conhecimento tradicional

Título	Autores	Instituição de correspondência
<b>Traditional knowledge</b> and areas of biodiversity in Brazilian <b>Amazonia</b>	Pinton, F	Univ Paris

#### b. Fitomedicamentos

Título	Autores	Instituição de correspondência
Inhibition of neurogenic inflammation by the <b>amazonian herbal medicine</b> Sangre de grado	Miller, MJS Vergnolle, N McKnight, W Musah, RA Davison, CA Trentacosti, AM Thompson, JH Sandoval, M Wallace, JL	Albany Med Coll

Título	Autores	Instituição de correspondência
Treatment of gastric ulcers and diarrhea with the <b>Amazonian herbal medicine</b> sangre de grado	Miller, MJS MacNaughton, WK Zhang, XJ Thompson, JH Charbonnet, RM Bobrowski, P Lao, J Trentacosti, AM Sandoval, M	Albany Med Coll

## 2. TEMA: DEFESA AGROPECUÁRIA

Não foram localizados artigos que tratem especificamente sobre defesa agropecuária na Amazônia. A título de ilustração apresentam-se a seguir os títulos dos 103 artigos que citam Amazônia no título, relacionados a agropecuária, com seus respectivos autores e instituição de correspondência.

Título	Autores	Instituição de correspondência
Assessment of soil property spatial variation in an <b>Amazon</b> pasture: basis for selecting an <b>agronomic</b> experimental area	Cerri, CEP Bernoux, A Chaplot, V Volkoff, B Victoria, RL Melillo, JM Paustian, K Cerri, CC	Univ Sao Paulo
Traditional versus <b>agricultural</b> lifestyle among Shuar women of the Ecuadorian <b>Amazon</b> : Effects on leptin levels	Lindgarde, F Widen, I Gebb, M Ahren, B	Lund Univ
Litter decomposition, microbial biomass and activity of soil organisms in three <b>agroforestry</b> sites in central <b>Amazonia</b>	Kurzatkowski, D Martius, C Hofer, H Garcia, M Forster, B Beck, L Vlek, P	Zentrum Entwicklungsforsch
Are <b>agricultural</b> production and forest conservation compatible? <b>Agricultural</b> diversity, <b>agricultural</b> incomes and primary forest cover among small farm colonists in the <b>Amazon</b>	Perz, SG	Univ Florida
Land-use change effects on local energy, water, and carbon balances in an <b>Amazonian agricultural</b> field	Sakai, RK Fitzjarrald, DR Moraes, OLL Staebler, RM Acevedo, OC Czikowsky, MJ Da Silva, R	SUNY Albany

Título	Autores	Instituição de correspondência
	Brait, E Miranda, V	
Modelling species and spacing effects on root zone water dynamics using Hydrus-2D in an <b>Amazonian agroforestry</b> system	Schlegel, P Huwe, B Teixeira, WG	Univ Bayreuth
Microclimate in <b>agroforestry</b> systems in central <b>Amazonia</b> : does canopy closure matter to soil organisms?	Martius, C Hofer, H Garcia, MVB Rombke, J Forster, B Hanagarth, W	Ctr Dev Res
Increasing the profitability of traditional, planted rubber <b>agroforests</b> at the Tapajos river, Brazilian <b>Amazon</b>	Schroth, G Moraes, V da Mota, MSS	Univ Bayreuth
Evaluation of soil fertility in smallholder <b>agroforestry</b> systems and pastures in western <b>Amazonia</b>	Alfaia, SSRibeiro, GANobre, ADLuizao, RCLuizao, FJ	Inst Nacl de Pesquisas da Amazonia
Litter fall, litter stocks and decomposition rates in rainforest and <b>agroforestry</b> sites in central <b>Amazonia</b>	Martius, C Hofer, H Garcia, MVB Rombke, J Hanagarth, W	Ctr Dev Res ZEF Bonn
Floristic inventory of secondary vegetation in <b>agricultural</b> systems of East- <b>Amazonia</b>	Baar, R Cordeiro, MD Denich, M Folster, H	Inst Soil Sci & Forest Nutr
Production and economic potentials of <b>cattle</b> in pasture-based systems of the western <b>Amazon</b> region of Brazil	Rueda, BL Blake, RW Nicholson, CF Fox, DG Tedeschi, LO Pell, AN Fernandes, ECM Valentim, JF Carneiro, JC	Cornell Univ
<b>Agricultural</b> land-use change in Brazilian <b>Amazonia</b> between 1980 and 1995: Evidence from integrated satellite and census data	Cardille, JA Foley, JA	Univ Wisconsin
Yanesha <b>agriculture</b> in the upper Peruvian <b>Amazon</b> : Persistence and change fifteen years down the 'road'	Hamlin, CC Salick, J	Ohio Univ
Land reform and land-use changes in the lower <b>amazon</b> : Implications for <b>agricultural</b> intensification	Futemma, C Brondizio, ES	Indiana Univ
Development of the soil macrofauna community under silvopastoral and <b>agrosilvicultural</b> systems in <b>Amazonia</b>	Barros, E Neves, A Blanchart, E Fernandes, ECM Wandelli, E Lavelle, P	Inst Nacl de Pesquisas da Amazonia
Nitrogen uptake from N-15-enriched fertilizer by four tree crops in an <b>Amazonian agroforest</b>	Dinkelmeyer, H Lehmann, J Renck, A Trujillo, L da Silva, JP Gebauer, G Kaiser, K	Univ Bayreuth
Rubber <b>agroforests</b> at the Tapajo's river,	Schroth, G	Univ Bayreuth

<b>Título</b>	<b>Autores</b>	<b>Instituição de correspondência</b>
Brazilian <b>Amazon</b> - environmentally benign land use systems in an old forest frontier region	Coutinho, P Moraes, VHF Albernaz, AL	
Soil microbial activities in tree-based <b>cropping</b> systems and natural forests of the Central <b>Amazon</b> , Brazil	Menyailo, OV Lehmann, J Cravo, MD Zech, W	Russian Acad Sci
Cows, colonists and trees: rethinking <b>cattle</b> and environmental degradation in Brazilian <b>Amazonia</b>	Muchagata, M Brown, K	Univ E Anglia
Social determinants and land use correlates of <b>agricultural</b> technology adoption in a forest frontier: A case study in the Brazilian <b>Amazon</b>	Perz, SG	Univ Florida
Landscape dynamics and equilibrium in areas of slash-and-burn <b>agriculture</b> with short and long fallow period (Bragantina region, NE Brazilian <b>Amazon</b> )	Metzger, JP	Univ Sao Paulo
Characterizing patterns of <b>agricultural</b> land use in <b>Amazonia</b> by merging satellite classifications and census data	Cardille, JA Foley, JA Costa, MH	Univ Wisconsin
An evaluation of <b>agroforestry</b> systems as a rural development option for the Brazilian <b>Amazon</b>	Yamada, M Gholz, HL	Tokyo Univ Agr & Technol
Growth and yield of some indigenous trees in an <b>Amazonian agroforestry</b> system: a rural-history-based analysis	Yamada, M Gholz, HL	Univ Florida
Mineral nutrition of peach palm ( <i>Bactris gasipaes</i> ) in <b>Amazonian agroforestry</b> and recommendations for foliar analysis	Schroth, G Elias, MEA Macedo, JLV Mota, MSS Lieberei, R	Natl Inst Res Amazon
Wild animals in the garden: Conserving wildlife in <b>amazonian agroecosystems</b>	Naughton-Treves, L	Univ Wisconsin
Mineral nutrition, growth and yields of annatto trees ( <i>Bixa orellana</i> ) in <b>agroforestry</b> on an <b>Amazonian</b> ferralsol	Elias, MEA Schroth, G Macedo, JLV Mota, MSS D'Angelo, SA	Natl Inst Res Amazon
Calving of interval on <b>cattle</b> of Nellore in the Eastern <b>Amazonia</b>	Cavalcante, FA Martins, R Campello, CC Lobo, RNB Martins, GA	-
Gestation length of Nellore <b>cattle</b> in the oriental <b>Amazonia</b>	Cavalcante, FA Martins, R Campello, CC Lobo, RNB Martins, GA	-
Post-partum interval of Nellore <b>cattle</b> in the oriental <b>Amazonia</b>	Cavalcante, FA Martins, R Campello, CC Lobo, RNB Martins, GA	-
Conversion of secondary forest into <b>agroforestry</b> and monoculture plantations in <b>Amazonia</b> : consequences for biomass, litter and soil carbon stocks after 7 years	Schroth, G D'Angelo, SA Teixeira, WG Haag, D Lieberei, R	Natl Inst Res Amazon
Genetic analysis of <i>Eucalyptus urophylla</i> and <i>E. grandis</i> clones selected in commercial <b>crops</b> from the Brazilian <b>Amazon</b> by RAPD markers	Muro-Abad, JI Gomes, EA Cancio, ON	Univ Fed Vicosa

Título	Autores	Instituição de correspondência
	de Araujo, E	
The implication of property rights for joint <b>agriculture</b> -timber productivity in the Brazilian <b>Amazon</b>	Otsuki, T Hardie, IW Reis, EJ	World Bank
Seasonal effects on microorganisms in the rhizosphere of two tropical plants in a polyculture <b>agroforestry</b> system in Central <b>Amazonia</b> , Brazil	Marschner, P Marino, W Lieberei, R	Univ Adelaide
A tropical forest transition? <b>Agricultural</b> change, out-migration, and secondary forests in the Ecuadorian <b>Amazon</b>	Rudel, TK Bates, D Machinguiashi, R	Rutgers State Univ
<b>Agricultural</b> colonization and malaria on the <b>Amazon</b> frontier	Singer, BH De Castro, MC	Princeton Univ
Phosphorus management for perennial <b>crops</b> in central <b>Amazonian</b> upland soils	Lehmann, J Cravo, MD de Macedo, JLV Moreira, A Schroth, G	Cornell Univ
Inorganic and organic soil phosphorus and sulfur pools in an <b>Amazonian</b> multistrata <b>agroforestry</b> system	Lehmann, J Gunther, D da Mota, MS de Almeida, MP Zech, W Kaiser, K	Cornell Univ
Spatial and temporal patterns of <b>Amazon</b> rainfall - Consequences for the planning of <b>agricultural</b> occupation and the protection of primary forests	Sombroek, W	ISRIC
Root activity patterns in an <b>Amazonian agroforest</b> with fruit trees determined by P-32, P-33 and N-15 applications	Lehmann, J Muraoka, T Zech, W	Univ Bayreuth
Soil nitrogen mineralization under tree crops and a legume cover crop in multi-strata <b>agroforestry</b> in central <b>Amazonia</b> : Spatial and temporal patterns	Schroth, G Salazar, E Da Silva, JP	Natl Inst Res Amazon
Growth, yields and mineral nutrition of cupuacu ( <i>Theobroma grandiflorum</i> ) in two multi-strata <b>agroforestry</b> systems on a ferralitic <b>Amazonian</b> upland soil at four fertilization levels	Schroth, GElias, MEAMacedo, JLVD'Angelo, SALieberei, R	INPA
Burning of <b>Amazonian</b> rainforests: burning efficiency and charcoal formation in forest cleared for <b>cattle</b> pasture near Manaus, Brazil	Fearnside, PM Graca, PMLD Rodrigues, FJA	Natl Inst Res Amazon
<b>Cattle</b> , deforestation and development in the <b>Amazon</b> : An economic, agronomic and environmental perspective.	Evans, S	Humboldt State Univ
Colonist farm income, off-farm work, <b>cattle</b> , and differentiation in Ecuador's northern <b>Amazon</b>	Murphy, LL	Univ N Carolina
From sustainable development to "productive conservation": Forest conservation options and <b>agricultural</b> income and assets in the Brazilian <b>Amazon</b>	Perz, SG	Univ Florida
Soil phosphorus availability and fine root proliferation in <b>Amazonian agroforests</b> 6 years following forest conversion	McGrath, DA Duryea, ML Cropper, WP	Univ South
Peri-urban agroforestry in the Brazilian <b>Amazon</b>	Slinger, VAV	Univ Florida
Nitrogen and phosphorus cycling in an <b>Amazonian agroforest</b> eight years following forest conversion	McGrath, DA Duryea, ML Comerford, NB Cropper, WP	Univ South



Título	Autores	Instituição de correspondência
Effect of five tree <b>crops</b> and a cover <b>crop</b> in multi-strata <b>agroforestry</b> at two fertilization levels on soil fertility and soil solution chemistry in central <b>Amazonia</b>	Schroth, G Teixeira, WG Seixas, R da Silva, LF Schaller, M Macedo, JLV Zech, W	Embrapa Ocidental Amazonia
Litter dynamics and monthly fluctuations in soil phosphorus availability in an <b>Amazonian agroforest</b>	McGrath, DA Comerford, NB Duryea, ML	Univ South
Nutrient concentrations and acidity in ferralitic soil under perennial <b>cropping</b> , fallow and primary forest in central <b>Amazonia</b>	Schroth, G Seixas, R da Silva, LF Teixeira, WG Zech, W	EMBRAPA Ocidental Amazonia
Smallholder risk, <b>cattle</b> and deforestation in the western Brazilian <b>Amazon</b>	Faminow, MD Dahl, C Vosti, S Witcover, J Oliveira, S Carpentier, C	Int Dev Res Ctr
<b>Agroforestry</b> performance on small farms in <b>Amazonia</b> : Findings from the Rondonia agroforestry pilot project	Browder, JO Pedlowski, MA	Virginia Polytech Inst & State Univ
Deforestation and <b>cattle</b> ranching in the Brazilian <b>Amazon</b> : External capital and household processes	Walker, RMoran, EAnselin, L	Michigan State Univ
Malaria control in an <b>agro-industrial</b> settlement of Rondonia (Western <b>Amazon</b> Region, Brazil)	Salcedo, JMV Camargo, EP Krieger, H da Silva, LHP Camargo, LMA	Secretaria Rondonia Saude
The implication of property rights for joint <b>agriculture</b> -timber productivity in the Brazilian <b>Amazon</b> .	Otsuki, T Reis, E	-
Effects of soil water content on soil respiration in forests and <b>cattle</b> pastures of eastern <b>Amazonia</b>	Davidson, EA Verchot, LV Cattanio, JH Ackerman, IL Carvalho, JEM	Woods Hole Res Ctr
Estimating the loss of <b>agricultural</b> productivity in the <b>Amazon</b>	Weinhold, D	Univ London London Sch Econ & Polit Sci
Kids and <b>crops</b> . The concept of fertility among the Wayana Indians in he Guyana <b>Amazon</b>	Veth, B	Univ Utrecht
Distribution patterns of the litter macrofauna in <b>agroforestry</b> and monoculture plantations in central <b>Amazonia</b> as affected by plant species and management	Vohland, K Schroth, G	Univ Hamburg
Earthworm populations in a savanna- <b>agroforestry</b> system of Venezuelan <b>Amazonia</b>	Araujo, Y Lopez-Hernandez, D	Cent Univ Venezuela
Distribution of throughfall and stemflow in multi-strata <b>agroforestry</b> , perennial monoculture, fallow and primary forest in central <b>Amazonia</b> , Brazil	Schroth, G da Silva, LF Wolf, MA Teixeira, WG Zech, W	Univ Hamburg
1492 and the loss of <b>Amazonian crop</b> genetic resources. I. The relation between domestication and human population decline	Clement, CR	Inst Nacl Pesquisas Amazonia

<b>Título</b>	<b>Autores</b>	<b>Instituição de correspondência</b>
1492 and the loss of <b>amazonian crop</b> genetic resources. II. <b>Crop</b> biogeography at contact	Clement, CR	Inst Nacl Pesquisas Amazonia
Selection for a toxic staple crop: meeting nutritional requirements in a blackwater basin of Northwest <b>Amazonia</b> .	Wilson, WM Dufour, DL	-
Pasture or permanent <b>crops</b> after slash-and-burn cultivation? Land-use choice in three <b>Amazon</b> colonies	Fujisaka, S White, D	Ctr Int Agr Trop
Manioc <b>agriculture</b> and sedentism in <b>Amazonia</b> : the Upper Xingu example	Heckenberger, MJ	Univ Fed Rio de Janeiro
The effect of <b>cattle</b> grazing on soil physical and chemical properties in a silvopastoral system in the Peruvian <b>Amazon</b>	Arevalo, LA Alegre, JC Bandy, DE Szott, LT	Int Ctr Res Agroforestry
The effects of forest conversion on annual <b>crops</b> and pastures: Estimates of carbon emissions and plant species loss in a Brazilian <b>Amazon</b> colony	Fujisaka, S Castilla, C Escobar, G Rodrigues, V Veneklaas, E Thomas, R Fisher, M	Ctr Int Agr Trop
Policy issues in <b>agroforestry</b> : Technology adoption and regional integration in the western Brazilian <b>Amazon</b>	Vosti, SA Witcover, J Oliveira, S Faminow, M	Int Food Policy Res Inst
Eradication of brucellosis from a <b>cattle</b> herd in the <b>Amazonian</b> region (short communication)	Molnar, L Molnar, E Barbosa, R Vale, WG	Fed Univ Para
Fire in the Brazilian <b>Amazon</b> 2. Biomass, nutrient pools and losses in <b>cattle</b> pastures	Kauffman, JB Cummings, DL Ward, DE	Oregon State Univ
Dynamic of soil chemical parameters in shifting <b>agriculture</b> in the Eastern <b>Amazon</b>	Holscher, D Ludwig, B Moller, RF Folster, H	Univ Kassel
Brazilian <b>Amazonian</b> caboclo <b>agriculture</b> : effect of fallow period on maize yield	SilvaForsberg, MC Fearnside, PM	INDIANA UNIV
Modelling of sorption experiments and seepage data of an <b>Amazonian</b> Ultisol subsoil under <b>cropping</b> fallow	Ludwig, B Holscher, D Khanna, P Prenzel, J Folster, H	UNIV GOTTINGEN
Estimation of the increase in deforestation due to <b>agricultural</b> and pastoral activities in the Brazilian Western <b>Amazon</b> : an approach based on the relationship between production and productivity	Bidone, ED CadaxoSobrinho, ES	UNIV FED FLUMINENSE
Indigenous market-oriented <b>agroforestry</b> : dissecting local diversity in western <b>Amazonia</b>	Coomes, OT Burt, GJ	MCGILL UNIV
Market incorporation, <b>agricultural</b> change, and sustainability among the Machigueuga Indians of the Peruvian <b>Amazon</b>	Henrich, J	UNIV CALIF LOS ANGELES
Flowering, pollination, nectar standing <b>crop</b> , and nectaries of <i>Euterpe precatoria</i> (Arecaceae), an <b>Amazonian</b> rain forest palm	Kuchmeister, H SilberbauerGottsberger, I Gottsberger, G	-
Nutrient input-output budget of shifting <b>agriculture</b> in Eastern <b>Amazonia</b>	Holscher, D Moller, RF Denich, M Folster, H	UNIV GOTTINGEN

<b>Título</b>	<b>Autores</b>	<b>Instituição de correspondência</b>
Spatial economics of local demand for <b>cattle</b> products in <b>Amazon</b> development	Faminow, MD	UNIV MANITOBA
Swidden-fallow <b>agroforestry</b> in <b>Amazonia</b> : Diversity at close distance	DeJong, W	CTR INT FORESTRY RES
Vertebrate predation of Brazil-nuts ( <i>Bertholletia excelsa</i> , Lecythidaceae), an agouti-dispersed <b>Amazonian</b> seed <b>crop</b> : A test of the escape hypothesis	Peres, CA Schiesari, LC DiasLeme, CL	UNIV E ANGLIA
Slash-and-burn <b>agriculture</b> , conversion to pasture, and deforestation in two Brazilian <b>Amazon</b> colonies	Fujisaka, S Bell, W Thomas, N Hurtado, L Crawford, E	CTR INT AGR TROP
Management of tropical legume cover <b>crops</b> in the Bolivian <b>Amazon</b> to sustain crop yields and soil productivity	LunaOrea, P Wagger, MG	-
Dynamics of soil physical properties in <b>Amazonian agroecosystems</b> inoculated with earthworms	Alegre, JC Pashanasi, B Lavelle, P	ICRAF, ESTAC EXPT SAN RAMON
Organizations and intensifications: Campesino federations, rural livelihoods and <b>agricultural</b> technology in the Andes and <b>Amazonia</b>	Bebbington, A	UNIV COLORADO
Deforestation, land use, and women's <b>agricultural</b> activities in the Ecuadorian <b>Amazon</b>	Thapa, KK Bilsborrow, RE Murphy, L	UNIV N CAROLINA
Upland <b>agricultural</b> and forestry development in the <b>Amazon</b> : Sustainability, criticality and resilience	Serrao, EAS Nepstad, D Walker, R	-
<b>Agroforestry</b> trajectories among smallholders in the Brazilian <b>Amazon</b> : Innovation and resiliency in pioneer and older settled areas	Smith, NJH Falesi, IC Alvim, PD Serrao, EAS	UNIV FLORIDA
<b>Cropping</b> and following sequences of small farms in the "terra firme" landscape of the Brazilian <b>Amazon</b> : A case study from Santarem, Para	Scatena, FN Walker, RT Homma, AKO deConto, AJ Ferreira, CAP Carvalho, RD daRocha, ACPN Santos, AIMD deOliveira, PM	US FOREST SERV
<b>Agricultural</b> production in Brazilian <b>Amazonia</b> : Problems and prospects	Barrow, CJ	UNIV COLL SWANSEA
<b>Agroforestry</b> developments and potential in the Brazilian <b>Amazon</b>	Smith, NJH Fik, TJ Alvim, PDT Falesi, IC Serrao, EAS	UNIV FLORIDA
STANDING <b>CROP</b> AND DISTRIBUTION OF FISH IN DRIFTING AND ATTACHED FLOATING MEADOW WITHIN AN UPPER <b>AMAZONIAN</b> VARZEA LAKE	HENDERSON, PAHAMILTON, HF	UNIV OXFORD
ECONOMIC AND ECOLOGICAL PERSPECTIVES ON <b>AGRICULTURE</b> IN THE EASTERN <b>AMAZON</b>	TONIOLO, A UHL, C	INST HOMEM & MEIO AMBIENTE AMAZONIA
<b>AGROFORESTRY</b> STRATEGIES FOR ALLEVIATING SOIL CHEMICAL CONSTRAINTS	FERNANDES, ECM MATOS, JCD	-

Título	Autores	Instituição de correspondência
TO FOOD AND FIBER PRODUCTION IN THE BRAZILIAN <b>AMAZON</b>		
GRADUATE COURSE IN <b>AGROFORESTRY</b> AT THE UNIVERSITY-OF- <b>AMAZONAS</b> , BRAZIL	DASILVA, JF TUCCI, CAF OLIVEIRA, WS CRUZ, FGG DEMENDONCA, MS	-
UNSTABLE HYPOENDEMIC MALARIA IN RONDONIA (WESTERN <b>AMAZON</b> REGION, BRAZIL) - EPIDEMIC OUTBREAKS AND WORK-ASSOCIATED INCIDENCE IN AN <b>AGROINDUSTRIAL</b> RURAL SETTLEMENT	MARCELO, L CAMARGO, A FERREIRA, MU KRIEGER, H DECAMARGO, EP DASILVA, LP	UNIV SAO PAULO
ANALYSIS OF GROWTH FROM TYPES AND FLORISTIC COMPOSITION OF THE SPONTANEOUS VEGETATION IN AN <b>AGRICULTURAL</b> TEST AREA NEAR MANAUS, <b>AMAZONAS</b> , BRAZIL	PREISINGER, H COELHO, LF SIQUEIRA, MD LIEBEREI, R	INST ANGEW BOT
INFLUENCE OF DIFFERENT <b>CROPPING</b> SYSTEMS ON THE DENSITY OF TERRESTRIAL INVERTEBRATES IN VARZEA SOIL OF CENTRAL <b>AMAZONIA</b>	DEOLIVEIRA, EP	INST NAEL PESQUISAS
WHERE'S THE BEEF - INCORPORATING CATTLE INTO SUSTAINABLE <b>AGROFORESTRY</b> SYSTEM SIN THE <b>AMAZON</b> BASIN	LOKER, WM	MISSISSIPPI STATE UNIV

Em relação aos termos referentes ao tema *defesa agropecuária*, não foram localizados artigos que se referem a Amazônia em seu título.

### 3. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS

Apresentam-se a seguir os títulos dos 10 artigos que citam Amazônia no título, sobre o tema *mudanças climáticas globais*, com seus respectivos autores e instituições.

Título	Autores	Instituição de correspondência
The impact of <b>global climate change</b> on tropical forest biodiversity in <b>Amazonia</b>	Miles, L Grainger, A Phillips, O	Univ Leeds
Holocene <b>climate change</b> and hydrarch succession in lowland <b>Amazonian</b> Ecuador	Weng, CY Bush, MB Athens, JS	Florida Inst Technol
Positive feedbacks among forest fragmentation, drought, and <b>climate change</b> in the <b>Amazon</b>	Laurance, WF Williamson, GB	Smithsonian Trop Res Inst
<b>Amazon</b> jungle linked to <b>global warming</b>	[Anon]	
Late Quaternary vegetation and <b>climate change</b> in the <b>Amazon</b> basin based on a 50,000 year pollen record from the <b>Amazon</b> fan, ODP site 932	Haberle, SG	Monash Univ
A crisis in the making: responses of <b>Amazonian</b> forests to land use and <b>climate change</b>	Laurance, WF	Natl Inst Res Amazon INPA
<b>Amazonian</b> deforestation and <b>global warming</b> : Carbon stocks in vegetation replacing Brazil's <b>Amazon</b> forest	Fearnside, PM	NATL INST RES AMAZON

Título	Autores	Instituição de correspondência
DETECTING <b>CLIMATE-CHANGE</b> CONCURRENT WITH DEFORESTATION IN THE <b>AMAZON</b> BASIN - WHICH WAY HAS IT GONE – COMMENT	BALLING, RC HUGHES, WS	ARIZONA STATE UNIV
DETECTING <b>CLIMATE-CHANGE</b> CONCURRENT WITH DEFORESTATION IN THE <b>AMAZON</b> BASIN - WHICH WAY HAS IT GONE – REPLY	HASTENRATH, S	UNIV HAWAII MANOA
DETECTING <b>CLIMATE-CHANGE</b> CONCURRENT WITH DEFORESTATION IN THE <b>AMAZON</b> BASIN - WHICH WAY HAS IT GONE	CHU, PS YU, ZP HASTENRATH, S	UNIV HAWAII

Em relação aos termos referentes ao tema *mudanças climáticas globais*, não foram localizados artigos que se referem a Amazônia em seu título.

#### 4. TEMA: PROGRAMAS DE DESCOBERTA

Em relação aos termos referentes ao tema programas de descoberta, em dois termos (clonagem e proteômica) foram localizados artigos que se referem em seu título à Amazônia. Os títulos dos artigos, seus autores e instituições são apresentados a seguir.

##### a. Clonagem

Título	Autores	Instituição de correspondência
<b>Cloning</b> and characterisation of a cysteine proteinase gene expressed in amastigotes of <i>Leishmania</i> (L.) <b>amazonensis</b>	Lasakosvitsch, F Gentil, LG dos Santos, MRM da Silveira, JF Barbieri, CL	Univ Fed Sao Paulo
<b>Cloning</b> and functional analysis of the ribonucleotide reductase gene small subunit from hydroxyurea-resistant <i>Leishmania mexicana amazonensis</i>	Lye, LF Hsieh, YH Su, KE Lee, ST	Acad Sinica
<i>Leishmania mexicana amazonensis</i> : Differential display analysis and <b>cloning</b> of mRNAs from attenuated and infective forms	Heard, PL Lewis, CS Chaudhuri, G	-

**b. Proteômica**

Título	Autores	Instituição de correspondência
<b>Proteomics</b> of the venom from the <b>Amazonian</b> scorpion <i>Tityus cambridgei</i> and the role of prolines on mass spectrometry analysis of toxins	Batista, CVF del Pozo, L Zamudio, FZ Contreras, S Becerril, B Wanke, E Possani, LD	Natl Autonomous Univ Mexico

## II - Artigos relacionados com o Brasil

A tabela a seguir mostra a frequência de artigos que citam o Brasil no título e no resumo, para os temas e termos deste estudo.

TEMAS/ TERMOS DA BIOTECNOLOGIA		Relacionados ao Brasil	
		TÍTULO	RESUMO
Tema: Biodiversidade/ Bioprospecção		19	181
Termos da Biodiversidade/ Bioprospecção	Bancos de germoplasma	0	17
	Herbários e demais formas de conservação ex situ	2	33
	Legislação ágil e eficiente	1	4
	Biodiversidade marinha	1	2
	Acesso ao patrimônio Genético	0	3
	Conhecimento tradicional	0	3
	Mercado de produtos da floresta	0	8
	Propriedade intelectual	0	3
	Fitomedicamentos	2	25
Tema: Bioeconomia		1	3
Tema: Bioindústria		0	0
Termos da Bioindústria	Bioprodutos	0	2
Tema: Bioinformática		0	2
Termos da Bioinformática	Aplicações para Genomas, proteomas e biodiversidade	0	1
Tema: Biorremediação		2	14
Termos da Biorremediação	Microorganismos	0	9
Tema: Bioterrorismo		0	1
Tema: Certificação de qualidade biológica		0	0
Termos da Certificação de qualidade biológica	Coleções certificadas	0	1
	Microorganismos	0	4
Tema: Defesa Agropecuária		254*	2123*
Termos da Defesa Agropecuária	Sistemas Efetivos de Monitoramento	1	68
Tema: Farmacogenética		0	5
Tema: Fertilidade e reprodução animal		0	3
Tema: Integração: alimentação, nutrição e saúde		0	40
Termos da Integração: alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)	0	1
	Produção de Vacinas em Plantas e Animais	1	44
Tema: Metagenômica/ Prospecção Gênica		0	1
Tema: Mudanças climáticas globais		7	67
Tema: Programas de Descoberta		n.a.	n.a.
Termos da Programas de Descoberta	Clonagem	5	106
	<i>Stem Cells</i>	11	24
	Genômica Funcional	0	2
	Engenharia Genética	0	11
	Proteômica	0	6
Tema: Segurança Biológica		3	9
Termos da Segurança Biológica	Níveis de segurança	0	2
Tema: Sustentabilidade Ambiental		0	3
Termos da Sustentabilidade Ambiental	OGMs	0	7
	Bioinseticidas	0	5

\* Estes números se referem à artigos sobre agropecuária e Amazônia  
n.a. = não se aplica. O tema programas de descoberta não é um termo de busca.

Nos itens que se seguem são apresentados a classificação, os títulos, autores e instituição de correspondência dos artigos relacionados aos temas/termos deste estudo. A coluna de classificação organiza os resultados encontrados pelo foco observado no título. Utilizou-se a instituição de correspondência como referência do local de realização da pesquisa.

## 1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO

Apresentam-se a seguir os títulos dos 19 artigos que citam Brasil no título, sobre o tema *biodiversidade/bioprospecção*, com seus respectivos autores e instituições. A análise dos títulos dos artigos mostra que, neste caso, a maioria dos artigos refere-se a aspectos gerais do Brasil, não estando focadas em uma área geográfica ou tipo de vegetação especificamente.

Classificação	Título	Autores	Instituição de correspondência
Geral	Parasite <b>biodiversity</b> and its determinants in coastal marine teleost fishes of <b>Brazil</b>	Luque, JL Mouillot, D Poulin, R	Univ Otago
	<b>Brazilian LTER: Ecosystem and biodiversity</b> information in support of decision-making	Barbosa, FAR Scarano, FR Sabara, MG Esteves, FA	Univ Fed Minas Gerais
	A study on the valuing of <b>biodiversity</b> : the case of three endangered species in <b>Brazil</b>	de Mendonca, MJC Sachsida, A Loureiro, PRA	IPEA
	<b>Biodiversity</b> under rocks: the role of microhabitats in structuring invertebrate communities in <b>Brazilian</b> outcrops	Ferreira, RL Silva, MS	Univ Fed Minas Gerais
	Bird community as an indicator of <b>biodiversity</b> : results from quantitative surveys in <b>Brazil</b>	Vielliard, JME	UNICAMP
	Sustainable use of <b>biodiversity</b> - Components of a model project for <b>Brazil</b>	BarretodeCastro, LA	MINIST CIENCIA & TECNOL
	<b>BRAZIL FIGHTS TO SAVE BIODIVERSITY</b>	ROCHA, J	
	<b>Brazil</b> considers <b>biodiversity</b> legislation	[Anon]	
	<b>Biodiversity</b> of rhizobia isolated from a wide range of forest legumes in <b>Brazil</b>	Moreira, FMS Haukka, K Young, JPW	Univ York
	Plenary and invited lectures from the 2nd IUPAC International Conference on <b>Biodiversity</b> , Belo Horizonte, <b>Brazil</b> , 11-15 July 1999 - Preface	Braga, FC de Oliveira, AB	
Sul do Brasil	<b>Biodiversity</b> and speciation in the south of <b>Brazil</b> and the basin of the Parana river: influences in the Sorocea A St-Hil (Moraceae) genus species complex	Romaniuc-Neto, S	Museum Natl Hist Nat



Classificação	Título	Autores	Instituição de correspondência
Bahia	<b>Biodiversity</b> and spatial distribution of Polychaeta (Annelida) communities in coral-algal buildup sediment, Bahia, <b>Brazil</b>	de Santa-Isabel, LM Peso-Aguiar, MC de Jesus, ACS Kelmo, F Dutra, LXC	Univ Fed Bahia
Espírito Santo	<b>Biodiversity</b> of Collembola in tropical agricultural environments of Espírito Santo, <b>Brazil</b> (vol 21, pg 49, 2002)	Culik, MP de Souza, JL Ventura, JÁ	
	<b>Biodiversity</b> of Collembola in tropical agricultural environments of Espírito Santo, <b>Brazil</b>	Culik, MP de Souza, JL Ventura, JÁ	
Guaratuba	<b>Biodiversity</b> and dynamics of ichthyic communities in the mangrove of Guaratuba, <b>Brazil</b>	Chaves, P Bouchereau, JL	Univ Fed Parana
Cerrado	The <b>Brazilian</b> cerrado vegetation and threats to its <b>biodiversity</b>	Ratter, JA Ribeiro, JF Bridgewater, S	ROYAL BOT GARDENS
Floresta Tropical	Saving <b>Brazil's</b> Atlantic rainforest: Using the golden-headed lion tamarin <i>Leontopithecus chrysomelas</i> as a flagship for a <b>biodiversity</b> hotspot	Mallinson, JJC	Durrell Wildlife Conservat Trust
	<b>Biodiversity</b> of killer activity in yeasts isolated from the <b>Brazilian</b> rain forest	Buzzini, P Martini, A	Univ Perugia
Pantanal	Arthropod <b>biodiversity</b> in the canopy of <i>Vochysia divergens</i> (Vochysiaceae), a forest dominant in the <b>Brazilian</b> Pantanal	Marques, MI Adis, J da Cunha, CN dos Santos, GB	Max Planck Inst Limnol
Savana	Alien grasses in <b>Brazilian</b> savannas: a threat to the <b>biodiversity</b>	Pivello, VR Shida, CN Meirelles, ST	Univ Sao Paulo

Em relação aos termos referentes ao tema biodiversidade/bioprospecção, em cinco termos foram localizados artigos que se referem em seu título ao Brasil. A classificação, os títulos dos artigos, seus autores e instituições para cada termo, são apresentados a seguir.

#### a. Herbários e demais formas de conservação ex situ

Classificação	Título	Autores	Instituição de correspondência
PE	Collecting, <b>ex situ conservation</b> and characterization of "caja-umbu" ( <i>Spondias mombin</i> x <i>Spondias tuberosa</i> ) germplasm in Pernambuco State, <b>Brazil</b>	Junior, JFD Bezerra, JEF Lederman, IE Alves, MA Neto, MLD	Embrapa Coastal Tablelands
Geral	Count F. C. Raben's <b>Brazilian herbaria</b>	Ryding, O	Bot Museum & Lib

## b. Legislação ágil e eficiente

Classificação	Título	Autores	Instituição de correspondência
Geral	<b>Brazil</b> considers biodiversity legislation	[Anon]	

## c. Biodiversidade marinha

Classificação	Título	Autores	Instituição de correspondência
Geral	Parasite <b>biodiversity</b> and its determinants in coastal <b>marine</b> teleost fishes of <b>Brazil</b>	Luque, JL Mouillot, D Poulin, R	Univ Otago

## d. Fitomedicamentos

Classificação	Título	Autores	Instituição de correspondência
Geral	Pharmaceutics and <b>phytotherapics</b> : The need for development of the industry of <b>phytopharmaceutics</b> and phytotherapics in <b>Brazil</b>	Yunes, RA Pedrosa, RC Cechinel, V	Univ Fed Santa Catarina
	Comparison between ethnopharmacology in traditional Chinese medicine and <b>Brazilian</b> popular <b>phytotherapy</b>	Botsaris, AS	–

## 2. TEMA: BIOECONOMIA

Apresentam-se a seguir o título do artigo que cita Brasil no título, sobre o tema *bioeconomia*, com seu respectivo autor e Instituição de correspondência.

Classificação	Título	Autores	Instituição de correspondência
Região Central	<b>Bioeconomic</b> analysis of breeding season introduction in roductive systems of beef herd in <b>Brazil</b> Central Region	de Abreu, UGP Cezar, IM Torres, RDA	Embrapa Pantanal

Em relação aos termos referentes ao tema *bioeconomia*, não foram localizados artigos que se referem ao Brasil em seu título.

## 3. TEMA: BIORREMEDIAÇÃO

Apresentam-se a seguir os títulos dos 2 artigos que citam Brasil no título, sobre o tema *biorremediação*, com seus respectivos autores e instituições.

Classificação	Título	Autores	Instituição de correspondência
Geral	Natural <b>bioremediation</b> perspective for BTX-contaminated groundwater in <b>Brazil</b> : Effect of ethanol	Corseuil, HX Alvarez, PJJ	UNIV FED SANTA CATARINA
	Implications of the presence of ethanol on intrinsic <b>bioremediation</b> of BTX plumes in <b>Brazil</b>	Corseuil, HX Aires, JR Alvarez, PJJ	

Em relação aos termos referentes ao tema *biorremediação*, não foram localizados artigos que se referem ao Brasil em seu título.

#### 4. TEMA: DEFESA AGROPECUÁRIA

Não foram localizados artigos que tratem especificamente de *defesa agropecuária* no Brasil. No entanto foram identificados 254 artigos relacionados com agropecuária no Brasil. Apresentam-se a seguir os títulos dos 100 primeiros artigos com seus respectivos autores e instituição de correspondência. A primeira coluna apresenta a abordagem geográfica ou de vegetação observada no título do artigo.

Classificação	Título	Autores	Instituição de correspondência
AL	Spontaneous BRSV infection in <b>cattle</b> of the state of Alagoas, <b>Brazil</b> .	Peixoto, PV Mota, RA Brito, MF Corbellini, LG Driemeier, D de Souza, MI	Univ Fed Rural Rio de Janeiro
BA	Pedological characteristics of <b>agricultural</b> environments at Corrente river tablelands, southwest of Bahia State, <b>Brazil</b>	Muggler, CC Curi, N Silva, MLN deLima, JM	Univ Fed Vicosa
BA	Serological survey of antibodies to <i>Toxoplasma gondii</i> in goats, sheep, <b>cattle</b> and water buffaloes in Bahia State, <b>Brazil</b>	Gondim, LFP Barbosa, HV Ribeiro, CHA Saeki, H	Univ Fed Bahia
BA	Seroprevalence of <i>Neospora caninum</i> in dairy <b>cattle</b> in Bahia, <b>Brazil</b>	Gondim, LFP Sartor, IF Hasegawa, M Yamane, I	Univ Fed Bahia
Belém	Urban <b>agriculture</b> in Belem, <b>Brazil</b>	Madaleno, I	Minist Cienciaeda Tecnol
Campinas	An adapted version of the US department of <b>agriculture</b> food insecurity module is a valid tool for assessing household food insecurity in Campinas, <b>Brazil</b>	Perez-Escamilla, R Segall-Correa, AM Maranhã, LK Sampaio, MDA Marin-Leon, L Panigassi, G	Univ Connecticut
Cerrado	Carbon and phosphorus stocks of clayey Ferralsols in Cerrado native and <b>agroecosystems</b> , <b>Brazil</b>	Lardy, LC Brossard, M Assad, MLL Laurent, JY	IRD
Cerrado	EFFECT OF STOCKING RATES AND ANTHELMINTIC TREATMENTS ON WEIGHT GAINS IN WEANED NELLORE <b>CATTLE</b> ON IMPROVED PASTURE IN THE <b>BRAZILIAN CERRADO</b>	BIANCHIN, I HONER, MR NUNES, SG DO NASCIMENTO, YA	CNPGC
Cerrado	EVOLUTION PATTERNS OF THE SOIL ORGANIC-MATTER IN SOME <b>AGRICULTURAL</b> SYSTEMS IN THE <b>BRAZILIAN CERRADO</b> REGION	NASCIMENTO, VM ALMENDROS, G FERNANDES, FM	UNIV ESTAD PAULISTA

Classificação	Título	Autores	Instituição de correspondência
Curitiba	COMMISSION-VII WORKSHOP ON <b>CROP FORECASTING</b> - MAY 11, 1993, CURITIBA, <b>BRAZIL</b>	DACUHNA, RP	
DF	Severity of alternaria in sunflower crop in the Cerrado region of Federal District, <b>Brazil</b>	Amabile, RF Vasconcelos, CM Gomes, AC	CPAC
ES	Biodiversity of Collembola in tropical <b>agricultural</b> environments of Espirito Santo, <b>Brazil</b>	Culik, MP de Souza, JL Ventura, JA	Rua Elpidio Pimentel 383-302
ES	Biodiversity of Collembola in tropical <b>agricultural</b> environments of Espirito Santo, <b>Brazil</b> (vol 21, pg 49, 2002)	Culik, MP de Souza, JL Ventura, JA	Rua Elpidio Pimentel 383-302
ES	Efficacy of Actara((R)) 25WG on three species of <b>Brazilian</b> termite (Isoptera, Nasutitermitinae) <b>crop</b> pests	Delgarde, S Rouland-Lefevre, C	Univ Paris 12
ES	Factors influencing the adoption of sustainable <b>agricultural</b> technologies - Evidence from the state of Espirito Santo, <b>Brazil</b>	De Souza, HM Young, T Burton, MP	Univ Manchester
Geral	"Cara inchada" of <b>cattle</b> , an infectious, apparently soil antibiotics-dependant periodontitis in <b>Brazil</b>	Dobereiner, J Dutra, IS Rosa, IV Blobel, H	UFRRJ
Geral	A <b>Brazilian</b> glycoprotein E-negative bovine herpesvirus type 1.2a (BHV-1.2a) mutant is attenuated for <b>cattle</b> and induces protection against wild-type virus challenge	Franco, AC Spilki, FR Esteves, PA de Lima, M Weiblen, R Flores, EF Rijsewijk, FAM Roehe, PM	Caixa Postal 2076
Geral	A more pleasant future for <b>Brazilian agriculture</b>	Marques, F Esteves, B	
Geral	A new species of <b>Agroiconota</b> Spaeth from <b>Brazil</b> (Coleoptera: Chrysomelidae, Cassidinae)	Buzzi, ZJ	FED UNIV PARANA
Geral	Adherence and experimental infection of bacteria associated with periodontal infections of young <b>cattle</b> in <b>Brazil</b> ("Cara inchada")	Grassmann, B Dobereiner, J Dutra, IS Kopp, PA Blobel, H	Univ Giessen
Geral	Adjustment factors for weaning weight according to age of dam in Nellore <b>cattle</b> in <b>Brazil</b>	Marcondes, CR Eler, JP Ferraz, JBS Silva, PR	Univ Sao Paulo
Geral	Adjustment for heterogeneity of variance for milk yield among herds of Holstein <b>cattle</b> in <b>Brazil</b>	Torres, RDA Bergmann, JAG Costa, CN Pereira, CS Valente, J Penna, VM Torres, RDA	UFV
Geral	Aggregate distribution and soil organic matter under different tillage systems for vegetable <b>crops</b> in a Red Latosol from <b>Brazil</b>	Pinheiro, EFM Pereira, MG Anjos, LHC	
Geral	<b>Agricultural</b> biotech - Monsanto clears hurdle in <b>Brazil</b>	Sissell, K	

Classificação	Título	Autores	Instituição de correspondência
Geral	<b>Agricultural</b> development with rainforest conservation: Methods for seeking best bet alternatives to slash-and-burn, with applications to <b>Brazil</b> and Indonesia	Tomich, TP van Noordwijk, M Vosti, SA Witcover, J	ICRAF SE Asia
Geral	<b>Agricultural</b> extension models in South America: A description of systems in use in Argentina, <b>Brazil</b> , Paraguay and Uruguay	Arboleya, J Restaino, E	
Geral	<b>Agrobacterium</b> tumefaciens-mediated transformation of <i>Paracoccidioides brasiliensis</i>	Leal, CV Montes, BA Mesa, AC Rua, AL Corredor, M Restrepo, A McEwen, JG	CIB
Geral	Allelopathic effects of legume cover <b>crops</b> on cogon grass ( <i>Imperata brasiliensis</i> Trin.)	Casini, P Olivero, L	Univ Florence
Geral	Analysis of phosphorus by (PNMR)-P-31 in Oxisols under <b>agroforestry</b> and conventional coffee systems in <b>Brazil</b>	Cardoso, IM Van der Meer, P Oenema, O Janssen, BH Kuyper, TW	Univ Wageningen & Res Ctr
Geral	ANTIMICROBIAL DRUG-RESISTANCE IN STAPHYLOCOCCUS-AUREUS ISOLATED FROM <b>CATTLE</b> IN <b>BRAZIL</b>	PEREIRA, MSV SIQUEIRAJUNIOR, JP	
Geral	Antimicrobial substances produced by <i>Staphylococcus aureus</i> strains isolated from <b>cattle</b> in <b>Brazil</b>	de Oliveira, SS Povoa, DC Nascimento, JD Pereira, ND de Siqueira, JP Bastos, MDD	Univ Fed Rio de Janeiro
Geral	Association of the <b>Brazil</b> nut protein gene and Kunitz trypsin inhibitor alleles with soybean protease inhibitor activity and <b>agronomic</b> traits	Streit, LG Beach, LR Register, JC Jung, R Fehr, WR	Iowa State Univ
Geral	Avermectin resistance of the <b>cattle</b> tick <i>Boophilus microplus</i> in <b>Brazil</b>	Martins, JR Furlong, J	Fundacao Estadual Pesquisa Agropecuaria
Geral	<i>Baccharis megapotamica</i> var <i>weirii</i> poisoning in <b>Brazilian cattle</b>	Driemeier, D Cruz, C Loretti, A	Univ Fed Rio Grande Sul
Geral	<i>Baccharis megapotamica</i> var <i>Weirii</i> poisoning in <b>Brazilian cattle</b> (vol 42, pg 220, 2000)	Loretti, AP	
Geral	Bayesian inference for genetic parameter estimation on growth traits for Nelore <b>cattle</b> in <b>Brazil</b> , using the Gibbs sampler	Magnabosco, CD Lobo, RB Famula, TR	Rua T36 Q154 Lt 04 Apto 202 Residencial
Geral	Botulism outbreak associated with poultry litter consumption in three <b>Brazilian cattle</b> herds	Ortolani, EL Brito, LAB Mori, CS Schalch, U Pacheco, J Baldacci, L	Univ Sao Paulo

Classificação	Título	Autores	Instituição de correspondência
Geral	Botulism outbreaks in <b>cattle</b> in <b>Brazil</b> associated with contaminated water	Dutra, IS Dobereiner, J Rosa, IV Souza, LAA Nonato, MW	UNESP
Geral	<b>Brazil</b> - No cause for alarm at large <b>crop</b>	Anon	
Geral	<b>Brazil</b> and the development of international scientific biosafety testing guidelines for transgenic <b>crops</b>	Capalbo, DMF Hilbeck, A Andow, D Snow, A Bong, BB Wan, FH Fontes, EMG Osir, EO Fitt, GP Johnston, J Songa, J Heong, KL Birch, ANE	Embrapa Environm
Geral	<b>Brazil</b> delays vote on bill to allow planting of GM <b>crops</b>	Anon	
Geral	<b>Brazil</b> destroys AgrEvo transgenic rice <b>crop</b>	Anon	
Geral	<b>Brazil</b> halts Monsanto's genetic <b>crops</b> program	Anon	
Geral	<b>Brazil</b> nixes Monsanto soybean <b>crop</b>	Anon	
Geral	<b>Brazil</b> suspends ban on GM <b>crops</b>	Sissell, K	
Geral	<b>Brazilian</b> isolates of Trypanosoma (Megatrypanum) theileri: diagnosis and differentiation of isolates from <b>cattle</b> and water buffalo based on biological characteristics and randomly amplified DNA sequences	Rodrigues, AC Campaner, M Takata, CSA Dell'Porto, A Milder, R Takeda, GF Teixeira, MMG	Univ Sao Paulo
Geral	<b>Brazilian</b> sugarcane <b>crop</b> revised upwards	Anon	
Geral	<b>Cattle</b> and rabbits immune response against beta and epsilon Clostridium perfringens toxins induced by six commercial vaccines in <b>Brazil</b>	Lobato, FCF Mora, E Umehara, O Assis, RA Martins, NE Goncalves, LCB	UFMG
Geral	Changing patterns of state intervention in the <b>Brazilian</b> agro-industrial complex	Belik, W	State Univ Campinas
Geral	CO2 emissions from liming of <b>agricultural</b> soils in <b>Brazil</b>	Bernoux, M Volkoff, B da Conceicao, M Carvalho, S Cerri, CC	Ctr Energia Nucl Agr
Geral	Coffee, one of the most exemplary <b>agricultural</b> products of <b>Brazil</b>	Grandjean, P Tulet, JC	Univ Reims
Geral	Colonization of a new fruit <b>crop</b> by Anastrepha fraterculus (Diptera : Tephritidae) in <b>Brazil</b> : a demographic analysis	Sugayama, RL Kovaleski, A Liedo, P Malavasi, A	Univ Sao Paulo
Geral	COMPARISON OF THE VERSATILE SOIL-MOISTURE BUDGET AND <b>SWACROP</b> MODELS FOR A WHEAT <b>CROP</b> IN <b>BRAZIL</b>	DEFARIA, RT MADRAMOOTOO, CA BOISVERT, J PRASHER, SO	Inst Agron Parana

Classificação	Título	Autores	Instituição de correspondência
Geral	Conservation in <b>Brazil's</b> chocolate forest: The unlikely persistence of the traditional cocoa <b>agroecosystem</b>	Johns, ND	Univ Texas
Geral	Conservation-with-development models in <b>Brazil's</b> agro-pastoral landscapes	Brannstrom, C	Univ London
Geral	Controlling labor commitment in <b>Brazil's</b> global <b>agriculture</b> : the crisis of competing flexibilities	Chase, J	
Geral	Cryptosporidium muris in dairy <b>cattle</b> in <b>Brazil</b>	Pena, HFD Kasai, N Gennari, SM	Univ Sao Paulo
Geral	Cytogenetic and molecular biomonitoring of <b>agricultural</b> workers exposed to pesticides in <b>Brazil</b>	D'Arce, LPG Colus, IMD	Univ Estadual Londrina
Geral	Dairy <b>cattle</b> enteric methane measured in <b>Brazilian</b> tropical conditions	Primavesi, O Frighetto, RTS Dos Santos Pedreira, M de Lima, MA Berchielli, TT Barbosa, PF	EMBRAPA
Geral	Development of an ELISA system for detection of anti-Anaplasma marginale antibodies in <b>cattle</b> in <b>Brazil</b>	Braz, CJ Ribeiro, MFB Lima, JD Passos, LMF	UFMG
Geral	Diet of the maned wolf (Chrysocyon brachyurus) and its role in seed dispersal on a <b>cattle</b> ranch in <b>Brazil</b>	Santos, EF Setz, EZF Gobbi, N	R Mistre Tito 42 Vila Ind
Geral	Diffusion of sustainable <b>agriculture</b> in the <b>Brazilian</b> tropical rain forest: A discrete choice analysis	Caviglia, JL Kahn, JR	Salisbury State Univ
Geral	Distribution of bovine lymphocyte antigen (BOLA-DRB3) alleles in <b>Brazilian</b> dairy <b>Gir cattle</b> (Bos indicus)	da Mota, AF Gabriel, JE Martinez, ML Coutinho, LL	USP
Geral	Distribution of mycorrhizal fungal spores in soils under agroforestry and monocultural coffee systems in <b>Brazil</b>	Cardoso, IM Boddington, C Janssen, BH Oenema, O Kuyper, TW	Univ Wageningen & Res Ctr
Geral	Drought affecting <b>crop</b> in <b>Brazil</b> ...	Anon	
Geral	Effect of exogenous calcium on <b>Agrobacterium tumefaciens</b> -mediated gene transfer in Hevea brasiliensis (rubber tree) friable calli	Montoro, P Teinseree, N Rattana, W Kongsawadworakul, P Michaux-Ferriere, N	Kasetsart Univ
Geral	Effect of vaccination with a recombinant Bm86 antigen preparation on natural infestations of Boophilus microplus in grazing dairy and beef pure and cross bred <b>cattle</b> in <b>Brazil</b>	Rodriguez, M Massard, CL daFonseca, AH Ramos, NF Machado, H Labarta, V delaFuente, J	CTR INGN GENET & BIOTECNOL
Geral	Effects of liming and legume/cereal <b>cropping</b> on populations of indigenous rhizobia in an acid <b>Brazilian</b> Oxisol	Andrade, DS Murphy, PJ Giller, KE	Univ Wageningen & Res Ctr

Classificação	Título	Autores	Instituição de correspondência
Geral	Emerging views on translation history in <b>Brazil</b> ( <b>CROP</b> special issue)	Xu, JZ	Shaanxi Univ Sci & Technol
Geral	Estimates of the intake and weight gain of <b>cattle</b> at <b>Brazilian</b> Conditions	Cappelle, ER Valadares, SD da Silva, JFC Cecon, PR	
Geral	Ethnic hegemony: the Japanese <b>Brazilians</b> in <b>agriculture</b> , 1908-1968	Makabe, T	RR4
Geral	Evaluation of an ELISA for detection of antibodies to <i>Babesia bigemina</i> in <b>cattle</b> and its application in an epidemiological survey in <b>Brazil</b>	Madruga, CR Marques, APC Araujo, FR Migueta, M Carvalho, CME Araujo, FS Umaki, ACS Crocci, AJ Queiroz, RA	Embrapa Gado Corte
Geral	Evaluation of <b>crop</b> -water production functions for wheat ( <i>Triticum aestivum</i> L.) in <b>Brazil</b>	de Faria, RT Madramootoo, CA	Inst Agron Parana
Geral	Evaluation of the average comparison tests in the "Pesquisa <b>Agropecuaria</b> Brasileira" journal from 1980 to 1994	dos Santos, JW Moreira, JDAN Beltrao, NEDM	Ctr Nacl Pesquisa Algodao
Geral	Evaluation of the diversity of rhizobia in <b>Brazilian agricultural</b> soils cultivated with soybeans	Coutinho, HLC Oliveira, VM Lovato, A Maia, AHN Manfio, GP	Embrapa Solos
Geral	Evaluation of zinc, manganese and iron levels in liver samples of <b>cattle</b> and sheep from various regions of <b>Brazil</b> .	Moraes, SD	Embrapa Ctr Nacl Pesquisa Gado Corte
Geral	Factors that cause genotype by environment interaction and use of a multiple-trait herd-cluster model for milk yield of Holstein <b>cattle</b> from <b>Brazil</b> and Colombia	Ceron-Munoz, MF Tonhati, H Costa, CN Rojas-Sarmiento, D Echeverri, DME	Univ Anioquia
Geral	Generic trend for milk yield in Holstein <b>cattle</b> in <b>Brazil</b> and in the United States of America	Neto, MH Silva, HM Bergmann, JAG	MINIST AGR
Geral	Genetic analysis of Holstein <b>cattle</b> populations in <b>Brazil</b> and the United States	Costa, CN Blake, RW Pollak, EJ Oltenuacu, PA Quaas, RL Searle, SR	Embrapa Gada Leite
Geral	Genetic and phenotypic correlations among type traits and milk yield of brown Swiss <b>cattle</b> in <b>Brazil</b>	Renno, FP de Araujo, CV Pereira, JC De Freitas, MS Torres, RD Renno, LN Azeveddo, JAG Kaiser, FD	UFV
Geral	Genetic parameters and inbreeding levels in Santa Gertrudis <b>cattle</b> in <b>Brazil</b>	Ribeiro, PMT Ferraz, JBS Eler, JP	Univ Sao Paulo



Classificação	Título	Autores	Instituição de correspondência
Geral	GENETIC-PARAMETERS FOR MILK-YIELD AND COMPOSITION OF CROSSBRED DAIRY- <b>CATTLE</b> IN <b>BRAZIL</b>	FREITAS, AF WILCOX, CJ ROMAN, RM	
Geral	Genotyping BoLA-DRB3 alleles in <b>Brazilian Dairy Gir cattle</b> ( <i>Bos indicus</i> ) by temperature-gradient gel electrophoresis (TGGE) and direct sequencing	da Mota, AF Martinez, ML Coutinho, LL	Univ Sao Paulo
Geral	Growth surges in 1998/94 <b>Brazilian</b> crop cycle	Anon	
Geral	Heterogeneity of variance and genetic evaluation of Brown Swiss <b>cattle</b> breed in <b>Brazil</b> .	de Araujo, CV Torres, RD Renno, FP Pereira, JC Torres, RD Araujo, SI Pires, AV Rodrigues, CAF	UFV
Geral	Heterogeneity of variance and genetic evaluation of Holstein <b>cattle</b> in <b>Brazil</b>	Torres, RD Bergmann, JAG Costa, CN Pereira, CS Valente, J Penna, VM Torres, RD de Araujo, CV	
Geral	Hunting spiders of woodland fragments and <b>agricultural</b> habitats in the Atlantic rain forest region of <b>Brazil</b>	Rinaldi, IMP Forti, LC	UNESP
Geral	Improving nutrient use efficiency of annual <b>crops</b> in <b>Brazilian</b> acid soils for sustainable <b>crop</b> production	Fageria, NK Baligar, VC	Natl Rice & Bean Res Ctr Embrapa
Geral	Inbreeding effects on growth traits of Gyr <b>cattle</b> in <b>Brazil</b>	de Queiroz, SA de Albuquerque, LG Lanzoni, NA	UNESP
Geral	Incidence of leptospiral abortion in <b>Brazilian</b> dairy <b>cattle</b>	Langoni, H de Souza, LC da Silva, AV Luvizotto, MCR Paes, AC Lucheis, SB	
Geral	Interactions in the <b>Agrobacterium</b> -soybean system and capability of some <b>Brazilian</b> soybean cultivars to produce somatic embryos	Di Mauro, AO de Nobrega, JCM Di Mauro, SMZ Collins, GB	UNESP
Geral	Interest groups and economic policy: Explaining the pattern of protection in the <b>Brazilian agricultural</b> sector	Helfand, SM	Univ Calif Riverside
Geral	INTERROOT MOVEMENT OF AZOSPIRILLUM-BRASILENSE AND SUBSEQUENT ROOT COLONIZATION OF <b>CROP</b> AND WEED SEEDLINGS GROWING IN SOIL	BASHAN, Y HOLGUIN, G	BIOL RES CTR
Geral	ISOLATION AND CHARACTERIZATION OF A LOCUS FROM AZOSPIRILLUM-BRASILENSE SP7 THAT COMPLEMENTS THE TUMORIGENIC DEFECT OF <b>AGROBACTERIUM</b> -TUMEFACIENS CHVB MUTANT	RAINA, S RAINA, R VENKATESH, TV DAS, HK	

Classificação	Título	Autores	Instituição de correspondência
Geral	Lead concentration in mineral salt mixtures used in beef <b>cattle</b> food supplementation in <b>Brazil</b>	Marcal, WS Gaste, L Liboni, M Pardo, PE Do Nascimento, MR Hisasi, CS	Londrina State Univ
Geral	Lead poisoning in <b>cattle</b> in southern <b>Brazil</b>	Traverso, SD Loretti, AP Donini, MA Driemeier, D	UFRGS
Geral	Litter decomposition in semideciduous forest and Eucalyptus spp. <b>crop</b> in <b>Brazil</b> : A comparison	Louzada, JNC Schoederer, JH DeMarco, P	
Geral	Long-term tillage and <b>crop</b> rotation effects on microbial biomass and C and N mineralization in a <b>Brazilian</b> Oxisol	Balota, EL Colozzi, A Andrade, DS Dick, RP	IAPAR
Geral	Management effects on nitrogen recovery in a sugarcane <b>crop</b> grown in <b>Brazil</b>	Basanta, MV Dourado-Neto, D Reichardt, K Bacchi, OOS Oliveira, JCM Trivelin, PCO Timm, LC Tominaga, TT Correchel, V Cassaró, FAM Pires, LF de Macedo, JR	Univ Sao Paulo
Geral	Managing urban settlement in <b>Brazil's</b> <b>agroindustrial</b> frontier	Chase, J	UNIV CALIF LOS ANGELES
Geral	Microelement deficiencies and imbalances in <b>cattle</b> and sheep in some regions of <b>Brazil</b>	Moraes, SD Tokarnia, CH Dobereiner, J	EMBRAPA
Geral	Milk protein polymorphisms in <b>Brazilian</b> Zebu <b>cattle</b>	da Silva, IT Del Lama, MA	Univ Fed Sao Carlos
Geral	Mineral deficiencies and imbalances in <b>cattle</b> and sheep - a review of <b>Brazilian</b> studies made between 1987 and 1998	Tokarnia, CH Dobereiner, J Moraes, SS Peixoto, PV	Univ Fed Rural Rio de Janeiro
Geral	Net and dietary energy, protein and macrominerals requirements of beef <b>cattle</b> in <b>Brazil</b>	da Silva, FF Valadares, SD Itavo, LCV Veloso, CM Valadares, RFD Cecon, PR Paulino, PVR de Moraes, EHBK	UESB
Geral	Networks and <b>agricultural</b> development: The case of soybean production and consumption in <b>Brazil</b>	de Sousa, ISF Busch, L	Brazilian Corp Agr Res
Geral	OCCURRENCE OF <b>AGROBACTERIUM-TUMEFACIENS</b> BIOVAR 3 ON GRAPEVINE IN <b>BRAZIL</b>	DEOLIVEIRA, JR ROMEIRO, RD LACERDA, BDL	Univ Fed Vicosa
Geral	PCR screening and allele frequency estimation of bovine leukocyte adhesion deficiency in Holstein and Gir <b>cattle</b> in <b>Brazil</b>	Ribeiro, LA Baron, EE Martinez, ML Coutinho, LL	USP

Classificação	Título	Autores	Instituição de correspondência
Geral	Persistence of polycyclic aromatic hydrocarbons in the soil of a burned area for <b>agricultural</b> purposes in <b>Brazil</b>		
Geral	Pesticide use in <b>Brazil</b> in the era of <b>agroindustrialization</b> and globalization	Dasgupta, S Mamingi, N Meisner, C	World Bank
Geral	Phage-mediated transfer of tetracycline resistance in <i>Staphylococcus aureus</i> isolated from <b>cattle</b> in <b>Brazil</b>	Pereira, MSV Barreto, VP Siqueira-Junior, JP	Univ Fed Paraiba
Geral	Photosensitization and crystal-associated cholangiohepatopathy in <b>cattle</b> grazing <i>Brachiaria decumbens</i> in <b>Brazil</b>	Lemos, RA Salvador, SC Nakazato, L	UNIV FED MATO GROSSO DO SUL
Geral	Plant biotech - European consumers stunt <b>Brazilian crops</b>	Sissell, K	
Geral	Predominant African-derived mtDNA in Caribbean and <b>Brazilian Creole cattle</b> is also found in Spanish <b>cattle</b> ( <i>Bos taurus</i> )	Miretti, MM Dunner, S Naves, M Contel, EP Ferro, JA	Wellcome Trust Sanger Inst
Geral	Prevalence of <i>Malassezia</i> spp. in the ears of asymptomatic <b>cattle</b> and <b>cattle</b> with otitis in <b>Brazil</b>	Duarte, ER Melo, MM Hahn, RC Hamdan, JS	UFMG
Geral	Producing possession: labour, law and land on a <b>Brazilian agricultural</b> frontier, 1920-1945	Brannstrom, C	Univ London
Geral	Production of <i>Hevea brasiliensis</i> transgenic embryogenic callus lines by <b>Agrobacterium tumefaciens</b> : roles of calcium	Montoro, P Rattana, W Pujade-Renaud, V Michaux-Ferriere, N Monkolsook, Y Kanthapura, R Adunsadthapong, S	CIRAD CP
Geral	Remineralization for sustainable <b>agriculture</b> : A tropical perspective from a <b>Brazilian</b> viewpoint	Leonardos, OH Theodoro, SH Assad, ML	UNB
Geral	Seroprevalence and molecular evidence for the presence of bovine immunodeficiency virus in <b>Brazilian cattle</b>	Meas, S Ruas, FJ Usui, T Teraoka, Y Mulenga, A Chang, KS Masuda, A Madruga, CR Ohashi, K Onuma, M	Hokkaido Univ
Geral	Skin test and tick immune status in susceptible and resistant <b>cattle</b> in <b>Brazil</b>	Bechara, GH Morelli, J Szabo, MPJ	Univ Estadual Paulista
Geral	Smoke impacts from <b>agricultural</b> burning in a rural <b>Brazilian</b> town	Reinhardt, TE Ottmar, RD Castilla, C	URS Corp
Geral	Soil bulk density and porosity of homogeneous morphological units identified by the <b>Cropping Profile Method</b> in clayey Oxisols in <b>Brazil</b>	Neves, CSVJ Feller, C Guimaraes, MF Medina, CC Tavares, J Fortier, M	Londrina State Univ

Classificação	Título	Autores	Instituição de correspondência
Geral	Soil tillage and precision <b>agriculture</b> - A theoretical case study for soil erosion control in <b>Brazilian</b> sugar cane production	Sparovek, G Schnug, E	Inst Plant Nutr & Soil Sci
Geral	Soil-atmosphere CO exchanges and microbial biogeochemistry of CO transformations in a <b>Brazilian agricultural</b> ecosystem	King, GM Hungria, M	Univ Maine
Geral	Superovulatory response in continuously heat stressed Holstein-Friesian <b>cattle</b> in <b>Brazil</b>	Benyei, B Fari, M Barros, CWC Solti, L	
Geral	SUSCEPTIBILITY OF <b>BRAZILIAN</b> SOYBEAN CULTIVARS TO <b>AGROBACTERIUM-TUMEFACIENS</b>	DROSTE, A BODANESEZANE TTINI, MH MUNDSTOCK, E HU, CY	
Geral	SUSCEPTIBILITY OF SOME <b>BRAZILIAN</b> SOYBEAN GENOTYPES TO 3 STRAINS OF <b>AGROBACTERIUM-TUMEFACIENS</b>	MAURO, AO NOBREGA, JC BARALDI, GL COLLINS, GB	UNIV ESTADO SAO PAULO
Geral	Systemic granulomatous disease in <b>Brazilian cattle</b> grazing pasture containing vetch ( <i>Vicia</i> spp)	Figuera, RA Barros, CS	Univ Fed Santa Maria
Geral	TAXATION OF <b>AGRICULTURE</b> IN <b>BRAZIL</b> - DO LOBBIES MATTER	HELFAND, S	
Geral	Taxonomic classification of rhizobial strains recommended for soybean and common bean <b>crops</b> in <b>Brazil</b> based on the sequencing of the 16s rRNA gene	Chueire, LMO Bangel, EV Mostasso, FL Campo, RJ Pedrosa, FO Hungria, M	Embrapa Soja
Geral	The <b>Brazilian cattle</b> sector: Status, prospects and controversies	Faminow, MD	Univ Manitoba
Geral	The distribution of subsidized <b>agricultural</b> credit in <b>Brazil</b> : Do interest groups matter?	Helfand, SM	Univ Calif Riverside
Geral	The impact of sector-specific and economy-wide policy reforms on the <b>agricultural</b> sector in <b>Brazil</b> : 1980-98	Helfand, SM de Rezende, GC	Univ Calif Riverside
Geral	The incidence of Shiga toxin-producing <i>Escherichia coli</i> in <b>cattle</b> with mastitis in <b>Brazil</b>	Lira, WM Macedo, C Marin, JM	Univ Sao Paulo
Geral	The land resource information and suitability system for family <b>agriculture</b> (LARISSA), developed for the <b>Brazilian</b> agrarian reform	Sparovek, G Cooper, M Dourado-Neto, D Maule, RF Vidal-Torrado, P Pimenta, LFD Martins, SP Teramoto, ER Silva, AC Van de Steeg, J Schnug, E	Univ Sao Paulo
Geral	The political economy of <b>agricultural</b> policy in <b>Brazil</b> : Decision Making and Influence from 1964 to 1992	Helfand, SM	Univ Calif Riverside
Geral	Total costs, environmental standards and international competitiveness - Case study results for selected <b>agricultural</b> products from <b>Brazil</b> , Germany and Indonesia	Grote, U Deblitz, C Stegmann, S	Zentrum Entwicklungsfor ch

Classificação	Título	Autores	Instituição de correspondência
Geral	Trace elements in <b>Brazilian</b> agricultural limestones and mineral fertilizers	Gabe, U Rodella, AA	USP
Geral	Use of <i>Gliricidia sepium</i> and <i>Leucaena leucocephala</i> in alley <b>cropping</b> systems to improve <b>Brazilian</b> coastal tableland soils	Barreto, AC Fernandes, MF	EMBRAPA
Geral	Using geostatistical analysis to evaluate the presence of <i>Rotylenchulus reniformis</i> in cotton <b>crops</b> in <b>Brazil</b> : Economic implications	Farias, PRS Sanchez-Vila, X Barbosa, JC Vieira, SR Ferraz, LCCB Soliz-Delfin, J	Dept Sci
Geral	Variance components and genetic parameters estimates for growth traits of Simmental <b>cattle</b> in <b>Brazil</b>	Marques, LFA Pereira, JCC Oliveira, HN Pereira, CS Bergmann, JAG	Univ Fed Fluminense
GO	Muscoid dipterous insects associated with <b>cattle</b> feces and their parasitoids in Goiás State, <b>Brazil</b>	Marchiori, CH Vieira, CIS Caldas, ER Teixeira, FF Silva, CG Linhares, AX	ULBRA
GO	Regional prestige: Cooperatives and <b>agroindustrial</b> identity in southwest Goiás, <b>Brazil</b>	Chase, J	Calif State Univ Los Angeles;
GO	Species of <i>Spalangia</i> (Hymenoptera : Pteromalidae : Spalangiane) as parasitoid pupa of muscoid dipterous insects in <b>cattle</b> feces in Goiás State, <b>Brazil</b>	Marchiori, CH Oliveira, AT Linhares, AX	ULBRA
GO	Trapped workers, urban freedoms and labor control in <b>Brazilian agriculture</b> : Evidence from southwest Goiás	Chase, J	Univ Massachusetts
Guarapuava	<b>CROP-ROTATION IN GUARAPUAVA, PR BRAZIL</b> .16. ENERGETIC EFFICIENCY OF ROTATION SYSTEMS FOR WHEAT, UNDER NO-TILLAGE	DOSSANTOS, HP REIS, EM	EMBRAPA
Itumbiara	Muscoid dipterous collected from <b>cattle</b> dung pats in pastures in Itumbiara, Goiás, <b>Brazil</b>	Marchiori, CH Caldas, ER Almeida, KGS Linhares, AX	Inst Luterano Ensino Superior Itumbiara
Lavras	Influence of weather and plant cutting on aphid population (Homoptera: Aphididae) in alfalfa <b>crop</b> ( <i>Medicago sativa</i> L) in Lavras county, <b>Brazil</b>	deCarvalho, AR Bueno, VHP Mendes, S	UNIV FED LAVRAS
MG	A simulation model for evaluating technical and economic aspects of an industrial eucalyptus-based <b>agroforestry</b> system in Minas Gerais, <b>Brazil</b>	Dube, F Couto, L Silva, ML Leite, HG Garcia, R Araujo, GAA	QMI
MG	<b>CATTLE AND SHEEP IN EUCALYPT PLANTATIONS - A SILVOPASTORAL ALTERNATIVE IN MINAS-GERAIS, BRAZIL</b>	COUTO, L ROATH, RL BETTERS, DR GARCIA, R ALMEIDA, JCC	Univ Fed Vicosa

Classificação	Título	Autores	Instituição de correspondência
MG	Continual learning for <b>agroforestry</b> system design: university, NGO and farmer partnership in Minas Gerais, <b>Brazil</b>	Cardoso, IM Guijt, I Franco, FS Carvalho, AF Neto, PSF	Univ Wageningen & Res Ctr
MG	EVALUATION OF <b>AGRONOMIC</b> PERFORMANCE AND FIBER QUALITY OF CULTIVARS AND STRAINS OF GLANDLESS COTTON GROWN IN THE CONDITIONS OF MINAS-GERAIS, <b>BRAZIL</b>	PENNA, JCV TORRES, GA	Univ Fed Uberlandia
MG	Factors limiting the growth of Panicum maximum cv. Tanzania-1 in an <b>agrosilvopastoral</b> system with eucalypt, in the Cerrados of Minas Gerais, <b>Brazil</b>	de Andrade, CMS Garcia, R Couto, L Pereira, OG	Univ Fed Vicosa
MG	Growth and yield of coffee plants in <b>agroforestry</b> and monoculture systems in Minas Gerais, <b>Brazil</b>		
MG	Infection by Neospora caninum associated with bovine herpesvirus 1 and bovine viral diarrhoea virus in <b>cattle</b> from Minas Gerais State, <b>Brazil</b>	de Melo, CB Leite, RC Lobato, ZIP Leite, RC	Univ Fed Sergipe
MG	Seasonal infection pattern of gastrointestinal nematodes of beef <b>cattle</b> in Minas Gerais State <b>Brazil</b>	Lima, WS	Univ Fed Minas Gerais
MG	Seasonal variation of Boophilus microplus (Canestrini, 1887) (Acari : Ixodidae) in <b>cattle</b> in Minas Gerais state, <b>Brazil</b>	Lima, WS Ribeiro, MF Guimaraes, MP	Univ Fed Minas Gerais
MT	"The law of the least effort" - <b>Cattle</b> ranching and the environment in the savanna of Mato Grosso, <b>Brazil</b> , 1900-1980	Wilcox, RW	No Kentucky Univ
MT	Effect of <b>cropping</b> systems on the stability of red-yellow latosol aggregates in Querencia, Mato Grosso, <b>Brazil</b>	Correa, JC	EMBRAPA
MT	Genotype environmental interaction in some growth traits of beef <b>cattle</b> in <b>Brazil</b>	Ferreira, VCP Penna, VM Bergmann, JAG Torres, RA	UFMG
Pantanal	Botanical composition of <b>cattle</b> diet on rangelands in the Pantanal wetland, <b>Brazil</b>	Santos, SA Costa, C Souza, GDE Pott, A Alvarez, JM Machado, SR	Univ Estadual Paulista Julio Mesquita Filho
Pantanal	<b>Cattle</b> ranching and deforestation in the <b>Brazilian</b> Pantanal	Seidl, AF de Silva, JDV Moraes, AS	Colorado State Univ
Pantanal	<b>CATTLE</b> REPRODUCTIVE-PERFORMANCE IN THE PAIAGUAS SUBREGION OF THE <b>BRAZILIAN</b> PANTANAL .4. EFFECT OF CALF WEANING AGE ON BREEDING COWS	DEALMEIDA, IL DEBRUM, PAR TULLIO, RR AROEIRA, JADC POTT, EB	EMBRAPA
Pantanal	Dynamics of Haematobia irritans irritans (Diptera : Muscidae) infestation on Nelore <b>cattle</b> in the Pantanal, <b>Brazil</b>	Barros, ATM	Embrapa Pantanal
Pantanal	INVESTIGATIONS ON NATURALLY-OCCURRING TRYPANOSOMA-EVANSI INFECTIONS IN HORSES, <b>CATTLE</b> , DOGS AND CAPYBARAS (HYDROCHAERIS-HYDROCHAERIS) IN PANTANAL-DE-POCONE (MATO-GROSSO, <b>BRAZIL</b> )	FRANKE, CR GREINER, M MEHLITZ, D	

Classificação	Título	Autores	Instituição de correspondência
Passo Fundo	<b>Crop</b> productivity of wheat rotation systems for ten-year period, in Passo Fundo, RS, <b>Brazil</b>	dosSantos, HP Ignaczak, JC Lhamby, JCB	EMBRAPA
PB	<b>AGROCLIMATIC POTENTIAL OF SUNFLOWER IN PARAIBA STATE, BRAZIL</b> .1. TEMPERATURE AND SOLAR-RADIATION	ZAFFARONI, E SILVA, MAV DE AZEVEDO, PV	Univ Fed Pelotas
PB	<b>AGROCLIMATIC POTENTIAL OF SUNFLOWER IN PARAIBA STATE, BRAZIL</b> .2. WATER REQUIREMENTS	ZAFFARONI, E SILVA, MAV DE AZEVEDO, PV	Univ Fed Pelotas
PI	Morphological dimorphism in the Y chromosome of "pe-duro" <b>cattle</b> in the <b>Brazilian</b> State of Piaui	Britto, CMC Mello, MLS	UNICAMP
Pilar-do-Sul	SUSCEPTIBILITY OF THE 2-SPOTTED SPIDER-MITE COLLECTED FROM GRAPE <b>CROP</b> (VITIS SPP) IN PILAR-DO-SUL, SAO-PAULO, <b>BRAZIL</b> , TO SOME ACARICIDES	DESOUZA, MF SUPLICY, N SATO, ME TAKEMATSU, AP	INST BIOL
PR	Determination of spatial water requirements at county and regional levels using <b>crop</b> models and GIS - An example for the State of Parana, <b>Brazil</b>	Heinemann, AB Hoogenboom, G de Faria, RT	Univ Georgia
PR	Effects of pruning season on cassava <b>crops</b> in the Northwestern region of Parana, <b>Brazil</b>	Takahashi, M	Inst Agron Parana
PR	Experimental infection of Lymnaea columella, Physa cubensis and Physa marmorata with <b>cattle</b> Fasciola hepatica miracidia from Curitiba urban area and Parana East Coast, <b>Brazil</b>	Luz, E Carlos, L Diniz, JMF Leite, LC Kozemjakin, DA Werka, L	UF PR
PR	Prevalence and geographical distribution of bovine eurytrematosis in <b>cattle</b> slaughtered in northern Parana, <b>Brazil</b>	de Azevedo, JR Mannigel, RC Agulhon, AZ Borba, TR Barbieri, AW de Oliveira, DCL Headley, SA Janeiro, V	CESUMAR
PR	Prevalence of Neospora caninum antibodies and factors associated with their presence in dairy <b>cattle</b> of the north of Parana' state, <b>Brazil</b>	Guimaraes, JS Souza, SLP Bergamaschi, DP Gennari, SM	Univ Estadual Londrina
PR	Prevalence of Neospora caninum antibodies in dogs from dairy <b>cattle</b> farms in Parana, <b>Brazil</b>	de Souza, SLP Guimaraes, JS Ferreira, F Dubey, JP Gennari, SM	USDA ARS
PR	Seroprevalence of Anaplasma marginale in <b>cattle</b> in Parana State, <b>Brazil</b> , by MSP-5 competitive ELISA	Vidotto, MC Vidotto, O Andrade, GM Palmer, G McElwain, T Knowles, DP	Univ Estadual Londrina
Região Central	Carbon and nitrogen mineralization in soils under <b>agro-pastoral</b> systems in subtropical Central <b>Brazil</b>	Kanda, K Miranda, CHB Macedo, MCM	Natl Inst Agroenvironm Sci

Classificação	Título	Autores	Instituição de correspondência
Região Central	Diagnosis of the productivity gap using a <b>crop</b> model. Methodology and case study of small-scale maize production in central <b>Brazil</b>	Affholder, F Scopel, E Neto, JM Capillon, A	Cirad CA
Região Centro-Oeste	THE <b>BRAZILIAN</b> MIDWEST - ECONOMIC AND SOCIOGEOGRAPHIC CHANGE IN A PERIPHERAL <b>AGRICULTURAL</b> REGION - GERMAN - COY,M, LUCKER,R	BORSDORF, A	INNSBRUCK UNIV
Região Leste	INDIGENOUS KNOWLEDGE IN A MODERN SUSTAINABLE <b>AGROFORESTRY</b> SYSTEM – A CASE-STUDY FROM EASTERN <b>BRAZIL</b>	SCHULZ, B BECKER, B GOTSCH, E	
Região Nordeste	Adaptability and yield stability of corn cultivars in the <b>Brazilian</b> Northeast in the <b>agricultural</b> year of 1998	de Carvalho, HWL Leal, MDD Cardoso, MJ dos Santos, MX de Carvalho, BCL Tabosa, JN Lira, MA Albuquerque, MM	EMBRAPA
Região Nordeste	Effects on employment, wages, and labor standards of non-traditional export <b>crops</b> in northeast <b>Brazil</b>	Damiani, O	
Região Nordeste	Fine root mineralization, soil organic matter and exchangeable cation dynamics in slash and burn <b>agriculture</b> in the semi-arid northeast of <b>Brazil</b>	Lessa, ASN Anderson, DW Moir, JO	Univ Saskatchewan
Região Nordeste	Influence of heavy <b>agricultural</b> work during pregnancy on birthweight in Northeast <b>Brazil</b>	Lima, M Ismail, S Ashworth, A Morris, SS	Univ London London Sch Hyg & Trop Med
Região Nordeste	Modeling soil nutrient limitations to <b>crop</b> production in semiarid NE of <b>Brazil</b> with a modified EPIC version I. Changes in the source code of the model	de Barros, I Williams, JR Gaiser, T	Ctr CIRAD
Região Nordeste	Organic matter turnover and management in low input <b>agriculture</b> of NE <b>Brazil</b>	Tiessen, H Sampaio, EVSB Salcedo, IH	Univ Saskatchewan
Região Nordeste	Residual N and P fertilizer effect and fertilizer recovery on <b>intercropped</b> and sole- <b>cropped</b> corn and bean in semiarid northeast <b>Brazil</b>	Sampaio, ESB Tiessen, H Antonino, ACD Salcedo, IH	Univ Fed Pernambuco
Região Norte	A study of alley- <b>cropping</b> data from Northern <b>Brazil</b> - II. A comparison of methods to estimate sample size	Oyejola, BA Riley, J Bolton, S	IACR Rothamsted
Região Sudeste	A survey of dairy <b>cattle</b> worm control practices in Southeast <b>Brazil</b>	Charles, TP Furlong, J	EMBRAPA
Região Sudeste	<b>Cattle</b> dung breeding diptera in pastures in southeastern <b>Brazil</b> : Diversity, abundance and seasonality	Mendes, J Linhares, AX	Univ Estadual Campinas
Região Sudeste	Detection of bovine herpesvirus type 5 (BoHV-5) in <b>cattle</b> in Southeast <b>Brazil</b>	Gomes, LI Rocha, MA Costa, EA Lobato, ZIP Mendes, LCN Borges, AS Leite, RC Barbosa-Stancioli, EF	Univ Fed Minas Gerais



Classificação	Título	Autores	Instituição de correspondência
Região Sudeste	Optimal replacement and insemination policies for Holstein <b>cattle</b> in the southeastern region of <b>Brazil</b> : The effect of selling animals for production	Cardoso, VL Nogueira, JR Van Arendonk, JAM	Inst Zootecnia;
Região Sudeste	Optimum replacement and insemination policies for crossbred <b>cattle</b> (Holstein Friesian x Zebu) in the south-east region of <b>Brazil</b>	Cardoso, VL Nogueira, JR Van Arendonk, JAM	Wageningen Univ Agr
Região Sul	Abortus by <i>Aspergillus fumigatus</i> and <i>Aspergillus niger</i> in <b>cattle</b> in southern <b>Brazil</b>	Corbellini, LG Pescador, CA Frantz, FJ de Lima, M Ferreiro, L Driemeier, D	UFRGS
Região Sul	Bracken fern ( <i>Pteridium aquilinum</i> ) poisoning in <b>cattle</b> in southern <b>Brazil</b>	Gava, A Neves, DD Gava, DSaliba, TD Schild, AL Riet- Correa, F	Univ Estado Santa Catarina
Região Sul	Clinical and pathological study of an outbreak of obstructive urolithiasis in feedlot <b>cattle</b> in southern <b>Brazil</b>	Loretti, AP de Oliveira, LO Cruz, CEF Driemeier, D	Univ Fed Rio Grande Sul
Região Sul	Congenital cerebellar cortical degeneration in Holstein <b>cattle</b> in southern <b>Brazil</b>	Schild, AL Riet-Correa, F Portiansky, EL Mendez, MC Graca, DL	UFPEl
Região Sul	Conservation farming in southern <b>Brazil</b> : Using cover <b>crops</b> to decrease erosion and increase infiltration	Busscher, WJ Reeves, DW Kochhann, RA Bauer, PJ Mullins, GL Clapham, WM Kemper, WD Galerani, PR	
Região Sul	CONTESTING THE HOUSEHOLD ESTATE - SOUTHERN <b>BRAZILIAN</b> PEASANTS AND MODERN <b>AGRICULTURE</b> - PAPMA,F	CRAVIOTTI, C	
Região Sul	CONTESTING THE HOUSEHOLD ESTATE, SOUTHERN <b>BRAZILIAN</b> PEASANTS AND MODERN <b>AGRICULTURE</b> - PAPMA,F	KAY, C	INST SOCIAL STUDIES
Região Sul	Detection of genomic variability in different populations of the <b>cattle</b> tick <i>Boophilus microplus</i> in southern <b>Brazil</b>	Passos, DT Ferreira, CAS da Silva, SS Richter, MF Ozaki, LS	Univ Fed Rio Grande Sul
Região Sul	Diseases of the central nervous system in <b>cattle</b> of southern <b>Brazil</b> .	Sanches, AWD Langohr, IM Stigger, AL Barros, CSL	UFMS
Região Sul	Dry matter, C/N ratio and nitrogen, phosphorus and potassium accumulation in mixed soil cover crops in Southern <b>Brazil</b>	Giacomini, SJ Aita, C Vendruscolo, ERO Cubilla, M Nicoloso, RS Fries, MR	Univ Fed Santa Maria

Classificação	Título	Autores	Instituição de correspondência
Região Sul	EFFECT OF <b>CROP</b> -ROTATION ON YIELDS, SOIL CHEMICAL CHARACTERISTICS, AND ECONOMIC RETURNS OF ZERO-TILL BARLEY IN SOUTHERN <b>BRAZIL</b>	DOS SANTOS, HP ZENTNER, RP SELLES, F AMBROSI, I	EMBRAPA
Região Sul	Effect of no-till <b>cropping</b> systems on soil organic matter in a sandy clay loam Acrisol from Southern <b>Brazil</b> monitored by electron spin resonance and nuclear magnetic resonance	Bayer, C Martin-Neto, L Mielniczuk, J Ceretta, CA	Embrapa Instrumentação Agropecuária
Região Sul	Field observations of Ateleia glazioviana poisoning in <b>cattle</b> in southern <b>Brazil</b>	Gava, A de Barros, CSL	Univ Fed Santa Catarina
Região Sul	Gaining ground: Land use and soil conservation in areas of <b>agricultural</b> colonisation in South <b>Brazil</b> and East Paraguay	Morris, AS	Univ Glasgow
Região Sul	Genetic parameters for <b>agronomic</b> traits of triticale and other small-grain cereals grown on aluminium-toxic soil in southern <b>Brazil</b>	Oettler, G Wietholter, S Horst, WJ	Univ Hohenheim
Região Sul	Hyperthermic syndrome in dairy <b>cattle</b> associated with consumption of ergots of Claviceps purpurea in southern <b>Brazil</b>	Ilha, MRS Loretti, AP Barros, CSL	
Região Sul	Intoxication by Xanthium cavanillesii in <b>cattle</b> and sheep in southern <b>Brazil</b>	Mendez, MD dos Santos, RC Riet-Correa, F	Univ Fed Pelotas
Região Sul	Long-term tillage and <b>crop</b> rotation effects on soil chemical properties of a Rhodic Ferralsol in southern <b>Brazil</b>	DeMaria, IC Nabude, PC de Castro, OM	Inst Agron
Região Sul	Nitrogen availability as affected by ten years of cover <b>crop</b> and tillage systems in southern <b>Brazil</b>	Amado, TJC Fernandez, SB Mielniczuk, J	Univ Fed Rio Grande Sul
Região Sul	Organic matter storage in a sandy clay loam Acrisol affected by tillage and <b>cropping</b> systems in southern <b>Brazil</b>	Bayer, C Mielniczuk, J Amado, TJC Martin-Neto, L Fernandes, SV	
Região Sul	Redroot pigweed (Amaranthus retroflexus) poisoning of <b>cattle</b> in southern <b>Brazil</b>	Torres, MB Kommers, GD Dantas, AFM deBarros, CSL	Univ Fed Santa Maria
Região Sul	Serological diagnosis of neosporosis in a herd of dairy <b>cattle</b> in southern <b>Brazil</b>	Locatelli-Dittrich, R Socol, VT Richartz, RRTB Gasino-Joineau, ME Vinne, R Pinckney, RD	Univ Fed Parana
Região Sul	Shiga toxin-producing Escherichia coli (STEC) isolated from healthy dairy <b>cattle</b> in southern <b>Brazil</b>	Moreira, CN Pereira, MA Brod, CS Rodrigues, DP Carvalho, JB Aleixo, JAG	UFPEl
Região Sul	Soil organic carbon and fractions of a Rhodic Ferralsol under the influence of tillage and <b>crop</b> rotation systems in southern <b>Brazil</b>	Freixo, AA Machado, PLOD dos Santos, HP Silva, CA Fadigas, FD	Embrapa Solos
Região Sul	The Je of southern <b>Brazil</b> and the antiquity of <b>agriculture</b> : Linguistic, archaeological and ethnographic elements	Noelli, FS	

Classificação	Título	Autores	Instituição de correspondência
RJ	An emergent poxvirus from humans and <b>cattle</b> in Rio de Janeiro State: Cantagalo virus may derive from <b>Brazilian</b> smallpox vaccine	Damaso, CRA Esposito, JJ Condit, RC Moussatche, N	UFRJ
RJ	Cancer mortality among <b>agricultural</b> workers from Serrana Region, state of Rio de Janeiro, <b>Brazil</b>	Meyer, A Chrisman, J Moreira, JC Koifman, S	Escola Nacl Saude Publica
RJ	High occurrence of Shiga toxin-producing Escherichia coli (STEC) in healthy <b>cattle</b> in Rio de Janeiro State, <b>Brazil</b>	Cerqueira, AMF Guth, BEC Joaquim, RM Andrade, JRC	Univ Fed Fluminense
RO	Deforestation and <b>agroforestry</b> adoption in tropical forests: Can we generalize? Some results from Campeche, Mexico, and Rondonia, <b>Brazil</b> .	Casey, JF Caviglia, JL	
RO	Surface exchange of nitric oxide, nitrogen dioxide, and ozone at a <b>cattle</b> pasture in Rondonia, <b>Brazil</b>	Kirkman, GA Gut, A Ammann, C Gatti, LV Cordova, AM Moura, MAL Andreae, MO Meixner, FX	Max Planck Inst Chem
RO	Sustainable <b>agricultural</b> practices in Rondonia, <b>Brazil</b> : Do local farmer organizations affect adoption rates?	Caviglia-Harris, JL	
RS	Clinico-pathological aspects in the natural infection of Bovine Respiratory Syncytial Virus (BRSV) in extensive management of <b>cattle</b> in Rio Grande do Sul, <b>Brazil</b>	Driemeier, D Gomes, MJP Moojen, V Arns, CW Vogg, G Kessler, L daCosta, UM	Univ Fed Rio Grande Sul
RS	Malignant catarrhal fever in cattle in Rio Grande do Sul, <b>Brazil</b> : Experimental transmission to <b>cattle</b> and characterization of the etiological agent.	Garmatz, SL Irigoyen, LE Rech, RR Brown, CC Zhang, J Barros, CSL	
RS	Neosporosis as a cause of abortion in dairy <b>cattle</b> in Rio Grande do Sul, southern <b>Brazil</b>	Corbellini, LG Driemeier, D Cruz, CFE Gondim, LFP Wald, V	Univ Fed Rio Grande Sul
RS	Partial strategic tick control within a herd of European breed <b>cattle</b> in the state of Rio Grande do Sul, southern <b>Brazil</b>	Martins, JR Evans, DE Cereser, VH Correa, BL	Estrada Bandeirantes 27635
RS	Spontaneous poisoning by the burs of Xanthium cavanillesii (Asteraceae) in <b>cattle</b> in Rio Grande do Sul, southern <b>Brazil</b>	Driemeier, D Irigoyen, LF Loretti, AP Colodel, EM Barros, CSL	Univ Fed Rio Grande Sul
RS	Systemic granulomatous disease in cattle in Rio Grande do Sul, <b>Brazil</b> , associated with grazing vetch (Vicia spp)	Barros, CSL Figuera, RA Rozza, DB Rech, RR Sallis, SV Langohr, IM	Univ Fed Santa Maria

Classificação	Título	Autores	Instituição de correspondência
RS	Time of <b>agricultural</b> use and chemical properties of two Ferralsols in the Planalto Medio region of the State of Rio Grande do Sul, <b>Brazil</b>	Perin, E Ceretta, CA Klamt, E	EMATER PR
São Carlos	Soil and climate characteristics and socio-economic data in the diagnostic of <b>agroecosystems</b> of Sao Carlos region, SP, <b>Brazil</b>	Pinto, LFG Crestana, S	Escola Super Agr Luis Dequeiroz
São Carlos	Water quality of the Canchim's creek watershed in Sao Carlos, SP, <b>Brazil</b> , occupied by beef and dairy <b>cattle</b> activities	Primavesi, O de Freitas, AR Primavesi, AC de Oliveira, HT	EMBRAPA
Savana	<b>Agronomic</b> characterization of amaranth for cultivation in the <b>Brazilian</b> Savannah	Teixeira, DL Spehar, CR Souza, LAC	QE 21
Savana	IMPACT OF STRATEGIC GENES IN SOYBEAN ON <b>AGRICULTURAL-DEVELOPMENT</b> IN THE <b>BRAZILIAN TROPICAL SAVANNAS</b>	SPEHAR, CR	CERRADOS NATL RES CTR
SC	<i>Phalaris angusta</i> (Gramineae) causing neurological disease in <b>cattle</b> in the State of Santa Catarina, <b>Brazil</b>	Gava, A Sousa, RS de Deus, MS Pilati, C Cristani, J Mori, A Neves, DS	Univ Estado Santa Catarina
SE	Selection of indigenous rhizobia to the cowpea, pigeonpea and jackbean <b>crops</b> in the coastal tableland of Sergipe, <b>Brazil</b>	Fernandes, MF Fernandes, RPM Hungria, M	EMBRAPA
SP	<b>Agroforestry</b> benefit zones: A tool for the conservation and management of Atlantic forest fragments, Sao Paulo, <b>Brazil</b>	Cullen, L Schmink, M Padua, CV Morato, MIR	
SP	CARBON STORAGE AND OTHER PROPERTIES OF SOILS UNDER <b>AGRICULTURE</b> AND NATURAL VEGETATION IN SAO-PAULO STATE, <b>BRAZIL</b>	LEPSCH, IF MENK, JRF OLIVEIRA, JB	INST AGRON CAMPINAS
SP	Electrophoretical characterization and subgroup analysis of rotavirus in dairy <b>cattle</b> in the State of Sao Paulo, <b>Brazil</b> .	Buzinaro, MG Munford, V Brito, VMED Racz, ML Jerez, JA	UNESP
SP	Enhanced degradation of metalaxyl in <b>agricultural</b> soils of Sao Paulo State, <b>Brazil</b>	Papini, S de Andrea, MM	Ctr Protecao Ambiental
SP	Host specificity of sheep and <b>cattle</b> nematodes in Sao Paulo state, <b>Brazil</b>	Amarante, AFT Bagnola, J Amarante, MRV Barbosa, MA	Univ Estadual Paulista
SP	NO <sub>2</sub> emissions from <b>agricultural</b> burning in Sao Paulo, <b>Brazil</b>	Oppenheimer, C Tsanev, VI Allen, AG McGonigle, AJS Cardoso, AA Wiatr, A Paterlini, W De Mello, C	Univ Cambridge

Classificação	Título	Autores	Instituição de correspondência
SP	Occurrence of <b>cattle</b> Sarcocystis species in raw kibbe from Arabian food establishments in the city of Sao Paulo, <b>Brazil</b> , and experimental transmission to humans	Pena, HFD Ogassawara, S Sinhorini, IL	Univ Sao Paulo
SP	Sources of atmospheric acidity in an <b>agricultural</b> -industrial region of Sao Paulo State, <b>Brazil</b>	da Rocha, GO Franco, A Allen, AG Cardoso, AA	UNESP
Sumaré	Evaluation of family <b>agriculture</b> health: the Sumare case – <b>Brazil</b>	de Castro, VL da Silveira, MA Perez, MA	Embrapa Meio Ambiente
Tabapuã	Genetic trends of the direct and maternal effects for weaning and post-weaning weights of Tabapua <b>cattle</b> in <b>Brazil</b>	Ferraz, PB Ramos, AD da Silva, LOC de Souza, JC de Alencar, MM Malhado, CHM	UFMS
Tabapuã	Population structure of the registered Tabapua <b>cattle</b> in <b>Brazil</b>	Vercesi, AE Faria, FJC Madalena, FE Josahkian, LA	UFMG
Uberlândia	Effect of <b>agroindustrial</b> wastes on the mycelium growth of Pleurotus sp "Florida", in Uberlandia, <b>Brazil</b>	Zanetti, AL Ranal, MA	Univ Fed Uberlandia
Uberlândia	Evaluation of the <b>agronomic</b> performance of corn hybrids in Uberlandia, MG, <b>Brazil</b>	Santos, PG Juliatti, FC Buiatti, AL Hamawaki, OT	Univ Fed Uberlandia
Vale do São Francisco	MINERAL AND ORGANIC FERTILIZING ON THE MELON <b>CROP</b> IN A VERTISOL OF THE SUBMIDDLE SAO-FRANCISCO VALLEY, <b>BRAZIL</b>	DEFARIA, CMB PEREIRA, JR DEPOSSIDEO, EL	EMBRAPA
Zona da Mata	Nematophagous fungi in fresh feces of <b>cattle</b> in the Mata region of Minas Gerais state, <b>Brazil</b>	Saumell, CA Padilha, T Santos, C de Roque, P de Roque, MVC	ARS

Em relação ao tema *defesa agropecuária*, apenas no termo *Sistemas Efetivos de Monitoramento* foi localizado um artigo que se refere em seu título ao Brasil, cujos autores e Instituição de correspondência são apresentados a seguir.

#### a. Sistemas Efetivos de Monitoramento

Classificação	Título	Autores	Instituição de correspondência
Sul do Brasil	Effect of no-till <b>cropping systems</b> on soil organic matter in a sandy clay loam Acrisol from Southern <b>Brazil</b> monitored by electron spin resonance and nuclear magnetic resonance	Bayer, C Martin-Neto, L Mielniczuk, J Ceretta, CA	Embrapa Instrumentacao Agropecuaria

## 5. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE

Para este tema não foram localizados artigos que citam explicitamente o Brasil no título. Dentre os termos relacionados ao tema, apenas no termo *produção de vacinas* foi localizado um artigo, cujo título, autor e Instituição de correspondência são apresentados a seguir.

### a. Produção de Vacinas em Plantas e Animais

Classificação	Título	Autores	Instituição de correspondência
Geral	The early use of yellow fever virus strain 17D for <b>vaccine production</b> in <b>Brazil</b> - A review	Post, PR de Carvalho, R Freire, MD Galler, R	Univ Fed Pelotas

## 6. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS

Apresentam-se a seguir os títulos dos 7 artigos que citam Brasil no título, sobre o tema *mudanças climáticas globais*, com seus respectivos autores e instituições.

Classificação	Título	Autores	Instituição de correspondência
Geral	Carbon-13 variation with depth in soils of <b>Brazil</b> and <b>climate change</b> during the quaternary	Martinelli, LA Pessenda, LCR Espinoza, E Camargo, PB Telles, EC Cerri, CC Victoria, RL Aravena, R Richey, J Trumbore, S	CTR ENERGIA NUCL AGR
	<b>Global warming</b> and transport in <b>Brazil</b> - ethanol alternative	Ribeiro, SK Younes- Ibrahim, PS	UFRJ
	Future electric power technology choices of <b>Brazil</b> : a possible conflict between local pollution and <b>global climate change</b>	Schaeffer, R Szklo, AS	UFRJ
Região Nordeste	Water scarcity under scenarios for <b>global climate change</b> and regional development in semiarid northeastern <b>Brazil</b>	de Araujo, JC Doll, D Guntner, A Krol, M Abreu, CBR Hauschild, M Mendonça, EM	

Classificação	Título	Autores	Instituição de correspondência
Região Sudeste	Lutzomyia vectors for cutaneous leishmaniasis in Southern <b>Brazil</b> : ecological niche models, predicted geographic distributions, and <b>climate change</b> effects	Peterson, AT Shaw, J	Univ Kansas
Floresta	Forests and <b>global warming</b> mitigation in <b>Brazil</b> : opportunities in the <b>Brazilian</b> forest sector for responses to global warming under the "clean development mechanism"	Fearnside, PM	Inst Nacl Pesquisas Amazonia
	<b>Global warming</b> response options in <b>Brazil's</b> forest sector: Comparison of project-level costs and benefits	Fearnside, PM	NATL INST RES AMAZON

Em relação aos termos referentes ao tema *mudanças climáticas globais* não foram localizados artigos que se referem ao Brasil em seu título.

## 7. TEMA: PROGRAMAS DE DESCOBERTA

Sobre este tema em dois termos – clonagem e células tronco - foram localizados artigos que referem-se em seu título ao Brasil. Os títulos dos artigos, seus autores e instituições são apresentados a seguir.

### a. Clonagem

Classificação	Título	Autores	Instituição de correspondência
Geral	<b>Cloning</b> and characterization of the cDNA for the <b>Brazilian</b> <i>Cratomorphus distinctus</i> larval firefly luciferase: similarities with European <i>Lampyris noctiluca</i> and Asiatic <i>Pyrocoelia luciferases</i>	Viviani, VR Arnoldi, FGC Brochetto-Braga, M Ohmiya, Y	Univ Estadual Sao Paulo
Geral	<b>Cloning</b> and characterization of the <i>Leishmania</i> (viannia) <b>braziliensis</b> Hsp70 gene. Diagnostic use of the C-terminal fragment rLb70(513-663)	Zurita, AI Rodriguez, J Pintero, JE Pacheco, R Carmelo, E del Castillo, A Valladares, B	Univ La Laguna
Geral	<b>Cloning</b> and molecular characterization of the cDNA encoding histone H1 from <i>Leishmania braziliensis</i>	Martinez, E Thomas, MC Alonso, V Carmelo, E Gonzalez, AC Del Castillo, A Valladares, B	Univ La Laguna
Geral	Isolation, <b>cloning</b> , and complete nucleotide sequence of a phenotypically distinct <b>Brazilian</b> isolate of human T-lymphotropic virus type II (HTLV-II)	Lewis, MJ Novoa, P Ishak, R Ishak, M Salemi, M Vandamme, AM Kaplan, MH Hall, WW	Natl Univ Ireland Univ Coll Dublin
Geral	<b>Cloning</b> and molecular characterization of the cDNA for the <b>Brazilian</b> larval click-beetle <i>Pyrearinus termitilluminaans</i> luciferase	Viviani, VR Silva, ACR Perez, GLO Santelli, RV Bechara, EJH Reinach, FC	Harvard Univ

## b. Stem Cells

Classificação	Título	Autores	Instituição de correspond.
Geral	Allogeneic haematopoietic <b>stem cell</b> transplantation - EBMT risk score evaluation for 1084 CML patients transplanted in <b>Brazil</b>	De Souza, CA Ruiz, MA Vigorito, AC Aranha, FJP Zulli, R Miranda, ECM Dulley, FL Tabak, D Azevedo, AM Byington, R Azevedo, WM Silla, L Maiolino, A Nucci, M Voltarelli, JC Colturato, V De Souza, MP Pasquini, R	-
Geral	Allogeneic <b>stem cell</b> transplantation for the treatment of 12 patients with Paroxysmal Nocturnal Hemoglobinuria in <b>Brazil</b>	Bonfim, CMS Bitencourt, MA Moreira, VA Setubal, DC Lorenzatto, C Ruiz, J Neves, H de Medeiros, CR Zanis-Neto, J Pasquini, R	-
Geral	Autologous <b>stem cell</b> transplantation for the treatment of pediatric solid tumors in <b>Brazil</b>	Castro, CG Seber, A Mendes, W Castro, HC Borsato, ML Gregianin, LJ Ginani, VC Barros, JCA Petrilli, AS Brunetto, AL	-
Geral	<b>Brazilian</b> cooperative trial of autologous hematopoietic <b>stem cell</b> transplantation for autoimmune diseases: preliminary results	Voltarelli, J Hamerschlak, N Azevedo, W Massumoto, C Stracieri, A Oliveira, M Ribeiro, A Popovici, M Solmuci, C Vandausen, A Coutinho, M Paton, E	-
Geral	Surveillance of tunneled catheters (Hickman) in hematological <b>stem cell</b> transplant recipients at a University Hospital, <b>Brazil</b>	Fagnani, R Dantas, SRPE Saboia, M Fortaleza, CMCB Leichsering, M Carvalho, MCS Trabasso, P	-
Geral	Invasive fungal infection in hematologic <b>stem cell</b> transplant recipients at a <b>Brazilian</b> University Hospital	Trabasso, P Vigorito, A De Souza, C Branchini, M	-



Classificação	Título	Autores	Instituição de correspond.
Geral	Attributable mortality due to invasive fungal infection among hematologic <b>stem cell</b> transplant recipients in a <b>Brazilian</b> University Hospital	Trabasso, P Vigorito, A De Souza, C Branchini, M	-
Geral	Immunological study of the first cord blood <b>stem cell</b> transplantation at the <b>Brazilian</b> National Cancer Institute (INCA)	Vasconcelos, ZFM Diamond, HR Pires, V Souza, MHO Barone, B Silva, MLM Tabak, DG Bouzas, LFS Rumjanek, VM	-
Geral	Autologous peripheral blood <b>stem cells</b> transplantation (APSBcT) as an outpatient basis. Experience of a <b>Brazilian</b> center.	Silva, RL Soussain, C Massumoto, C Macedo, MCA Medeiros, RSS Dzik, C Rocha, IF Silva, ACM Loterio, HA Diomedes, BB Franca, GG Ostronoff, M Machado, CM DorlhacLacer, P Chamone, DAF Dulley, F	-
Região Sudeste	Allogeneic peripheral blood <b>stem cell</b> versus bone marrow transplantation for chronic myeloid leukemia: A comparative study from State University of Campinas (UNICAMP) and Federal University of Minas Gerais (UFMG), <b>Brazil</b>	Azevedo, WM Fagundes, EM Lodi, FM Vigorito, AC Souza, CA	-
Ribeirão Preto	CD34+cells from bone marrow, peripheral blood <b>stem cell</b> collection and umbilical cord blood: Quantitative analysis at Hemocentro de Ribeirao Preto-USP- <b>BRAZIL</b>	Lemos, MM Voltarelli, JC Covas, DT Zago, MA Palma, P Orellana, M	-

## 8. TEMA: SEGURANÇA BIOLÓGICA

Apresentam-se a seguir os títulos dos 3 artigos que citam Brasil no título, sobre o tema *segurança biológica*, com seus respectivos autores e instituições.

Classificação	Título	Autores	Instituição de correspondência
Geral	<b>Brazil</b> and the development of international scientific <b>biosafety</b> testing guidelines for transgenic crops	Capalbo, DMF Hilbeck, A Andow, D Snow, A Bong, BB Wan, FH Fontes, EMG Osir, EO Fitt, GP Johnston, J Songa, J Heong, KL Birch, ANE	Embrapa Environm
	Globalization and <b>Brazilian biosafety</b> : the politics of scale over biotechnology governance	Jepson, WE	Univ Calif Los Angeles
	<b>Brazil</b> flexes <b>biosafety</b> muscle	[Anon]	

Em relação aos termos referentes ao tema *segurança biológica* não foram localizados artigos que se referem ao Brasil em seu título.

### **III - Artigos publicados por autores vinculados a instituições brasileiras**

Esta seção trata dos artigos que tem pelo menos um autor vinculado a uma instituição brasileira. A tabela a seguir mostra a frequência desses artigos com os temas/termos de busca no título e no resumo, para os temas e termos deste estudo.

TEMAS/ TERMOS DA BIOTECNOLOGIA		Autores de Instituições brasileiras	
		TITULO	RESUMO
Tema: Biodiversidade/ Bioprospecção		42	238
Termos da Biodiversidade/ Bioprospecção	Bancos de germoplasma	3	23
	Herbários e demais formas de conservação ex situ	6	34
	Legislação ágil e eficiente	0	2
	Biodiversidade marinha	1	3
	Acesso ao patrimônio Genético	0	2
	Conhecimento tradicional	0	1
	Mercado de produtos da floresta	0	23
	Propriedade intelectual	0	2
	Fitomedicamentos	9	45
Tema: Bioeconomia		2	4
Bioindústria		0	0
Termos da Bioindústria	Bioprodutos	6	12
Tema: Bioinformática		10	39
Termos da Bioinformática	Aplicações para Genomas, proteomas e biodiversidade	0	1
Tema: Biorremediação		4	44
Termos da Biorremediação	Meio ambiente	1	15
	Microorganismos	1	18
Tema: Bioterrorismo		0	2
Tema: Certificação de qualidade biológica		0	0
Termos da Certificação de qualidade biológica	Coleções certificadas	0	1
	Microorganismos	1	13
Tema: Defesa Agropecuária		1057*	3789*
Termos da Defesa Agropecuária	Sistemas Efetivos de Monitoramento	2	126
Tema: Farmacogenética		2	12
Tema: Fertilidade e reprodução animal		1	5
Termos da Fertilidade e Reprodução animal	Clonagem	0	1
Tema: Integração: alimentação, nutrição e saúde		0	58
Termos da Integração: Alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)	4	13
	Qualidade de vida	0	1
	Bem estar	0	1
	Produção de Vacinas em Plantas e Animais	5	159
Tema: Metagenômica/ Prospecção Gênica		0	1
Tema: Mudanças climáticas globais		29	140
Tema: Programas de Descoberta		n.a.	n.a.

TEMAS/ TERMOS DA BIOTECNOLOGIA		Autores de Instituições brasileiras	
		TITULO	RESUMO
TERMOS da Programas de Descoberta	Clonagem	159	822
	<i>Stem Cells</i>	91	194
	Genômica Funcional	1	12
	Farmacogenética	0	1
	Engenharia Genética	1	20
	Proteômica	12	28
Tema: Segurança Biológica		9	19
TERMOS da Segurança Biológica	Níveis de segurança	0	1
	Fluxo Gênico	0	1
Tema: Sustentabilidade Ambiental		0	1
TERMOS da Sustentabilidade Ambiental	OGMs	0	7
	Bioinseticidas	4	15
	Biofungicidas	0	1

\* Estes números se referem à artigos sobre agropecuária e Amazônia  
n.a. = não se aplica. O tema programas de descoberta não é um termo de busca.

Nas seções a seguir apresentam-se os títulos, autores e instituições relacionados a cada um dos temas/termos de busca. As instituições identificadas como brasileiras foram destacadas em negrito.

## 1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO

Apresentam-se a seguir os títulos dos 42 artigos que tem pelo menos um autor vinculado a uma instituição brasileira, sobre o tema *biodiversidade/bioprospecção*, com seus respectivos autores e instituições.

Título	Autores	Instituições
A biodiversity approach in the neotropical Erythrinidae fish, <i>Hoplias malabaricus</i> . Karyotypic survey, geographic distribution of cytotypes and cytotaxonomic considerations	Bertollo, LAC Born, GG Dergam, JA Fenocchio, AS Moreira, O	<b>Univ Fed Sao Carlos;</b> <b>Univ Rio Grande;</b> <b>Univ Fed Vicos;</b> Univ Nacl Misiones
A biodiversity assessment of bats (Chiroptera) in a tropical lowland rainforest of Central Amazonia, including methodological and conservation considerations	Sampaio, EM Kalko, EKV Bernard, E Rodriguez-Herrera, B Handley, CO	Smithsonian Trop Res Inst; Univ Ulm; Univ Tubingen; York Univ; Costa Rica Natl Museum; Natl Museum Nat Hist; <b>INPA</b>
A study on the valuing of biodiversity: the case of three endangered species in Brazil	de Mendonca, MJC Sachside, A Loureiro, PRA	<b>IPEA;</b> <b>Univ Catol Brasilia</b>

<b>Título</b>	<b>Autores</b>	<b>Instituições</b>
Agricultural intensification, soil biodiversity and ecosystem function in the tropics: The role of nitrogen-fixing bacteria	Kahindi, JHP Woomeer, P George, T Moreira, FMD Karanja, NK Giller, KE	UNIV LONDON WYE COLL; UNIV NAIROBI; <b>UNESCO</b> ; IRRI; ESCUELA SUPER AGR LAVARAS
Alien grasses in Brazilian savannas: a threat to the biodiversity	Pivello, VR Shida, CN Meirelles, ST	<b>Univ Sao Paulo</b>
AMAZON BIODIVERSITY - A RENEWABLE NATURAL-RESOURCE	SEIDL, PR	
Arthropod biodiversity in the canopy of <i>Vochysia divergens</i> (Vochysiaceae), a forest dominant in the Brazilian Pantanal	Marques, MI Adis, J da Cunha, CN dos Santos, GB	<b>Fed Univ Mato Grosso</b>
Bioconnectivity: a blueprint for biodiversity?	Gottlieb, OR Borin, MRDB	<b>FIOCRUZ</b>
Biodiversity - Seed germination in rainforest fragments	Bruna, EM	Univ Calif Davis; <b>INPA</b>
Biodiversity and dynamics of ichthyic communities in the mangrove of Guaratuba, Brazil.	Chaves, P Bouchereau, JL	Univ Montpellier 2; <b>Univ Fed Parana</b>
Biodiversity and ecosystem functioning in conservation of rivers and streams	Moulton, TP	<b>Univ Estado Ri De Janeiro</b>
Biodiversity as an environmental service in Brazil's Amazonian forests: risks, value and conservation	Fearnside, PM	Natl Inst Res Amazon
Biodiversity meets the atmosphere: A global view of forest canopies	Ozanne, CMP Anhuf, D Boulter, SL Keller, M Kitching, RL Korner, C Meinzer, FC Mitchell, AW Nakashizuka, T Dias, PLS Stork, NE Wright, SJ Yoshimura, M	<b>Univ Sao Paulo</b> ; US Forest Serv; Univ Basel; Univ Oxford; Res Inst Human & Nat; Japan Sci & Technol Corp; James Cook Univ N Queensland; Smithsonian Trop Res Inst; Univ Surrey Roehampton; Griffith Univ
Biodiversity of Collembola in tropical agricultural environments of Espirito Santo, Brazil	Culik, MP de Souza, JL Ventura, JA	<b>INCAPER</b>
Biodiversity of Collembola in tropical agricultural environments of Espirito Santo, Brazil (vol 21, pg 49, 2002)	Culik, MP de Souza, JL Ventura, JA	<b>Inst Capixaba Pesquisa</b>
Biodiversity of galling insects: historical, community and habitat effects in four neotropical savannas	Goncalves-Alvim, SJ Fernandes, GW	<b>Univ Fed Minas Gerais</b>
Biodiversity under rocks: the role of microhabitats in structuring invertebrate communities in Brazilian outcrops	Ferreira, RL Silva, MS	<b>Univ Fed Minas Gerais</b>

<b>Título</b>	<b>Autores</b>	<b>Instituições</b>
Biodiversity, epidemiology and virulence of <i>Colletotrichum gloeosporioides</i> . I. Genetic and pathogenic diversity in <i>Colletotrichum gloeosporioides</i> isolates from <i>Stylosanthes guianensis</i>	Kelemu, S Badel, JL Moreno, CX Miles, JW Chakraborty, S Fernandes, CD Charchar, MJD	Ctr Int Agr Trop; CSIRO Trop Agr; <b>EMBRAPA</b>
Biodiversity, epidemiology and virulence of <i>Colletotrichum gloeosporioides</i> . II. Genetic and pathogenic diversity in isolates of <i>Colletotrichum gloeosporioides</i> from eight species of <i>Stylosanthes</i>	Chakraborty, S Perrott, R Charchar, MJD Fernandes, CD Kelemu, S	CSIRO Trop Agr; <b>EMBRAPA</b> ; Univ Queensland; CIAT
Biodiversity, epidemiology and virulence of <i>Colletotrichum gloeosporioides</i> . III. Field evaluation of <i>Stylosanthes</i> species for anthracnose resistance in their centre of diversity	Cameron, DF Charchar, MJD Fernandes, CD Kelemu, S Chakraborty, S	CSIRO Trop Agr; <b>EMBRAPA</b> ; CIAT
Biodiversity, epidemiology and virulence of <i>Colletotrichum gloeosporioides</i> . IV. Epidemiology of <i>Stylosanthes</i> anthracnose at the centre of host-pathogen diversity	Chakraborty, S Fernandes, CD Charchar, MJD Kelemu, S Cameron, DF	CSIRO Trop Agr; <b>EMBRAPA</b> ; CIAT
Biodiversity: modelling angiosperms as networks	Gottlieb, OR Borin, MRDB	<b>FIOCRUZ</b>
Bioprospecting for plant and fungus extracts with systemic effect to control the cucumber powdery mildew	Stadnik, MJ Bettioli, W Saito, ML	<b>Univ Fed Santa Catarina</b> ; Lab Microbiol & Fitopatol
Bird community as an indicator of biodiversity: results from quantitative surveys in Brazil	Vielliard, JME	<b>UNICAMP</b>
Brazilian LTER: Ecosystem and biodiversity information in support of decision-making	Barbosa, FAR Scarano, FR Sabara, MG Esteves, FA	<b>Univ Fed Minas Gerais</b> ; <b>Univ Fed Rio de Janeiro</b> ; <b>Unileste MG</b>
Ecological taxonomy: a basic tool for biodiversity conservation	Barbosa, F Galdean, N	NATL HIST MUSEUM GRIGORE ANTIPA
Edward O. Wilson, doyen of biodiversity's crusade, honorary fellow of ATB, 1999	Oliveira, PS	<b>Univ Estadual Campinas</b>
ENABLING BIODIVERSITY	VALLE, S	
EXPLORING SOLUTIONS FOR THE TROPICAL BIODIVERSITY CRISIS	PERES, CA	
Fishes from the Paraíba do Sul River basin. Biodiversity and biogeographic patterns	Bizerril, CRSF	<b>Univ Fed Rio de Janeiro</b>
FUTURE-ORIENTED MAPPING OF BIODIVERSITY IN AMAZONIA	GOTTLIEB, OR	
Karyotypic studies on <i>Hoplerythrinus unitaeniatus</i> (Pisces, Erythrinidae) populations. A biodiversity analysis	Diniz, D Bertollo, LAC	
Parasite biodiversity and its determinants in coastal marine teleost fishes of Brazil	Luque, JL Mouillot, D Poulin, R	Univ Otago; Univ Montpellier 2; <b>Univ Fed Rural</b>

<b>Título</b>	<b>Autores</b>	<b>Instituições</b>
		<b>Rio de Janeiro</b>
Protecting indigenous peoples' rights to biodiversity	Posey, DA	GOELDI MUSEUM
Rational design and biodiversity in the search for new antichagasic drugs	Oliva, G	<b>Univ Sao Paulo</b>
Seed savers: Conserving agricultural biodiversity	Cordeiro, A	
Self-organized criticality, optimization and biodiversity	Onody, RN De Castro, PA	<b>Univ Sao Paulo</b>
Sustainable use of biodiversity - Components of a model project for Brazil	BarretodeCastro, LA	
THE AMAZON RAIN-FOREST, SUSTAINABLE DEVELOPMENT AND THE BIODIVERSITY CONVENTION - A POLITICAL-ECONOMY PERSPECTIVE	DORE, MHI NOGUEIRA, JM	<b>UNIV BRASILIA; BROCK UNIV</b>
The Brazilian cerrado vegetation and threats to its biodiversity	Ratter, JA Ribeiro, JF Bridgewater, S	<b>EMBRAPA</b>
The relationship between fluvial morphology and biodiversity and its application in the process of environmental evaluation.	Bizerril, CRSF	<b>Fed Univ Rio De Janeiro</b>
Wilderness and biodiversity conservation	Mittermeier, RA Mittermeier, CG Brooks, TM Pilgrim, JD Konstant, WR da Fonseca, GAB Kormos, C	<b>Univ Fed Minas Gerais;</b> Conservat Int; Int Wilderness Leadership WILD Fdn

Em relação aos termos referentes ao tema biodiversidade/bioprospecção, em quatro termos foram localizados artigos publicados por pelo menos um autor vinculado a instituição brasileira. Os títulos dos artigos, seus autores e instituições para cada termo, são apresentados a seguir.

#### a. Bancos de germoplasma

Título	Autores	Instituição
Chromosome number and secondary constriction variation in 51 accessions of a citrus germplasm bank	Guerra, M Pedrosa, A Silva, AEB Cornelio, MTM Santos, K Soares, WD	
Genetic divergence among accessions of a germplasm bank of elephantgrass	Shimoya, A Cruz, CD Ferreira, RD Vander Pereira, A Carneiro, PCS	<b>Pesagro Rio</b>
Isozyme analysis of an active cassava germplasm bank collection	Montarroyos, AVV de Lima, MAG dos Santos, EO de Franca, JGE	<b>IPA</b>

#### b. Herbários e demais formas de conservação ex situ

Título	Autores	Instituições
A list of type specimens of microfungi described by P. Hennings held at the Herbarium of Institute de Botanica (SP)	Gusmao, LFP Baseia, IG	Inst Bot
Additions to Index Herbariorum (Herbaria), Edition 8 - Eleventh series	Holmgren, PK Holmgren, NH	<b>Univ Estado</b>
Collecting, ex situ conservation and characterization of "caja-umbu" (Spondias mombin x Spondias tuberosa) germplasm in Pernambuco State, Brazil	Junior, JFD Bezerra, JEF Lederman, IE Alves, MA Neto, MLD	<b>IPA</b>
Melastomataceae Raddiana: a study of G. Raddi's Melastomataceae types housed in the herbaria of Pisa (PI) and Firenze (FI)	Goldenberg, R Baldini, RM	<b>Univ Fed Parana;</b> Univ Florence
Reproductive status of endemic felid species in Latin American zoos and implications for ex situ conservation	Swanson, WF Johnson, WE Cambre, RC Citino, SB Ougley, KB Brousset, DM Morals, RN Moreira, N O'Brien, SJ Wildt, DE	Cincinnati Zoo & Bot Garden; Smithsonian Natl Zool Pk; <b>Univ Fed Parana;</b> White Oak Conservat Ctr; NCI; Hornocker Wildlife Res Inst; Univ Nacl Autonoma Mexico



Título	Autores	Instituições
Should small herbaria have voting rights?	Filgueiras, TS Davidse, G Kirkbride, JH Chiang, F Rueda, R Zuloaga, FO	Inst Bot Darwinion; <b>Reserva Ecol IBGE;</b> Univ Nacl Autonomo Nicaragua; USDA ARS; Missouri Bot Gardens; Univ Nacl Autonomo Mexico

### c. Biodiversidade marinha

Título	Autores	Instituição
Parasite biodiversity and its determinants in coastal marine teleost fishes of Brazil	Luque, JL Mouillot, D Poulin, R	Univ Otago ; <b>Univ Fed Rural Rio de Janeiro;</b> Univ Montpellier 2

### d. Fitomedicamentos

Título	Autores	Instituição
Absence of genotoxicity of a phytotherapeutic extract from <i>Stryphnodendron adstringens</i> (Mart.) Coville in somatic and germ cells of <i>Drosophila melanogaster</i>	de Sousa, NC de Carvalho, S Spano, MA Graf, U	Swiss Fed Inst Technol; <b>Fed Univ Goias;</b> Univ Fed Uberlandia
Analgesic effect of the herbal medicine Catuama in thermal and chemical models of nociception in mice	Vaz, ZR Mata, LV Calixto, JB	<b>Univ Fed Santa Catarina</b>
Comparison between ethnopharmacology in traditional Chinese medicine and Brazilian popular phytotherapy	Botsaris, AS	
Efficacy, safety, quality control, marketing and regulatory guidelines for herbal medicines (phytotherapeutic agents)	Calixto, JB	<b>Univ Fed Santa Catarina</b>
Herbal medicine catuama induces endothelium-dependent and -independent vasorelaxant action on isolated vessels from rats, guinea-pigs and rabbits	Calixto, JB Cabrini, DA	
Leishmaniasis phytotherapy. Nature's leadership against an ancient disease	de Carvalho, PB Ferreira, EI	<b>Univ Sao Paulo</b>
Pesticide residues in medicinal plants and phytomedicines	Zuin, VG Vilegas, JHY	<b>Univ Sao Paulo</b>
Pharmaceutics and phytotherapies: The need for development of the industry of phytopharmaceutics and phytotherapies in Brazil.	Yunes, RA Pedrosa, RC Cechinel, V	<b>Univ Fed Santa Catarina;</b> <b>UNIVALI</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
The relaxation of isolated rabbit corpus cavernosum by the herbal medicine Catuama (R) and its constituents	Antunes, E Gordo, WM de Oliveira, JF Teixeira, CE Hyslop, S De Nucci, G	<b>Univ Estadual Campinas</b>

## **2. TEMA: BIOECONOMIA**

Apresentam-se a seguir os títulos dos 2 artigos que tem pelo menos um autor vinculado a uma instituição brasileira, sobre o tema *bioeconomia*, com seus respectivos autores e instituições.

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Bioeconomic analysis of breeding season introduction in productive systems of beef herd in Brazil Central Region	de Abreu, UGP Cezar, IM Torres, RDA	<b>Embrapa Pantanal; Embrapa Gado Corte; Univ Fed Vicoso</b>
Sensitivity of the BEAM4 fisheries bioeconomic model to the main biological input parameters	de Castro, LAB Petrere, M Comune, AE	<b>Univ Sao Paulo; Univ Estadual Paulista</b>

Em relação aos termos referentes ao tema bioeconomia, não foram localizados artigos publicados por autores vinculados a instituições brasileiras.

## **3. TEMA: BIOINDÚSTRIA**

Não foram localizados artigos que contenham especificamente o tema Bioindústria no título.

Em relação aos termos referentes ao tema bioindústria, em um termo (bioprodutos) foram localizados artigos publicados com pelo menos um autor vinculado a instituição brasileira. Os títulos dos 6 artigos, seus autores e instituições, são apresentados a seguir.

## a. Bioprodutos

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Bioproduction of carotenoids: The comparative use of raw sugarcane juice and depolymerized bagasse by <i>Phaffia rhodozyma</i>	Fontana, JD Czczuga, B Bonfim, TMB Chociai, MB Oliveira, BH Guimaraes, MF Baron, M	MED ACAD; <b>UNIV FED PARANA</b>
Bioproduction of lichen phenolics by immobilized lichen cells with emphasis on the role of epiphytic bacteria	Blanco, Y Blanch, M Fontaniella, B Legaz, ME Millanes, AM Pereira, EC Vicente, C	<b>Univ Fed Pernambuco;</b> Univ Complutense Madrid
BIOPRODUCTION OF USNIC ACID FROM ACETATE BY KAOLINITE IMMOBILIZED CELLS OF CLADONIA-SUBSTELLATA VAIN	PEREIRA, EC PEREYRA, T MATOS, SC DASILVA, NH ANDRADE, L VICENTE, C	
Development of switched predictive control system for continuous purification process of bioproducts	Mattedi, A Maciel, R	Sch Chem Engrn
Downstream processing of bioproducts	Cockrem, M Santana, CC	KiwiChem Int; <b>State Univ Campinas</b>
Influence of pH on the xylose reductase activity of <i>Candida guilliermondii</i> during fed-batch xylitol bioproduction	Rodrigues, DCGD da Silva, SS Vitolo, M	Fac Chem Engrn Lorena; <b>Univ Sao Paulo</b>

## 4. TEMA: BIOINFORMÁTICA

Apresentam-se a seguir os títulos dos 10 artigos que tem pelo menos um autor vinculado a uma instituição brasileira no título, sobre o tema *bioinformática*, com seus respectivos autores e instituições.

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Analysis of structure and function of putative surface-exposed proteins encoded in the <i>Streptococcus pneumoniae</i> genome: A bioinformatics-based approach to vaccine and drug design	Rigden, DJ Galperin, MY Jedrzejas, MJ	Childrens Hosp Oakland; <b>Cenargen EMBRAPA;</b> Natl Lib Med
Bioinformatics data analysis using an artificial immune network	Bezerra, GB de Castro, LN	<b>State Univ Campinas Unicamp</b>
Bioinformatics of the sugarcane EST project	Telles, GP Braga, MDV Dias, Z Lin, TL Quitzau, JAA da Silva, FR Meidanis, J	<b>Univ Estadual Campinas</b>
Comparative analysis of the catalytic domain of hemorrhagic and non-hemorrhagic snake venom metalloproteinases using bioinformatic tools	Ramos, OHP Selistre-de-Araujo, HS	<b>Univ Fed Sao Carlos</b>
Current challenges in bioinformatics	Meidanis, J	Scylla Bioinformat; <b>Univ Campinas</b>
ESTWeb: bioinformatics services for EST sequencing projects	Paquola, ACM Nishiyama, MY Reis, EM da Silva, AM Verjovski-Almeida, S	<b>Univ Sao Paulo</b>
Special issue: Imaging in bioinformatics	Costa, LD Belmonte, JCI	<b>Univ Sao Paulo;</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
		Salk Inst Biol Studies
Structural bioinformatics study of cyclin-dependent kinases complexed with inhibitors	Canduri, F da Silveira, NJF Camera, JC de Azevedo, WF	<b>Inst Butantan; UNESP</b>
Structural bioinformatics study of EPSP synthase from <i>Mycobacterium tuberculosis</i>	Pereira, JH Canduri, F de Oliveira, JS da Silveira, NJF Basso, LA Palma, MS de Azevedo, WF Santos, DS	<b>UFRGS; Pontificia Univ Catolica Rio Grande Do Sul; Inst Butantan; UNESP</b>
Structural bioinformatics study of PNP from <i>Schistosoma mansoni</i>	da Silveira, NJF Uchoa, HB Canduri, F Pereira, JH Camera, JC Basso, LA Palma, MS Santos, DS de Azevedo, WF	<b>PUCRS; UFRGS; Inst Butantan; UNESP</b>

Em relação aos termos referentes ao tema *bioinformática*, não foram localizados artigos que contenham pelo menos um autor vinculado a uma instituição brasileira.

## 5. TEMA: BIORREMEDIAÇÃO

Apresentam-se a seguir os títulos dos 4 artigos que tem pelo menos um autor vinculado a uma instituição brasileira no título, sobre o tema *biorremediação*, com seus respectivos autores e instituições.

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Metal bioremediation by microorganisms	Gomes, NCM Mendonca- Hagler, LCS Savvaiddis, I	<b>Univ Fed Rio de Janeiro; Univ Ioannina</b>
Algae: From aquatic environment economy to bioremediation and analytical chemistry	Vidotti, EC Rollemberg, MDC	<b>Univ Estadual Maringa</b>
Natural bioremediation of aquifer material contaminated with gasoline-ethanol mixtures	Corseuil, HX Alvarez, PJJ	
Natural bioremediation perspective for BTX-contaminated groundwater in Brazil: Effect of ethanol	Corseuil, HX Alvarez, PJJ	UNIV IOWA

Em relação aos termos referentes ao tema *biorremediação*, em dois termos (Meio ambiente e Microorganismos) foram localizados artigos que têm pelo menos um autor vinculado a uma instituição brasileira no título. Os títulos dos artigos, seus autores e instituição de correspondência são apresentados a seguir.

### a. Meio ambiente

Título	Autores	Instituição
Algae: From aquatic environment economy to bioremediation and analytical chemistry	Vidotti, EC Rollemberg, MDC	<b>Univ Estadual Maringa</b>

### b. Microorganismos

Título	Autores	Instituição
Metal bioremediation by microorganisms	Gomes, NCM Mendonca- Hagler, LCS Savvaidis, I	<b>Univ Fed Rio de Janeiro;</b> Univ Ioannina

## 6. TEMA: CERTIFICAÇÃO DE QUALIDADE BIOLÓGICA

Em relação aos termos referentes ao tema *Certificação de qualidade biológica*, em um termo (Microorganismos) foi localizado 1 artigo que tem pelo menos um autor vinculado a uma instituição brasileira no título. O título do artigo, seus autores e instituição de correspondência são apresentados a seguir.

### a. Microorganismos

Título	Autores	Instituição
Biological control of Phytophthora root rot of avocado with microorganisms grown in organic mulches	Costa, JLD Menge, JA Casale, WL	<b>EMBRAPA Arroz &amp; Feijao;</b> Univ Calif Riverside

## 7. TEMA: DEFESA AGROPECUÁRIA

Não foram localizados artigos que tratem especificamente de *defesa agropecuária* e tenham pelo menos um autor vinculado a uma instituição brasileira. No entanto foram identificados 1057 artigos relacionados com agropecuária que autores de instituição brasileira. Apresentam-se a seguir os títulos dos 100 primeiros artigos com seus respectivos autores e instituição de correspondência.

Título	Autores	Instituição
A comparative study of the toxicity of <i>Palicourea juruana</i> (Rubiaceae) to buffalo and cattle	de Oliveira, CMC Barbosa, JD de Macedo, RSC Brito, MDF Peixoto, PV Tokarnia, CH	<b>UFRRJ;</b> <b>Fed Univ Para;</b> <b>Univ Fed Rural Rio Janeiro</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
A practice analysis to account for adoption of innovations in irrigated rice cropping systems in Lake Alaotra (Madagascar)	Ducrot, R Capillon, A	CIRAD CA
Additive genetic relationships between heifer pregnancy and scrotal circumference in Nellore cattle	Eler, JP Silva, JAIV Evans, JL Ferraz, JBS Dias, F Golden, BL	Oklahoma State Univ; <b>Agropecuaria CFM Ltda;</b> Colorado State Univ; <b>Univ Sao Paulo</b>
Agricultural and forest products as supplementary feeding for tambaqui in polyculture with jaraqui	Guimaraes, SF Storti, A	<b>Inst Nacl de Pesquisas da Amazonia</b>
Agrobacterium tumefaciens-mediated genetic transformation of the entomopathogenic fungus Beauveria bassiana	dos Reis, MC Fungaro, MHP Duarte, RTD Furlaneto, L Furlaneto, MC	<b>Univ Norte Parana;</b> <b>Univ Estadual Londrina</b>
Agrobacterium tumefaciens-mediated transformation of Swingle citrumelo (Citrus paradisi Macf. x Poncirus trifoliata L. Raf.) using thin epicotyl sections	Molinari, HBC Bepalhok, JC Kobayashi, AK Pereira, LFP Vieira, LGE	Inst Agron Parana; <b>Embrapa Mandioca &amp; Fruticultura</b>
Agrobacterium-mediated transformation of sorghum: factors that affect transformation efficiency	Carvalho, CHS Zehr, UB Gunaratna, N Anderson, J Kononowicz, HH Hodges, TK Axtell, JD	<b>Embrapa Milho &amp; Sorgo;</b> Purdue Univ
Agronomic and technologic characteristics of common bean genotypes from Carioca commercial group	Lemos, LB de Oliveira, RS Palomino, EC da Silva, TRB	<b>Univ Estado Sao Paulo</b>
An adapted version of the US department of agriculture food insecurity module is a valid tool for assessing household food insecurity in Campinas, Brazil	Perez-Escamilla, R Segall-Correa, AM Maranhã, LK Sampaio, MDA Marin-Leon, L Panigassi, G	Univ Connecticut; <b>Univ Campinas</b>
Assessment of soil property spatial variation in an Amazon pasture: basis for selecting an agronomic experimental area	Cerri, CEP Bernoux, A Chaplot, V Volkoff, B Victoria, RL Melillo, JM Paustian, K Cerri, CC	Biol Marine Lab; Colorado State Univ; <b>Univ Sao Paulo</b>
Beef cattle production and dry matter accumulation in the crop-pasture rotation system in presence and absence of white clover and nitrogen	Assmann, AL Pelissari, A de Moraes, A Assmann, TS de Oliveira, EB Sandini, I	<b>EMBRAPA;</b> <b>IAPAR;</b> <b>UFPR;</b> <b>Ctr Fed Educ Tecnol;</b> <b>Fdn Educ Guarapuava PR</b>
Biological control of gastrointestinal trichostrongylids (Nematoda : Trichostrongyloidea) of cattle by pellets of Monacrosporium sinense]	Araujo, JV Assis, RCL Alves, PH Campos, AK Gandra, JR	<b>Univ Fed Vicosa</b>
Cattle supplementation on Coastcross pasture (Cynodon dactylon (L.) Pers) during the summer	Prohmann, PEF Branco, AF Jobim, CC Cecato, U Paris, W Mouro, GF	<b>Univ Estadual Maringa</b>
Cattle supplementation on Coastcross pasture (Cynodon dactylon (L.) Pers) during the winter	Prohmann, PEF Branco, AF Cecato, U Jobim, CC Guimaraes, KC Ferreira, RA	<b>UEM</b>
Chemical interactions of Brachiaria plantaginea with Commelina bengalensis and Acanthospermum hispidum in soybean cropping systems	Voll, E Franchini, JC Da Cruz, RT Gazziero, DLP Brighenti, AM Adegas, FS	<b>Embrapa Soybean</b>
Co)Variance components and genetic parameters of post-weaning traits in Angus cattle	Cardoso, FF Cardellino, RA Campos, LT	<b>EMBRAPA;</b> <b>UFPEL</b>
Common bean lines with resistance to anthracnose selected to desirable	Pereira, HS dos Santos, JB Abreu, ADB	<b>Univ Fed Lavras</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
agronomical traits		
Comparative epidemiological, clinical and pathological aspects of poisoning by <i>Arrabidaea bilabiata</i> (Bignoniaceae) in buffalo and cattle.	Tokarnia, CH Barbosa, JD de Oliveira, CMC Brito, MDF de Oliveira, RB Barbas, LAL	<b>UFRRJ; Fed Univ Para</b>
Comparison of markers for estimating nutrient digestibility in high grain beef cattle diets varying nitrogen sources	de Oliveira, RC Pires, AV Fernandes, JJD Susin, I Santos, FAP Nascimento, VF de Araujo, RC	<b>USP</b>
Comparison of selection criteria for pre-weaning growth traits of Nelore cattle	Pena, CDO Carvalheiro, R de Queiroz, SA Fries, LA	<b>UNESP; UNA; GenSys Consultores Associados SC Ltda; Lagoa Serra Ltda</b>
Corn crop residue decomposition and related parameters	Bertol, I Leite, D Zoldan, WA	<b>UDESC</b>
Cortisol in saliva and plasma of cattle after ACTH administration and milking	Negrao, JA Porcionato, MA de Passille, AM Rushen, J	Agr & Agri Food Canada; <b>Univ Sao Paulo</b>
Cost analyses on different beef cattle genetic groups finished in feedlot condition	Ferreira, IC Silva, MA Reis, RP Euclides, K Figueiredo, GR	<b>UFLA; EMBRAPA Gado Corte; UFMG</b>
Cover crop mixtures preceding no-till corn. I-soil nitrogen dynamics	Aita, C Giacomini, SJ Hubner, AP Chiapinotto, IC Fries, MR	<b>Univ Fed Santa Maria; Empresa Pesquisa Agropecuaria Extensao Rural Sant</b>
Cover crop mixtures preceding no-till corn. II - Nitrogen accumulation by corn and grain yield	Giacomini, SJ Aita, C Chiapinotto, IC Hubner, AP Marques, MG Cadore, F	<b>Univ Fed Santa Maria; Empresa Pesquisa Agropecuaria &amp; Extensao Rural Sa</b>
Crude protein levels in multiple supplements for finishing crossbred beef cattle at pasture during dry season: Productive performance and carcass characteristics	Detmann, E Paulino, MF Zervoudakis, JT Cecon, PR Valadares, SD Goncalves, LC Cabral, LD Melo, AJN	<b>UNEF; Univ Fed Mato Grosso</b>
Crystallization and preliminary X-ray diffraction analysis of HeLp, a heme lipoprotein from the hemolymph of the cattle tick <i>Boophilus microplus</i>	Alves, LR Oliveira, PL Barbosa, JARG Guimaraes, BG Medrano, FJ	<b>Lab Nacl Luz Sincrotron; Univ Fed Rio de Janeiro</b>
Cysteine-rich antimicrobial peptides of the cattle tick <i>Boophilus microplus</i> : isolation, structural characterization and tissue expression profile	Fogaca, AC Lorenzini, DM Kaku, LM Esteves, E Bulet, P Daffre, S	<b>Univ Sao Paulo; CNRS</b>
Dairy cattle enteric methane measured in Brazilian tropical conditions	Primavesi, O Frighetto, RTS Dos Santos Pedreira, M de Lima, MA Berchielli, TT Barbosa, PF	<b>EMBRAPA; Univ Estadual Paulista</b>
Deltamethrin impact in soil surface Coleoptera associated with maize crop in no tillage and conventional plantation systems	Araujo, RA Badji, CA Correa, AS Ladeira, JA Guedes, RNC	<b>Univ Fed Vicosa</b>
Effect of age of exposure of heifers to reproduction on heritability estimates for age at first calving in Nelore cattle	Dias, LT El Faro, L Albuquerque, LG	<b>Inst Zootecn Ribeirao Preto; UNESP</b>
Effect of grazing system on fetal development in Nelore cattle	Bergamaschi, MACM Vicente, WRR Barbosa, RT Marques, JA Freitas, AR	<b>Embrapa Pecuaria Sudeste; UNESP</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Effects of nitrogen and potassium fertilization on agronomic characteristics of upland rice cultivated under no-tillage	Farinelli, R Penariol, FG Fornasieri, D Bordin, L	<b>Univ Estadual Paulista Julio Mesquita Filho;</b> Sementes Monsoy Monsanto; <b>UNESP</b>
Entomopathogenic fungi selection to control <i>Oligonychus yothersi</i> (McGregor) (Acari : Tetranychidae) in Paraguay tea crops ( <i>Ilex paraguariensis</i> St. Hill.)	De Oliveira, RC Neves, PMOJ Alves, LFA	Fac Assis Guagacz; <b>UEL;</b> <b>UNIOESTE</b>
Evaluation of soil fertility in smallholder agroforestry systems and pastures in western Amazonia	Alfaia, SS Ribeiro, GA Nobre, AD Luizao, RC Luizao, FJ	<b>Inst Nacl de Pesquisas da Amazonia</b>
Evaluation of the agronomic behavior of the plant and nutritive value of silage from different corn ( <i>Zea mays</i> , L.) hybrids	Rosa, JRP da Silva, JHS Restle, J Pascoal, LL Brondani, IL Alves, DC de Freitas, AK	<b>UFRGS;</b> <b>UFSM;</b> <b>UFG</b>
Experimental poisoning by <i>Dodonea viscosa</i> (Sapindaceae) in cattle	Cattani, CSDO Colodel, EM Traverso, SD Correa, AMR Driemeier, D	<b>Univ Fed Rio Grande Sul</b>
Exploring the limits of crop productivity: Beyond the limits of tipburn in lettuce	Frantz, JM Ritchie, G Cometti, NN Robinson, J Bugbee, B	<b>UFRRJ;</b> Utah State Univ
Factors that cause genotype by environment interaction and use of a multiple-trait herd-cluster model for milk yield of Holstein cattle from Brazil and Colombia	Ceron-Munoz, MF Tonhati, H Costa, CN Rojas-Sarmiento, D Echeverri, DME	Univ Anioquia; <b>Embrapa Gado Leite;</b> <b>Univ Estadual Paulista</b>
Floristic inventory of secondary vegetation in agricultural systems of East-Amazonia	Baar, R Cordeiro, MD Denich, M Folster, H	<b>EMBRAPA;</b> Ctr Dev Res; Inst Soil Sci & Forest Nutr
Genetic and phenotypic correlations between type traits and milk production in Holstein cattle	Esteves, AMC Bergmann, JAG Duraes, MC Costa, CN Silva, HM	<b>UFMG;</b> <b>EMBRAPA</b>
Genotyping BoLA-DRB3 alleles in Brazilian Dairy Gir cattle ( <i>Bos indicus</i> ) by temperature-gradient gel electrophoresis (TGGE) and direct sequencing	da Mota, AF Martinez, ML Coutinho, LL	<b>Univ Sao Paulo;</b> Natl Dairy Cattle Res Ctr
Herbaceous cotton yield in no-till system in rainfed Savannah conditions with crop rotation	Correa, JC Sharma, RD	
Increasing the profitability of traditional, planted rubber agroforests at the Tapajos river, Brazilian Amazon	Schroth, G Moraes, V da Mota, MSS	<b>EMBRAPA;</b> Univ Bayreuth; <b>INPA</b>
Infection by <i>Neospora caninum</i> associated with bovine herpesvirus 1 and bovine viral diarrhoea virus in cattle from Minas Gerais State, Brazil	de Melo, CB Leite, RC Lobato, ZIP Leite, RC	<b>Univ Fed Minas Gerais;</b> <b>Univ Fed Sergipe</b>
Influence of agronomic variables on the composition of mate tea leaves ( <i>Ilex paraguariensis</i> ) extracts obtained from CO <sub>2</sub> extraction at 30 degrees C and 175 bar	Esmelindro, AA Girardi, JD Mossi, A Jacques, RA Dariva, C	URI
Influence of dry matter and length of roots on growth of five field crops at varying soil zinc and copper levels	Fageria, NK	<b>EMBRAPA</b>
Land-use change effects on local energy, water, and carbon balances in an	Sakai, RK Fitzjarrald, DR Moraes, OLL Staebler, RM	SUNY Albany; LBA ECO Logist Support



<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Amazonian agricultural field	Acevedo, OC Czikowsky, MJ Da Silva, R Brait, E Miranda, V	Off Santarem; <b>Univ Fed Santa Maria</b>
Lead poisoning in cattle in southern Brazil	Traverso, SD Loretti, AP Donini, MA Driemeier, D	<b>UFRGS</b>
Legume cover cropping effects on early growth and soil nitrogen supply in eucalypt plantations in south-western India	Mendham, DS Kumaraswamy, S Balasundaran, M Sankaran, KV Corbeels, M Grove, TS O'Connell, AM Rance, SJ	CSIRO Forestry & Forest Prod; Kerala Forest Res Inst; CIRAD
Litter decomposition, microbial biomass and activity of soil organisms in three agroforestry sites in central Amazonia	Kurzatkowski, D Martius, C Hofer, H Garcia, M Forster, B Beck, L Vlek, P	Univ Gottingen; Zentrum Entwicklungsforsch; Staatl Museum Naturkunde; <b>Embrapa Amazonia Occidental</b> ; ECT Okotoxikol GmbH
Litter fall, litter stocks and decomposition rates in rainforest and agroforestry sites in central Amazonia	Martius, C Hofer, H Garcia, MVB Rombke, J Hanagarth, W	<b>Embrapa Amazonia Occidental</b> ; ECT Oekotoxikol GmbH; Ctr Dev Res ZEF Bonn; SMNK
Long-term tillage and crop rotation effects on microbial biomass and C and N mineralization in a Brazilian Oxisol	Balota, EL Colozzi, A Andrade, DS Dick, RP	Oregon State Univ; <b>IAPAR</b>
Microanalytical study of a ferrous agricultural tool recovered from a historical site in Rio de Janeiro	Campos, GN Solorzano, IG	<b>PUC Rio</b>
Microclimate in agroforestry systems in central Amazonia: does canopy closure matter to soil organisms?	Martius, C Hofer, H Garcia, MVB Rombke, J Forster, B Hanagarth, W	<b>Embrapa Amazonia Occidental</b> ; Ctr Dev Res; Staatliches Museum Nat Kunde Karlsruhe; ECT Oekotoxikol GmbH
Modeling the stability of wheeled agricultural tractors	Junior, JKK Dias, GP Cordeiro, RR de Souza, CWA	<b>Univ Fed Vicosa</b>
Modelling species and spacing effects on root zone water dynamics using Hydrus-2D in an Amazonian agroforestry system	Schlegel, P Huwe, B Teixeira, WG	Univ Bayreuth; <b>Empresa Brasileira Pesquisa Agropecuaria Amazonia</b>
NO <sub>2</sub> emissions from agricultural burning in Sao Paulo, Brazil	Oppenheimer, C Tsanev, VI Allen, AG McGonigle, AJS Cardoso, AA Wiatr, A Paterlini, W De Mello, C	Univ Cambridge; Univ Birmingham; <b>Univ Estadual Paulista</b>
Nutrient digestibility in cattle diet with urea or starea replacing soybean meal	Junior, RCD Pires, AV Susin, I Fernandes, JJD Santos, FAP	<b>Univ Sao Paulo</b>
Nutritional requirements of zebu cattle. Energy	Paulino, PVR Costa, MAL Valadares, SD Paulino, MF Valadares, RFD Magalhaes, KA de Moraes, EHBK Porto, MO Andreatta, K	<b>UFV</b>
Nutritional requirements of zebu cattle: Minerals	Paulino, PVR Costa, MAL Valadares, SD Paulino, MF Valadares, RFD Magalhaes, KA Porto, MO Baroni, CES	<b>UFV</b>
Nutritional requirements of zebu cattle: Protein	Paulino, PVR Costa, MAL Valadares, SD Paulino, MF Valadares, RFD Magalhaes, KA Porto, MO Andreatta, K	<b>UFV</b>
Otitis in cattle, an aetiological review	Duarte, ER Hamdan, JS	<b>Univ Fed Minas Gerais</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Passive immunity in cattle against enterotoxigenic <i>Escherichia coli</i> : serologic evaluation of a bacterin containing K99 and F41 fimbriae in colostrum of vaccinated females and calf serum	Figueiredo, HCP Lage, AP Pereira, FN Leite, RC	<b>Univ Fed Lavras; EV UFMG</b>
Phosphatase activity in soil under mycorrhizal and non-mycorrhizal cover crops	Dalla Costa, M Lovato, PE	<b>Univ Fed Santa Catarina</b>
Physical properties of a dystrophic Red Latosol (oxisol) under crop cultivation and native forest	Araujo, MA Tormena, CA Silva, AP	<b>USP; UEM</b>
Physical soil properties of conventional tillage and no-tillage, in crop rotation and succession, compared with natural pasture	Bertol, I Albuquerque, JA Leite, D Amaral, AJ Zoldan, WA	<b>UDESC</b>
Physiological and biochemical effects of rare earth elements on plants and their agricultural significance: A review	Hu, ZY Richter, H Sparovek, G Schnug, E	<b>Univ Sao Paulo; Chinese Acad Sci; FAL</b>
Predominant African-derived mtDNA in Caribbean and Brazilian Creole cattle is also found in Spanish cattle ( <i>Bos taurus</i> )	Miretti, MM Dunner, S Naves, M Contel, EP Ferro, JA	<b>Univ Sao Paulo; Univ Complutense Madrid; INRA; Univ Estadual Paulista</b>
Prevalence and geographical distribution of bovine eurytrematosis in cattle slaughtered in northern Parana, Brazil	de Azevedo, JR Mannigel, RC Agulhon, AZ Borba, TR Barbieri, AW de Oliveira, DCL Headley, SA Janeiro, V	<b>Univ Estadual Maringa; CESUMAR; Ctr Univ Maringa</b>
Prevalence of <i>Neospora caninum</i> antibodies and factors associated with their presence in dairy cattle of the north of Parana' state, Brazil	Guimaraes, JS Souza, SLP Bergamaschi, DP Gennari, SM	<b>USP; Univ Estadual Londrina; Univ Sao Paulo</b>
Progesterone production in cattle placenta under the influence of VEGF and bFGF in vitro	Campos, D Artoni, L Teixeira, A Kfoury, JR Miglino, MA Birgel, E Buratini, J Machado, U Papa, P	<b>Univ Sao Paulo; IB UNESP</b>
Puberty in South American <i>Bos indicus</i> (Zebu) cattle	Nogueira, GP	<b>UNESP</b>
Redistribution of phosphorus roots in soil through cover crop roots	Franchini, JC Pavan, MA Miyazawa, M	<b>IAPAR</b>
Regulation of frequency of luteinizing hormone pulses by magnitude of acute change in circulating concentration of progesterone of female cattle	Fike, KE Kojima, FN Lindsey, BR Bergfeld, EGM Quintal-Franco, JA Melvin, EJ Zanella, EL Wehrman, ME Kinder, JE	Univ Nebraska; Ohio State Univ; Univ Missouri; Minitube Amer; Amer Soc Agron; INIFAP SAGAR; Wake Forest Univ; <b>EMBRAPA Suinos &amp; Aves;</b> Rocky Mt Reprod Serv Inc
Repeatability of agro-industrial characteristics in sugar cane	dos Santos, MSM Madalena, JA Soares, L Ferreira, PV Barbosa, GVS	<b>Univ Fed Alagoas</b>
Residual N and P fertilizer effect and fertilizer recovery on intercropped and sole-cropped corn and bean in semiarid northeast Brazil	Sampaio, ESB Tiessen, H Antonino, ACD Salcedo, IH	<b>Univ Fed Pernambuco; Univ Gottingen</b>
Residues of acephate and its methamidophos metabolite in fruits from greenhouse and field tomato crops	Trevizan, LRP de Baptista, GC	<b>Univ Sao Paulo</b>
Risk ratio as indicator of the number of animals necessary for genetic mapping of complex binary traits in cattle	Neto, AT Fries, R Thaller, G	<b>Univ Estado Santa Catarina; Tech Univ Munich</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Risk Ratio as parameter for the genetic characterization of new defined traits for mastitis of cattle	Thaler-Neto, A Fries, R Thaller, G	<b>Univ Estado Santa Catarina;</b> Tech Univ Munich
Selection criteria for growth traits in Nellore cattle	Simonelli, SM Silva, MA Silva, LOC Pereira, JCC Souza, JER Ventura, RV Valente, BD	<b>EMBRAPA Gado Corte;</b> <b>UENF;</b> <b>UFMG</b>
Selectivity of six insecticides used in citrus crops on pupae and adults of <i>Chrysoperla externa</i> (Hagen) (Neuroptera : Chrysopidae)	Godoy, MS Carvalho, GA Moraes, JC Cosme, LV Goussain, MM Carvalho, CF Morais, AA	<b>UFLA;</b> <b>Escola Super Agr</b>
Services performed by the ecosystem: forest remnants influence agricultural cultures' pollination and production	De Marco, P Coelho, FM	<b>Univ Fed Viosa</b>
Short intervals between ultrasonographically guided follicle aspiration improve oocyte quality but do not prevent establishment of dominant follicles in the Gir breed ( <i>Bos indicus</i> ) of cattle	Viana, JHM Camargo, LSD Ferreira, AD de Sa, WF Fernandes, CAD Marques, AD	<b>Eugenio Nascimento;</b> <b>Univ Alfenas;</b> <b>Univ Fed Minas Gerais</b>
Slaughter weights for the production of young bull cattle. 1. Performance on feedlot and cost of production	da Cruz, GM Esteves, SN Tullio, RR Alencar, MMD Oliveira, MCD	<b>Embrapa Pecuaria Sudeste;</b> <b>UNESP</b>
Slaughter weights for the production of young bull cattle. 2. Weight, age and carcass characteristics	da Cruz, GM Tullio, RR Esteves, SN de Alencar, MM Cordeiro, CA	<b>Embrapa Pecuaria Sudeste</b>
Spatial distribution of <i>Bemisia tabaci</i> (Genn.) biotype B (Hemiptera : Aleyrodidae) on bean crop ( <i>Phaseolus vulgaris</i> L.)	Pereira, MFA Boica, AL Barbosa, JC	ESAPP; <b>UNESP</b>
Spectral and temporal behavior analysis of coffee crop in Landsat images	Moreira, MA Adam, M Rudorff, BFT	<b>Inst Nacl Pesquisas Espaciais;</b> <b>Secretaria Estado Agr &amp; Abastecimento Parana</b>
Systemic granulomatous disease in Brazilian cattle grazing pasture containing vetch ( <i>Vicia</i> spp)	Figuera, RA Barros, CS	<b>Univ Fed Santa Maria</b>
Temporal variation of soil penetration resistance in a Clayey oxisol under no-tillage and crop rotation	Junior, SAG Reinert, DJ Reichert, JM	CAAL; <b>Univ Fed Santa Maria</b>
The impact of sector-specific and economy-wide policy reforms on the agricultural sector in Brazil: 1980-98	Helfand, SM de Rezende, GC	Univ Calif Riverside; <b>Univ Fed Fluminense</b>
The incidence of Shiga toxin-producing <i>Escherichia coli</i> in cattle with mastitis in Brazil	Lira, WM Macedo, C Marin, JM	<b>Univ Sao Paulo;</b> <b>Univ Estadual Paulista</b>
The use of hormonal treatments to improve reproductive performance of anestrous beef cattle in tropical climates	Baruselli, PS Reis, EL Marques, MO Nasser, LF Bo, GA	<b>FMVZ USP;</b> Univ Catolica Cordoba
Total replacement of soybean meal by urea or starea in high grain diets on nitrogen metabolism, ruminal ammonia-N concentration and blood parameters in beef cattle	de Oliveira, RC Pires, AV Fernandes, JJD Susin, I Santos, FAP de Araujo, RC	<b>USP</b>
Toxicity of leaf extracts of <i>Ageratum conyzoides</i> to lepidoptera pests of horticultural crops	Moreira, MD Picanco, MC Barbosa, LCD Guedes, RNC da Silva, LM	<b>Univ Fed Viosa</b>

Em relação ao tema *defesa agropecuária*, apenas no termo *Sistemas Efetivos de Monitoramento* foram localizados dois artigos que têm pelo menos um autor vinculado a uma instituição brasileira no título, cujos autores e Instituição de correspondência são apresentados a seguir.

#### a. Sistemas Efetivos de Monitoramento

Título	Autores	Instituição
Effect of no-till cropping systems on soil organic matter in a sandy clay loam Acrisol from Southern Brazil monitored by electron spin resonance and nuclear magnetic resonance	Bayer, C Martin-Neto, L Mielniczuk, J Ceretta, CA	Embrapa Instrumentacao Agropecuaria; Univ Fed Santa Maria; Univ Fed Rio Grande Sul; Univ Estado Santa Catarina
Monitoring of pesticide residues in a cotton crop soil	Luchini, LC Peres, TB de Andrea, MM	Ctr Protecao Ambiental

## 8. TEMA: FARMACOGENÉTICA

Apresentam-se a seguir os títulos dos 2 artigos que tem pelo menos um autor vinculado a uma instituição brasileira, sobre o tema *Farmacogenética*, com seus respectivos autores e instituições.

Título	Autores	Instituição
Attention-deficit/hyperactivity disorder: current aspects on pharmacogenetics	Rohde, LA Roman, T Hutz, MH	Univ Fed Rio Grande Sul
Novel CYP3A4 gene mutations: Contribution to the pharmacogenetic profile of hypercholesterolemic individuals treated with atorvastatin	Cavalli, S Moretti, I Matsumoto, L Salazar, L Hiroyuki, M Forti, N Diament, J Chiara, M Faludi, A Dominguez, R	USP

Em relação aos termos referentes ao tema *Farmacogenética*, não foram localizados artigos que contenham pelo menos um autor vinculado a uma instituição brasileira.

## 9. TEMA: FERTILIDADE E REPRODUÇÃO ANIMAL

Apresenta-se a seguir o título, autor e instituição do artigo localizado de autor vinculado a uma instituição brasileira, sobre o tema *Fertilidade e reprodução animal*, com seus respectivos autores e instituições.

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Special issue: Research and practice III: 15th international congress on <b>animal reproduction</b> - Preface	Henry, M	<b>Univ Fed Minas Gerais</b>

Em relação aos termos referentes ao tema *Fertilidade e reprodução animal*, não foram localizados artigos que contenham pelo menos um autor vinculado a uma instituição brasileira.

## **10. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE**

Não foram localizados artigos que contenham especificamente o tema Integração: alimentação, nutrição e saúde.

Em relação aos termos referentes ao tema Integração: alimentação, nutrição e saúde, em dois termos (Nutracêuticos (Alimentos Funcionais) e Produção de Vacinas em Plantas e Animais) foram localizados artigos publicados por pelo menos um autor vinculado a instituição brasileira. Os títulos dos artigos, seus autores e instituições, são apresentados a seguir.

### **a. Nutracêuticos (Alimentos Funcionais)**

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Biochemical pharmacology of functional foods and prevention of chronic diseases of aging	Ferrari, CKB Torres, EAFS	<b>Univ Sao Paulo</b>
Functional foods, herbs and nutraceuticals: towards biochemical mechanisms of healthy aging	Ferrari, CKB	<b>Univ Sao Paulo</b>
Functional foods: Latin American perspectives	Lajolo, FA	<b>Univ Sao Paulo</b>
Seafood as functional food	Soccol, MCH Oetterer, M	<b>USP</b>

### **b. Produção de Vacinas em Plantas e Animais**

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
EVALUATION OF DIFFERENT MEAT PEPTONES AS CULTURE MEDIA FOR BRUCELLA-ABORTUS 19 VACCINE PRODUCTION	POESTER, FP RAMOS, ET GIANNOULAKIS, MK	
Polygenic control of antibody production and correlation with vaccine induced resistance to rabies virus in high and low antibody responder mice	DeFranco, M Massa, S Vassao, RC Siqueira, M SantAnna, OA	<b>INST BUTANTAN</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Production and targeting of the Brucella abortus antigen L7/L12 in Lactococcus lactis: a first step towards food-grade live vaccines against brucellosis	Ribeiro, LA Azevedo, V Le Loir, Y Oliveira, SC Dieye, Y Piard, JC Gruss, A Langella, P	INRA; <b>Univ Fed Minas Gerais</b>
Stepwise iodination. A general procedure for detoxification of proteins suitable for vaccine development and antiserum production	Heneine, IF Heneine, LGD	<b>Univ Fed Minas Gerais;</b> FUNED
The early use of yellow fever virus strain 17D for vaccine production in Brazil - A review	Post, PR de Carvalho, R Freire, MD Galler, R	<b>FIOCRUZ;</b> <b>Univ Fed Pelotas</b>

## 11. TEMA: MUDANÇAS CLIMÁTICAS GLOBAIS

Apresenta-se a seguir os títulos dos 29 artigos que têm pelo menos um autor vinculado a uma instituição brasileira, sobre o tema Mudanças climáticas globais, com seus respectivos autores e instituições.

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
A crisis in the making: responses of Amazonian forests to land use and climate change	Laurance, WF	<b>Natl Inst Res Amazon INPA;</b> Smithsonian Inst
A mathematical model for malaria transmission relating global warming and local socioeconomic conditions	Yang, HM	<b>Univ Estadual Campinas</b>
Amazonian deforestation and global warming: Carbon stocks in vegetation replacing Brazil's Amazon forest	Fearnside, PM	
Assessing the effects of global warming and local social and economic conditions on the malaria transmission	Yang, HM Ferreira, MU	<b>Univ Estadual Campinas;</b> <b>Univ Sao Paulo</b>
Assessing the health benefits of urban air pollution reductions associated with climate change mitigation (2000-2020): Santiago, Sao Paulo, Mexico City, and New York City	Cifuentes, L Borja-Aburto, VH Gouveia, N Thurston, G Davis, DL	Pontificia Univ Catolica Chile; Secretaria Salud; <b>USP;</b> Carnegie Mellon Univ; NYU
Carbon-13 variation with depth in soils of Brazil and climate change during the quaternary	Martinelli, LA Pessenda, LCR Espinoza, E Camargo, PB Telles, EC Cerri, CC Victoria, RL Aravena, R Richey, J Trumbore, S	UNIV WATERLOO; UNIV WASHINGTON; UNIV CALIF IRVINE
Climate change after tropical deforestation: Seasonal variability of surface albedo and its effects on precipitation change	Berbert, MLC Costa, MH	<b>Univ Fed Vicosa</b>
Climate change and vector-borne diseases: a regional analysis	Githeko, AK Lindsay, SW Confalonieri, UE Patz, JA	Kenya Med Res Inst; Univ Durham; Natl Sch Publ Hlth; Johns Hopkins Univ

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Climate change: Hidden health benefits of greenhouse gas mitigation	Cifuentes, L Borja-Aburto, VH Gouveia, N Thurston, G Davis, DL	Direcc Gen Salud Ambiental; Pontificia Univ Catolica Chile; <b>Univ Sao Paulo</b> ; Carnegie Mellon Univ; NYU
Developing countries are combating climate change - Actions in developing countries that slow growth in carbon emissions	Reid, WV Goldemberg, J	World Resources Inst; <b>Univ Sao Paulo</b>
Expected climate change impacts on soil erosion rates: A review	Nearing, MA Pruski, FF O'Neal, MR	
Forests and global warming mitigation in Brazil: opportunities in the Brazilian forest sector for responses to global warming under the "clean development mechanism"	Fearnside, PM	<b>Inst Nacl Pesquisas Amazonia</b>
Further evidence of changes in the hydrological regime of the River Paraguay: part of a wider phenomenon of climate change?	Collischonn, W Tucci, CEM Clarke, RT	<b>Inst Pesquisas Hidraul</b>
Future electric power technology choices of Brazil: a possible conflict between local pollution and global climate change	Schaeffer, R Szklo, AS	<b>UFRJ</b>
Global warming and transport in Brazil - ethanol alternative	Ribeiro, SK Younes-Ibrahim, PS	<b>UFRJ</b>
Global warming and tropical land-use change: Greenhouse gas emissions from biomass burning, decomposition and soils in forest conversion, shifting cultivation and secondary vegetation	Fearnside, PM	<b>Natl Inst Res Amazon</b>
GLOBAL WARMING POTENTIALS - THE CASE OF EMISSIONS FROM DAMS	ROSA, LP SCHAEFFER, R	
Global warming response options in Brazil's forest sector: Comparison of project-level costs and benefits	Fearnside, PM	
Linkages between climate change and sustainable development	Beg, N Morlot, JC Davidson, O Afrane-Okesse, Y Tyani, L Denton, F Sokona, Y Thomas, JP La Rovere, EL Parikh, JK Parikh, K Rahman, AA	<b>UFRJ</b> ; Indira Gandhi Inst Dev Res; OECD; BCAS; EDRC; ENDA TM
Lutzomyia vectors for cutaneous leishmaniasis in Southern Brazil: ecological niche models, predicted geographic distributions, and climate change effects	Peterson, AT Shaw, J	Univ Kansas; <b>Univ Sao Paulo</b>
Positive feedbacks among forest fragmentation, drought, and climate change in the Amazon	Laurance, WF Williamson, GB	Smithsonian Trop Res Inst; <b>Natl Inst Amazonian Res</b> ; Louisiana State

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
		Univ
Saving tropical forests as a global warming countermeasure: an issue that divides the environmental movement	Fearnside, PM	<b>Natl Isnt Res Amazon</b>
Surplus production, variability, and climate change in the great sardine and anchovy fisheries	Jacobson, LD De Oliveira, JAA Barange, M Cisneros-Mata, MA Felix-Uraga, R Hunter, JR Kim, JY Matsuura, Y Niquen, M Porteiro, C Rothschild, B Sanchez, RP Serra, R Uriarte, A Wada, T	Natl Marine Fisheries Serv; Marine & Coastal Management; Plymouth Marine Lab; Ctr Reg Invest Pesqueras; Inst Politecn Nacl; Natl Fisheries Res & Dev Inst; Inst Mar Peru; <b>Univ Sao Paulo</b> ; Ctr Oceanog Vigo; Univ Massachusetts; Inst Nacl Invest & Desarrollo Pesquero; Inst Fomento Pesquero; Inst Tecnol Pesquero & Alimentario; Japan Minist Agr Forestry & Fisheries
Sustainable forest management and global climate change: Selected case studies from the Americas	Da Motta, RS	IPEA
Sustainable forest management and global climate change: Selected case studies from the Americas.	Da Motta, RS	IPEA
The present, past, and future contributions to global warming of CO2 emissions from fuels	Rosa, LP Ribeiro, SK	<b>Univ Fed Rio de Janeiro</b> ; Int Virtual Inst Global Change
Time preference in global warming calculations: a proposal for a unified index	Fearnside, PM	<b>INPA</b>
Uncertainty in land-use change and forestry sector mitigation options for global warming: Plantation silviculture versus avoided deforestation	Fearnside, PM	<b>Natl Inst Res Amazon INPA</b>

Em relação aos termos referentes ao tema *Mudanças climáticas globais*, não foram localizados artigos que contenham pelo menos um autor vinculado a uma instituição brasileira.



## 12. TEMA: PROGRAMAS DE DESCOBERTA

Sobre este tema em quatro termos – clonagem, células tronco, genômica funcional, proteômica - foram localizados artigos que referem-se em seu título ao Brasil. Os títulos dos artigos, seus autores e instituições são apresentados a seguir.

### a. Clonagem

Título	Autores	Instituição
A prothrombin activator from Bothrops erythromelas (jararaca-da-seca) snake venom: characterization and molecular cloning	Silva, MB Schattner, M Ramos, CRR Junqueira-de-Azevedo, ILM Guarnieri, MC Lazzari, MA Sampaio, CAM Pozner, RG Ventura, JS Ho, PL Chudzinski-Tavassi, AM	Inst Butantan; Univ Fed Pernambuco; Univ Fed Sao Paulo; Consejo Nacl Invest Cient & Tecn
A rolling-circle miniplasmid of Xanthomonas campestris pv. glycines: The nucleotide sequence and its use as a cloning vector	Baldini, RL Tahara, ST Rosato, YB	UNICAMP
A simple method for cloning the complete begomovirus genome using the bacteriophage phi 29 DNA polymerase	Inoue-Nagata, AK Albuquerque, LC Rocha, WB Nagata, T	Embrapa Hortalias; Univ Catolica Brasilia
A yeast-based model system for cloning secreted and membrane proteins	Surpili, MJ Muller-Rober, B Willmitzer, L	Inst Genbiol Forsch Berlin GmbH; MPI MOPP
An improved general approach for cloning and characterizing telomeres: the protozoan parasite Trypanosoma cruzi as model organism	Chiurillo, MA Santos, MRM Da Silveira, JF Ramirez, JL	Cent Univ Venezuela; Inst Estudios Avanzados IDEA; Escola Paulista Med Unifesp
BJ46a, a snake venom metalloproteinase inhibitor - Isolation, characterization, cloning and insights into its mechanism of action	Valente, RH Dragulev, B Perales, J Fox, JW Domont, GB	Univ Fed Rio de Janeiro; Univ Virginia; FIOCRUZ
Carbohydrate metabolism of Xylella fastidiosa: Detection of glycolytic and pentose phosphate pathway enzymes and cloning and expression of the enolase gene	Facincani, AP Ferro, JA Pizauro, JM Pereira, HA Lemos, EGD do Prado, AL Ferro, MIT	Univ Estadual Paulista
cDNA cloning and heterologous expression of functional cysteine-rich antifungal protein Psd1 in the yeast Pichia pastoris	Almeida, MS Cabral, KS de Medeiros, LN Valente, AP Almeida, FCL Kurtenbach, E	Univ Fed Rio de Janeiro

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
CDNA cloning and sequence analysis of a lysine-49 phospholipase A(2) myotoxin from <i>Agkistrodon contortrix laticinctus</i> snake venom	deAraujo, HSS White, SP Ownby, CL	OKLAHOMA STATE UNIV; UNIV FED SAO CARLOS
cDNA cloning, expression and characterization of a <i>Boophilus microplus</i> paramyosin	Ferreira, CAS Barbosa, MC Silveira, TCL Valenzuela, JG Vaz, ID Masuda, A	UFRGS; NIAID; PUC RS; UNISINOS
Cloning and characterisation of a cysteine proteinase gene expressed in amastigotes of <i>Leishmania (L.) amazonensis</i>	Lasakosvitsch, F Gentil, LG dos Santos, MRM da Silveira, JF Barbieri, CL	Univ Fed Sao Paulo
Cloning and characterization of a basic phospholipase A(2) homologue from <i>Micrurus corallinus</i> (coral snake) venom gland	de Oliveira, UC Assui, A de Brandao Prieto da Silva, AR de Oliveira, JS Ho, PL	Univ Sao Paulo; Ctr Biotecnol
Cloning and characterization of a defensin-encoding cDNA of <i>Triatoma brasiliensis</i>	Araujo, CA Waniek, PJ Jansen, AM Kollien, AK Schaub, GA	Ruhr Univ Bochum; Inst Oswaldo Cruz
Cloning and characterization of a gene encoding a novel immunodominant antigen of <i>Trypanosoma cruzi</i>	Lesenechal, M Duret, L Cano, MI Mortara, RA Jolivet, M Camargo, ME daSilveira, JF ParanhosBaccala, G	ECOLE NORMALE SUPER LYON; LAB BIOMETRIE; ESCOLA PAULISTA MED; BIOLAB MERIEUX
Cloning and characterization of a gene encoding a putative protein associated with U3 small nucleolar ribonucleoprotein in <i>Trypanosoma cruzi</i>	Fragoso, SP Plazanet-Menut, C Carreira, MAC Motta, MC Dallagiovana, B Krieger, MA Goldenberg, S	Univ Fed Rio de Janeiro; Inst Biol Mol Parana; Fiocruz MS
Cloning and characterization of a gene encoding an immunoglobulin-binding receptor on the cell surface of some members of the family Trypanosomatidae	Campos-Neto, A Suffia, I Cavassani, KA Jen, S Greeson, K Ovendale, P Silva, JS Reed, SG Skeiky, YAW	Univ Sao Paulo; Infect Dis Res Inst; Corixa Corp
Cloning and characterization of a gene encoding the endopolygalacturonase of <i>Penicillium griseoroseum</i>	Ribon, AOB Coelho, JLC de Barros, EG Araujo, EF	Univ Fed Vicosa
CLONING AND CHARACTERIZATION OF A GENE FOR THE STAGE-SPECIFIC 82-KDA SURFACE-ANTIGEN OF METACYCLIC TRYPOMASTIGOTES OF <i>TRYPANOSOMA-CRUZI</i>	ARAYA, JE CANO, MI YOSHIDA, N DA SILVEIRA, JF	ESCOLA PAULISTA MED
Cloning and characterization of a LON gene homologue from the human pathogen <i>Paracoccidioides brasiliensis</i>	Barros, TF Puccia, R	UNIFESP

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Cloning and characterization of a novel uncoupling protein homologue in hummingbirds	Vianna, CR Bicudo, JEPW Moriscot, AS Bradford, LB Bianco, AC	Univ Sao Paulo; Harvard Univ
CLONING AND CHARACTERIZATION OF A PUTATIVE CALCIUM-TRANSPORTING ATPASE GENE FROM SCHISTOSOMA-MANSONI	DEMENDONCA, RL BECK, E RUMJANEK, FD GOFFEAU, A	Univ Fed Rio de Janeiro; UNIV CATHOLIQUE LOUVAIN; UNIV GIESSEN
Cloning and characterization of a putative human D-2-hydroxyacid dehydrogenase in chromosome 9q	Huang, TS Yang, WX Pereira, AC Craigen, WJ Shih, VE	Harvard Univ; FMUSP; Baylor Coll Med
Cloning and characterization of a repetitive 1.9 kb HindIII DNA fragment from <i>Crotalus durissus terrificus</i> genome	Magdesian, MH daSilva, ARBP Ho, PL Furtado, MFD Yamane, T	Inst Butantan
Cloning and characterization of a <i>Schistosoma mansoni</i> cDNA clone with a specific antigenic expression during development in a vertebrate host	Coelho Castelo, AM Rodrigues, V	Univ Sao Paulo
CLONING AND CHARACTERIZATION OF AN ALPHA-AMYLASE GENE FROM <i>STREPTOMYCES</i> SP WL6	CHEN, I MARCOS, AT DACOSTA, SOP MARTIN, JF PADILLA, G	Univ Sao Paulo; UNIV LEON
Cloning and characterization of an alpha-neurotoxin-type protein specific for the coral snake <i>Micrurus corallinus</i>	de Oliveira, JS da Silva, ARDP Soares, MB Stephano, MA Dias, WD Raw, I Ho, PL	Inst Butantan; Univ Iowa
Cloning and characterization of COX18, a <i>Saccharomyces cerevisiae</i> PET gene required for the assembly of cytochrome oxidase	Souza, RL Green-Willms, NS Fox, TD Tzagoloff, A Nobrega, FG	Univ Sao Paulo; Univ Vale Paraiba; Cornell Univ; Columbia Univ
Cloning and characterization of <i>Echinococcus granulosus</i> (Cestode) <i>EgactI</i> and <i>EgactII</i> actin gene promoters and their functional analysis in the NIH3T3 mouse cell line	Gimba, ERP Chemale, G Farias, SS Zaha, A	Univ Fed Rio Grande Sul
Cloning and characterization of <i>SmZF1</i> , a gene encoding a <i>Schistosoma mansoni</i> zinc finger protein	de Souza, PRE Valadao, AF Calzavara-Silva, CE Franco, GR de Moraes, MA Abath, FGC	Ctr Pesquisas Aggeu Magalhaes Fiocruz; Univ Fed Pernambuco; Univ Fed Minas Gerais
Cloning and characterization of the cDNA for the Brazilian <i>Cratomorphus distinctus</i> larval firefly luciferase: similarities with European <i>Lampyris noctiluca</i> and Asiatic <i>Pyrocoelia</i> luciferases	Viviani, VR Arnoldi, FGC Brochetto-Braga, M Ohmiya, Y	Univ Estadual Sao Paulo; Osaka Natl Res Inst
CLONING AND CHARACTERIZATION OF THE GENE ENCODING ATP-DEPENDENT PHOSPHO-ENOL-PYRUVATE CARBOXYKINASE IN <i>TRYPANOSOMA-CRUZI</i> - COMPARISON OF PRIMARY AND PREDICTED SECONDARY STRUCTURE WITH HOST CTP-DEPENDENT ENZYME	LINSS, J GOLDENBERG, S URBINA, JA AMZEL, LM	Fdn Oswaldo Cruz; JOHNS HOPKINS UNIV; INST VENEZOLANO INVEST CIENT

Título	Autores	Instituição
CLONING AND CHARACTERIZATION OF THE GENE ENCODING ATP-DEPENDENT PHOSPHO-ENOL-PYRUVATE CARBOXYKINASE IN TRYPANOSOMA-CRUZI - COMPARISON OF PRIMARY AND PREDICTED SECONDARY STRUCTURE WITH HOST GTP-DEPENDENT ENZYME (VOL 136, PG 69, 1993)	LINSS, J GOLDENBERG, S URBINA, JA AMZEL, LM	Fdn Oswaldo Cruz; JOHNS HOPKINS UNIV; INST VENEZOLANO INVEST CIENT
Cloning and characterization of the gene encoding the OmpU outer membrane protein of <i>Vibrio cholerae</i>	Sperandio, V Bailey, C Giron, JA DiRita, VJ Silveira, WD Vettore, AL Kaper, JB	UNIV MARYLAND; UNIV MICHIGAN; Univ Estadual Campinas
Cloning and characterization of the gene encoding the PepF endopeptidase from the aquatic bacterium <i>Caulobacter crescentus</i>	Braz, VS Lang, EAS Marques, MV	Univ Sao Paulo
CLONING AND CHARACTERIZATION OF THE GENE FOR THE CATALYTIC SUBUNIT OF CAMP-DEPENDENT PROTEIN-KINASE IN THE AQUATIC FUNGUS <i>BLASTOCLADIELLA-EMERSONII</i>	DE OLIVEIRA, JCF BORGES, ACC MARQUES, MD GOMES, SL	Univ Sao Paulo
Cloning and characterization of the metacyclogenin gene, which is specifically expressed during <i>Trypanosoma cruzi</i> metacyclogenesis	Avila, AR Yamada-Ogatta, SF Monteiro, VDS Krieger, MA Nakamura, CV de Souza, W Goldenberg, S	Inst Biol Mol Parana; Univ Estadual Londrina; Fiocruz MS; Univ Estadual Maringa; UFRJ
Cloning and detection of metallothionein mRNA by RT-PCR in mangrove oysters ( <i>Crassostrea rhizophorae</i> )	Rebelo, MF Pfeiffer, WC da Silva, H Moraes, MO	Univ Fed Rio de Janeiro; Fiocruz MS
CLONING AND EXPRESSION OF A LEISHMANIA-DONOVANI GENE INSTRUCTED BY A PEPTIDE ISOLATED FROM MAJOR HISTOCOMPATIBILITY COMPLEX CLASS-II MOLECULES OF INFECTED MACROPHAGES	CAMPOSNETO, A SOONG, L CORDOVA, JL SANTANGELO, D SKEIKY, YAW RUDDLE, NH REED, SG JANEWAY, C MCMAHONPRATT, D	Univ Sao Paulo; YALE UNIV
Cloning and expression of an acidic platelet aggregation inhibitor phospholipase A(2) cDNA from <i>Bothrops jararacussu</i> venom gland	Roberto, PG Kashima, S Soares, AM Chioato, L Faca, VM Fuly, AL Astolfi, S Pereira, JO Franca, SC	Univ Fed Rio de Janeiro; Univ Sao Paulo; Univ Ribeirao Preto; Univ Fed Amazonas
Cloning and expression of calglandulin, a new EF-hand protein from the venom glands of <i>Bothrops insularis</i> snake in E-coli	Junqueira-de-Azevedo, ID Pertinhez, T Spisni, A Carreno, FR Farah, CS Ho, PL	Univ Sao Paulo; Inst Butantan; Ctr Biol Mol Estrutural; Univ Parma

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Cloning and expression of colonization factor antigen I (CFA/I) epitopes of enterotoxigenic <i>Escherichia coli</i> (ETEC) in <i>Salmonella</i> flagellin	Luna, MG Martins, MM Newton, SMC Costa, SOP Almeida, DF Ferreira, LCS	Univ Sao Paulo; INST BIOFIS CARLOS CHAGAS FILHO
Cloning and expression of functional shikimate dehydrogenase (EC 1.1.1.25) from <i>Mycobacterium tuberculosis</i> H37Rv	Magalhaes, MLB Pereira, CP Basso, LA Santos, DS	Univ Fed Rio Grande Sul
Cloning and expression of soluble recombinant protein comprising the extracellular domain of the human type I interferon receptor 2c subunit (IFNAR-2c) in <i>E-coli</i>	Yoon, SO Hirata, RDC da Silva, ACR Nguyen, NY Hirata, MH	Univ Sao Paulo; US FDA
Cloning and functional characterization of an uncoupling protein homolog in hummingbirds	Vianna, CR Hagen, T Zhang, CY Bachman, E Boss, O Gereben, B Moriscot, AS Lowell, BB Bicudo, JEPW Bianco, AC	Univ Sao Paulo; Brigham & Womens Hosp; Harvard Univ; Beth Israel Deaconess Med Ctr
Cloning and functional expression of a <i>Boophilus microplus</i> cathepsin L-like enzyme	Renard, G Garcia, JF Cardoso, FC Richter, MF Sakanari, JA Ozaki, LS Termignoni, C Masuda, A	UFRGS; Univ Fed Rio Grande Sul; Sonoma State Univ
Cloning and molecular characterization of the cDNA for the Brazilian larval click-beetle <i>Pyrearinus termitilluminans</i> luciferase	Viviani, VR Silva, ACR Perez, GLO Santelli, RV Bechara, EJH Reinach, FC	Univ Sao Paulo
Cloning and molecular characterization of the <i>Schistosoma mansoni</i> genes RbAp48 and histone H4	Souza, PP Santos, DN Pena, SDJ Franco, GR	Univ Fed Minas Gerais
Cloning and overexpression in soluble form of functional shikimate kinase and 5-enolpyruvylshikimate 3-phosphate synthase enzymes from <i>Mycobacterium tuberculosis</i>	Oliveira, JS Pinto, CA Basso, LA Santos, DS	Univ Fed Rio Grande Sul
Cloning and partial characterization of a <i>Boophilus microplus</i> (Acari : Ixodidae) calreticulin	Ferreira, CAS Vaz, ID da Silva, SS Haag, KL Valenzuela, JG Masuda, A	NIAID; Univ Fed Pelotas; Univ Fed Rio Grande Sul
Cloning and partial characterization of a <i>Boophilus microplus</i> (Acari : Ixodidae) glutathione S-transferase	de Lima, MFR Ferreira, CAS de Freitas, DRJ Valenzuela, JG Masuda, A	NIAID; Univ Fed Rio Grande Sul
Cloning and sequence analysis of a <i>Bothrops jararaca</i> cDNA encoding a precursor of seven bradykinin-potentiating peptides and a C-type natriuretic peptide	Murayama, N Hayashi, MAF Ohi, H Ferreira, LAF Hermann, VV Saito, H Fujita, Y Higuchi, S Fernandes, BL Yamane, T DeCamargo, ACM	Univ Sao Paulo; SHOWA UNIV; Inst Butantan
Cloning and sequencing of <i>tccb</i> , a gene encoding a <i>Trypanosoma cruzi</i> cathepsin B-like protease	Nobrega, OT Silva, MAS Teixeira, ARL Santana, JM	Univ Brasilia
Cloning and sequencing of the nitrogenase structural genes <i>nifHDK</i> of <i>Herbaspirillum seropedicae</i>	Machado, IMP Yates, MG Machado, HB Souza, EM Pedrosa, FO	Univ Fed Parana; UNIV SUSSEX
Cloning of a cDNA from <i>Arabidopsis thaliana</i> homologous to the human XPB gene	Ribeiro, DT Machado, CR Costa, RMA Praekelt, UM Van Sluys, MA Menck, CFM	Univ Sao Paulo; USP
CLONING OF A CDNA-ENCODING A NOVEL HEAT-SHOCK PROTEIN FROM <i>DICTYOSTELIUM-DISCOIDEUM</i>	DEMARIA, AC GOMES, SL JULIANIA, MH MAZZARELLA, R KLEIN, C	Univ Sao Paulo; ST LOUIS UNIV
CLONING OF A CDNA-ENCODING A PUTATIVE CYSTEINE PROTEASE FROM GERMINATING MAIZE SEEDS	DEBARROS, EG LARKINS, BA	UNIV ARIZONA

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Cloning of a chitinase gene from <i>Ewingella americana</i> , a pathogen of the cultivated mushroom, <i>Agaricus bisporus</i>	Inglis, PW Peberdy, JF Sockett, RE	Univ Nottingham
CLONING OF A FRAGMENT OF THE GENE CRYIVB FROM <i>BACILLUS-THURINGIENSIS</i> VAR <i>ISRAESENSIS</i> CODING FOR THE AMINOTERMINAL SEGMENT OF A 130-KDA LARVICIDAL ENDOTOXIN	SAAR, JH DEGRAVE, WM	Inst Oswaldo Cruz
CLONING OF A LOCUS INVOLVED IN PATHOGENICITY AND PRODUCTION OF EXTRACELLULAR POLYSACCHARIDE AND PROTEASE IN <i>XANTHOMONAS-CAMPESTRIS</i> PV <i>CAMPESTRIS</i>	ROSATO, YB DESTEFANO, SAL DANIELS, MJ	UNIV CAMPINAS
CLONING OF A RECA-LIKE GENE FROM THE DIAZOTROPH <i>HERBASPIRILLUM-SEROPEDICAE</i> STRAIN Z78	STEFFENS, MBR RIGO, LU FUNAYAMA, S SOUZA, EM MACHADO, HB PEDROSA, FO	Univ Fed Parana
Cloning of a surface membrane glycoprotein specific for the infective form of <i>Trypanosoma cruzi</i> having adhesive properties to laminin	Giordano, R Fouts, DL Tewari, D Colli, W Manning, JE Alves, MJM	Univ Sao Paulo; Univ Calif Irvine
CLONING OF A THYMIC STROMAL CELL CAPABLE OF PROTECTING THYMOCYTES FROM APOPTOSIS	AMARANTEMENDES, JGP CHAMMAS, R ABRAHAMSOHN, P PATEL, PC POTWOROWSKI, EF MACEDO, MS	Univ Sao Paulo; LUDWIG INST CANC RES
Cloning of an unusual natriuretic peptide from the South American coral snake <i>Micrurus corallinus</i>	Ho, PL Soares, MB Maack, T Gimenez, I Puerto, G Furtado, MDD Raw, I	Inst Butantan; Cornell Univ; Columbia Univ
Cloning of cDNAs encoding neurotoxic peptides from the spider <i>Phoneutria nigriventer</i>	Kalapothis, E Penaforte, CL Beirao, PSL Romano-Silva, MA Cruz, JS Prado, MAM Guimaraes, PEM Gomez, MV Prado, VF	Univ Fed Minas Gerais
Cloning of glucocorticoid-regulated genes in C6/ST1 rat glioma phenotypic reversion	Valentini, SR Armelin, MCS	Univ Sao Paulo; Univ Estadual Paulista
CLONING OF METALLOPROTEASE GENES IN THE CARPET VIPER ( <i>ECHIS-PYRAMIDUM-LEAKEYI</i> ) - FURTHER MEMBERS OF THE METALLOPROTEASE/DISINTEGRIN GENE FAMILY	PAINE, MJI MOURADASILVA, AM THEAKSTON, RDG CRAMPTON, JM	Inst Butantan; UNIV LIVERPOOL
Cloning of the chaperonin t-complex polypeptide 1 gene from <i>Schistosoma mansoni</i> and studies of its expression levels under heat shock and oxidative stress	Campos, EG Hamdan, FF	Univ Brasilia; McGill Univ
Cloning of the t(1;5)(q23;q33) in a myeloproliferative disorder associated with eosinophilia: Involvement of PDGFRB and response to imatinib.	Wilkinson, K Velloso, E Lopes, L Lee, C Aster, J Shipp, M Aguiar, RC	Univ Sao Paulo; Brigham & Womens Hosp; Harvard Univ; Hosp AC Camargo Fund Antonio Prudente
Cloning of the t(1;5)(q23;q33) in a myeloproliferative disorder associated with eosinophilia: involvement of PDGFRB and response to imatinib	Wilkinson, K Velloso, ERP Lopes, LF Lee, C Aster, JC Shipp, MA Aguiar, RCT	Univ Sao Paulo; Harvard Univ; Hosp AC Camargo Fund Antonio Prudente; Dana Farber Canc Inst

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
CLONING SHRIMP BACULOVIRUS-PENAEI DNA AND HYBRIDIZATION COMPARISON WITH AUTOGRAPHICA-CALIFORNICA NUCLEAR POLYHEDROSIS-VIRUS	MACHADO, CR BUENO, SLD MENCK, CFM	Univ Sao Paulo
Cloning, cDNA sequence analysis and patch clamp studies of a toxin from the venom of the armed spider (Phoneutria nigriventer)	Kalapothis, E Penaforte, CL Leao, RM Cruz, JS Prado, VF Cordeiro, MN Diniz, CR Romano-Silva, MA Prado, MAM Gomez, MV Beirao, PSL	Fdn Ezequiel Dias; Univ Fed Minas Gerais
Cloning, characterization and preliminary crystallographic analysis of Leishmania hypoxanthine-guanine phosphoribosyltransferase	Monzani, PS Alfonzo, JD Simpson, L Oliva, G Thiemann, OH	Univ Sao Paulo; Univ Calif Los Angeles
Cloning, characterization and serological evaluation of K9 and K26: two related hydrophilic antigens of Leishmania chagasi	Bhatia, A Daifalla, NS Jen, SY Badaro, R Reed, SG Skeiky, YAW	Univ Khartoum; Infect Dis Res Inst; Corixa Corp; Univ Fed Bahia; Univ Washington
Cloning, characterization, and epitope expression of the major diagnostic antigen of Paracoccidioides brasiliensis	Cisalpino, PS Puccia, R Yamauchi, LM Cano, MIN daSilveira, JF Travassos, LR	Univ Fed Sao Paulo
Cloning, characterization, and structural analysis of a C-type lectin from Bothrops insularis (BiL) venom	Guimaraes-Gomes, V Oliveira-Carvalho, AL Junqueira-De-Azevedo, IDM Dutra, DLS Pujol-Luz, M Castro, HC Ho, PL Zingali, RB	Univ Fed Rio de Janeiro; IBU; Univ Sao Paulo; Univ Fed Fluminense
Cloning, expression and partial characterization of a Haemaphysalis longicornis and a Rhipicephalus appendiculatus glutathione S-transferase	Vaz, ID Imamura, S Ohashi, K Onuma, M	Hokkaido Univ; Univ Fed Rio Grande Sul
Cloning, expression and preliminary crystallographic studies of the potential drug target purine nucleoside phosphorylase from Schistosoma mansoni	Pereira, HM Cleasby, A Pena, SDJ Franco, GR Garratt, RC	Univ Sao Paulo; Astex Technol; UFMG
Cloning, expression and purification of the large and small hydrophilic loops of sarcoplasmic reticulum Ca-ATPase.	Hering, VR VerjovskiAlmeida, S	Univ Sao Paulo
Cloning, expression, and characterization of a bi-functional disintegrin/alkaline phosphatase hybrid protein	Butera, D Skielka, K McLane, MA Paquette-Straub, C Ducancel, F da Silva, AMM	Univ Sao Paulo; Inst Butantan; Univ Delaware; CEA Saclay
Cloning, expression, and purification of the virulence-associated protein D from Xylella fastidiosa	Catani, CF Azzoni, AR Paula, DP Tada, SFS Rosselli, LK de Souza, AP Yano, T	State Univ Campinas; Univ Estadual Campinas
Cloning, expression, and structural analysis of recombinant BJcuL, a c-type lectin from the Bothrops jararacussu snake venom	Kassab, BH de Carvalho, DD Oliveira, MA Baptista, GR Pereira, GAG Novello, JC	Univ Estadual Campinas; Inst Butanta
Cloning, Golgi localization, and enzyme activity of the full-length heparin/heparan sulfate-glucuronic acid C5-epimerase	Crawford, BE Olson, SK Esko, JD Pinhal, MAS	Univ Calif San Diego
Cloning, overexpression, and purification of functional human purine nucleoside phosphorylase	Silva, RG Carvalho, LPS Oliveira, JS Pinto, CA Mendes, MA Palma, MS Basso, LA Santos, DS	Univ Fed Rio Grande Sul; Univ Estado Sao Paulo

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Cloning, purification, crystallization and preliminary X-ray diffraction analysis of the antistatin-type inhibitor ghilanten (domain I) from <i>Haementeria ghilianii</i> in complex with porcine beta-trypsin	Rester, U Bode, W Sampaio, CAM Auerswald, EA Lopes, APY	UNIFESP; Inst Butantan; Max Planck Inst Biochem; Univ Munich Klinikum; Univ Munich
Cloning, sequence analysis, and expression of active <i>Phrixothrix</i> railroad-worms luciferases: Relationship between bioluminescence spectra and primary structures	Viviani, VR Bechara, EJM Ohmiya, Y	Univ Sao Paulo; Univ Shizuoka
Cloning, structural analysis and expression of the gene encoding Hsp32 from <i>Dictyostelium discoideum</i>	DeMaria, AC Moerman, A Klein, C Gomes, SL	ST LOUIS UNIV; Univ Fed Sao Paulo
Coherent soliton propagation through doped optical fibers: cloning, breakup, and soliton interactions	Cavalcanti, SB Fonseca, EJM Caetano, DP Hickmann, JM	Univ Fed Alagoas
Comparative evaluation of <i>Mycobacterium vaccae</i> as a surrogate cloning host for use in the study of mycobacterial genetics	Medeiros, MA Dellagostin, OA Armoa, GRG Degrave, WM de Mendonca-Lima, L Lopes, MQ Costa, JF Mcfadden, J McIntosh, D	Oswaldo Cruz Fdn; Fed Univ Pelotas; Univ Surrey
Construction of a cloning vector for <i>Paenibacillus polymyxa</i> and P-azotofixans	Duarte, GF Seldin, L	Univ Fed Rio de Janeiro
Detection and cloning of expressed sequences linked to a target gene	Vallejos, CE Malandro, JJ Sheehy, K Zimmermann, MJ	Univ Florida; Empresa Brasileira Pesquisa Agropecuaria
<i>Echinococcus granulosus</i> : Cloning and functional in vitro characterization of an actin filament fragmenting protein	Cortez-Herrera, E Yamamoto, RR Rodrigues, JSS Farias, SE Ferreira, HB Zaha, A	Univ Fed Rio Grande Sul
<i>Echinococcus granulosus</i> : Molecular cloning and phylogenetic analysis of an inducible glutathione S-transferase	Fernandez, V Chalar, C Martinez, C Musto, H Zaha, A Fernandez, C	Univ Fed Rio Grande Sul; Univ Republ
Establishment of an expression cloning system for CD4(+) T cell epitopes	Fujii, S Uemura, Y Iwai, LK Ando, M Senju, S Nishimura, Y	Univ Sao Paulo; Kumamoto Univ
Genetic analysis of the bacteriocin-encoding plasmids pRJ6 and pRJ9 of <i>Staphylococcus aureus</i> by transposon mutagenesis and cloning of genes involved in bacteriocin production	de Oliveira, SS Nascimento, JDS Povia, DC de Araujo, SA Gamon, MR Bastos, MCD	UFRJ
Glycerol kinase of <i>Trypanosoma brucei</i> - Cloning, molecular characterization and mutagenesis	Kralova, I Rigden, DJ Oppendoes, FR Michels, PAM	Catholic Univ Louvain; EMBRAPA
Human serine racemase: molecular cloning, genomic organization and functional analysis	De Miranda, J Santoro, A Engelder, S Wolosker, H	Univ Fed Rio de Janeiro; Inst Ciencias Biomed
Identification and characterization of T cell-stimulating antigens from <i>Leishmania</i> by CD4 T cell expression cloning	Probst, P Stromberg, E Ghalib, HW Mozel, M Badaro, R Reed, SG Webb, JR	Infect Dis Res Inst; Corixa Corp; King Khalid Univ; Univ Fed Bahia; Univ Ottawa
Identification and cloning of snake venom vascular endothelial growth factor (svVEGF) from <i>Bothrops erythromelas</i> pitviper	Junqueira-de-Azevedo, IDL da Silva, MB Chudzinski-Tavassi, AM Ho, PL	



Título	Autores	Instituição
Identification and molecular cloning of insecticidal toxins from the venom of the brown spider <i>Loxosceles intermedia</i>	de Castro, CS Silvestre, FG Araujo, SC Yazbeck, GD Mangili, OC Cruz, I Chavez-Olortegui, C Kalapothakis, E	Univ Fed Ouro Preto; Univ Fed Parana; Embrapa Milho & Sorgo; Univ Fed Minas Gerais
IDENTIFICATION OF BLOMIA-TROPICALIS ALLERGEN BLO-T-5 BY CDNA CLONING	ARRUDA, LK FERNANDEZCALDAS, E NASPITZ, CK MONTEALEGRE, F VAILES, LD CHAPMAN, MD	ESCOLA PAULISTA MED; UNIV S FLORIDA; PONCE SCH MED
Infestin, a thrombin inhibitor presents in <i>Triatoma infestans</i> midgut, a Chagas' disease vector: gene cloning, expression and characterization of the inhibitor	Campos, ITN Amino, R Sampaio, CAM Auerswald, EA Friedrich, T Lemaire, HG Schenkman, S Tanaka, AS	UNIFESP; Klinikum Univ Munich; BASF AG
Isolation and cloning of <i>Streptomyces</i> terminal fragments	Stoll, A Horvat, LI Lopes-Shikida, SAR Padilla, G Cullum, J	Univ Sao Paulo; Univ Kaiserslautern; Inst Technol Res Sao Paulo State IPT
Isolation, cloning, and complete nucleotide sequence of a phenotypically distinct Brazilian isolate of human T-lymphotropic virus type II (HTLV-II)	Lewis, MJ Novoa, P Ishak, R Ishak, M Salemi, M Vandamme, AM Kaplan, MH Hall, WW	Rockefeller Univ; Natl Univ Ireland Univ Coll Dublin; Emilio Ribas Inst Infect Dis; Katholieke Univ Leuven; Fed Univ Para; N Shore Univ Hosp
Molecular cloning and analysis of functional envelope genes from human immunodeficiency virus type 1 sequence subtypes A through G	Gao, F Morrison, SG Robertson, DL Thornton, CL Craig, S Karlsson, G Sodroski, J Morgado, M GalvaoCastro, B vonBriesen, H Beddows, S Weber, J Sharp, PM Shaw, GM Hahn, BH Osmanov, S Heyward, WL Esparza, J vandePerre, P Karita, E Sempala, S Tugume, B Biryahwaho, B Wasi, C RubsamenWaigmann, H Holmes, H Newberry, A Ranjbar, S Tomlinson, P Bradac, J Mullins, JI Delwart, EL CheingsongPopov, R Kaleebu, P Myers, G Korber, BTM Chipangwi, J Taha, T Desormeaux, J Eiumtrakul, S Natpratan, C Khamboonruang, C Miotti, P Halsey, NA Vlahov, D Nelson, KE Phair, J Cao, Y Moore, JP Ho, DD Matocha, M Fowler, A Dilworth, S Sharma, O Brown, R Dusing, S Whitman, J Hoekzema, D Vogel, F	NIAID; Fiocruz MS; UNIV ALABAMA; UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED; GEORG SPEYER HAUS; WHO; NATL AIDS CONTROL PROGRAM; Dana Farber Canc Inst; INST TROP MED; UGANDA VIRUS RES INST; MAHIDOL UNIV; NATL INST BIOL STAND & CONTROLS; LOS ALAMOS NATL LAB; MALAWI COLL MED; CTR DEV & SANTE; ROYAL THAI ARMY HOSP; ROYAL THAI MINIST PUBL HLTH; CHIANG MAI UNIV; JOHNS HOPKINS UNIV; NORTHWESTERN UNIV; AARON DIAMOND AIDS RES CTR; Univ Nottingham; Univ Washington

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Molecular cloning and biochemical characterization of a new mouse testis soluble-zinc-metalloproteinase of the neprilysin family	Ghaddar, G Ruchon, AF Carpentier, M Marcinkiewicz, M Seidah, NG Crine, P Desgroseillers, L Boileau, G	Univ Montreal; Univ Fed Ceara
Molecular cloning and characterization of a cDNA encoding the N-acetyl-beta-D-glucosaminidase homologue of <i>Paracoccidioides brasiliensis</i>	Santos, MO Pereira, M Felipe, MSS Jesuino, RSA Ulhoa, CJ Soares, RDA Soares, CMD	Univ Fed Goias; Univ Brasilia
Molecular cloning and characterization of a cDNA encoding the <i>Paracoccidioides brasiliensis</i> I35 ribosomal protein	Jesuino, RSA Pereira, M Felipe, MSS Azevedo, MO Soares, CMA	Univ Fed Goias; Univ Brasilia
Molecular cloning and characterization of a gene encoding the 29-kDa proteasome subunit from <i>Trypanosoma cruzi</i>	Bartholomeu, DC Batista, JAN Vainstein, MH Lima, BD de Sa, MC	Univ Fed Rio Grande Sul; Univ Brasilia; Univ Fed Minas Gerais
Molecular cloning and characterization of a glucan synthase gene from the human pathogenic fungus <i>Paracoccidioides brasiliensis</i>	Pereira, M Felipe, MSS Brigido, MM Soares, CMA Azevedo, MO	Univ Fed Goias; Univ Brasilia
Molecular cloning and characterization of ConBr, the lectin of <i>Canavalia brasiliensis</i> seeds	Grangeiro, TB Schriefer, A Calvete, JJ Raida, M Urbanke, C BarralNetto, M Cavada, BS	Fiocruz MS; TIERARZTLICHEN HSCH HANNOVER; PEPTID FORSCH GMBH; HANNOVER MED SCH; Univ Fed Ceara
Molecular cloning and characterization of Phosphatidylinositol 3-OH kinase active on calcium channels	Cardoso, FC Pacifico, LG Carvalho, DC Victoria, JMN Neves, ALG Chavez-Olortegui, C Gomez, MV Kalapothakis, E	Univ Fed Minas Gerais
Molecular cloning and characterization of the DNA mismatch repair gene class 2 from the <i>Trypanosoma cruzi</i>	Augusto-Pinto, L Bartholomeu, DC Teixeira, SMR Pena, SDJ Machado, CR	Univ Fed Minas Gerais
Molecular cloning and expression of a functional dermonecrotic and haemolytic factor from <i>Loxosceles laeta</i> venom	Pedrosa, MD de Azevedo, ID Goncalves-de-Andrade, RM van den Berg, CW Ramos, CRR Ho, PL Tambourgi, DV	Univ Sao Paulo; Inst Butantan; Univ Wales Coll Cardiff
Molecular cloning and expression of a functional snake venom vascular endothelium growth factor (VEGF) from the <i>Bothrops insularis</i> pit viper - A new member of the VEGF family of proteins	Junqueira de Azevedo, ILM Farsky, SHP Oliveira, MLS Ho, PL	Univ Sao Paulo; Inst Butantan
Molecular cloning and expression of bothrojaracin, a potent thrombin inhibitor from snake venom	Arocas, V Castro, HC Zingali, RB Guillin, MC Bon, C Wisner, A	Univ Fed Rio de Janeiro; INST PASTEUR; UNIV PARIS 07
Molecular cloning and expression of structural domains of bothropasin, a P-III metalloproteinase from the venom of <i>Bothrops jararaca</i>	Assakura, MT Silva, CA Mentele, R Camargo, ACM Serrano, SMT	Inst Butantan; Univ Munich
Molecular cloning and expression of the potent thrombin inhibitor bothrojaracin	Arocas, V JandrotPerrus, M Zingali, RB Guillin, MC Bon, C Wisner, A	INST PASTEUR; UFRPJ
Molecular cloning and functional characterization of a mouse bradykinin B1 receptor gene	Pesquero, JB Pesquero, JL Oliveira, SM Roscher, AA Metzger, R Ganten, D Bader, M	ESCOLA PAULISTA MED; MAX DELBRUCK CTR MOLEC MED; CELL CONTROL BIOMED LABS; Univ Munich; Univ Fed Minas Gerais

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Molecular cloning and genomic analysis of TsNTxp: an immunogenic protein from Tityus serrulatus scorpion venom	Guatimosim, SC Prado, VF Diniz, CR Chavez-Olortegui, C Kalapothakis, E	Fdn Ezequiel Dias; Univ Fed Parana; Univ Fed Minas Gerais
Molecular cloning and sequencing of salivary gland-specific cDNAs of the blood-sucking bug Triatoma brasiliensis (Hemiptera : Reduviidae)	Sant Anna, MRV Araujo, JGVC Pereira, MH Pesquero, JL Diotaiuti, L Lehane, SM Lehane, MJ	Fiocruz MS; Univ Fed Minas Gerais; Univ Wales
Molecular cloning and sequencing of the cDNA for rat mesenteric arterial bed elastase-2, an angiotensin II-forming enzyme	Santos, CF Oliveira, EB Salgado, MCO Greene, AS	Univ Sao Paulo; Med Coll Wisconsin
Molecular cloning and structural characterization of conBr, the lectin of Canavalia brasiliensis seeds	Grangeiro, TB Nogueira, NAP Schriefer, A Calvete, JJ BarraNetto, M Cavada, BS	UFC; TIERARZTLICHEN HSCH HANNOVER
Molecular cloning of a cysteine proteinase cDNA from the cotton boll weevil Anthonomus grandis (Coleoptera : Curculionidae)	Neto, OBD Batista, JAN Rigden, DJ Franco, OL Fragoso, RR Monteiro, ACS Monnerat, RG Grossi-De-Sa, MF	Univ Brasilia; Embrapa Recursos Genet & Biotecnol; Univ Catolica Brasilia
Molecular cloning of a gamma-phospholipase A(2) inhibitor from Lachesis muta muta (the bushmaster snake)	Fortes-Dias, CL Barcellos, CJ Estevao-Costa, MI	FUNED
Molecular cloning of alpha-amylases from cotton boll weevil, Anthonomus grandis and structural relations to plant inhibitors: An approach to insect resistance	Oliveira-Neto, OB Batista, JAN Rigden, DJ Franco, OL Falcao, R Fragoso, RR Mello, LV dos Santos, RC Grossi-de-Sa, MF	Univ Brasilia; Embrapa Recursos Genet & Biotecnol; Univ Catolica Brasilia; EMBRAPA Algodao
Molecular cloning of cDNAs encoding insecticidal neurotoxic peptides from the spider Phoneutria nigriventer	Penaforte, CL Prado, VF Prado, MAM Romano-Silva, MA Guimaraes, PEM De Marco, L Gomez, MV Kalapothakis, E	Univ Fed Minas Gerais
Molecular cloning of exons II and III of the alpha-globin major gene from Odontophrynus americanus 2n and 4n (Amphibia, Anura)	Acedo, MDP Paranhos-Baccala, G Denoya, CD Ruiz, IRG	UFMG
Molecular cloning of Neurospora crassa glycogen synthase	de Paula, R Terenzi, HF Bertolini, MC	UNESP; USP
Molecular cloning of the neutral trehalase gene from Kluyveromyces lactis and the distinction between neutral and acid trehalases	Amaral, FC VanDijck, P Nicoli, JR Thevelein, JM	Katholieke Univ Leuven; Univ Fed Minas Gerais
Molecular cloning of translocation t(1;14)(q21;q32) defines a novel gene (BCL9) at chromosome 1q21	Willis, TG Zalcborg, IR Coignet, LJA Wlodarska, I Stul, M Jadayel, DM Bastard, C Treleaven, JG Catovsky, D Silva, MLM Dyer, MJS	Inst Canc Res; Inst Nacl Canc; Ctr Reg Transfus Sanguine & Genet Humaine; Katholieke Univ Leuven
Molecular cloning of translocation t(1;14)(q21;q32) defines a novel gene (BCL9) at chromosome 1q21.	Willis, TG Zalcborg, IQ Jadayel, D Coignet, LJA Stul, M Treleaven, JG Catovsky, D Wlodarska, I Silva, MLM Dyer, MJS	Inst Canc Res; <b>Inst Nacl Canc</b> ; Katholieke Univ Leuven
Molecular cloning, characterization and expression of the heat shock protein 60 gene from the human pathogenic fungus Paracoccidioides brasiliensis	Izacc, SMS Gomez, FJ Jesuino, RSA Fonseca, CA Felipe, MSS Deepe, GS Soares, CMA	Univ Cincinnati; <b>Univ Fed Goias</b> ; <b>Univ Brasilia</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Molecular cloning, characterization, and expression of the M antigen of <i>Histoplasma capsulatum</i>	Zancope-Oliveira, RM Reiss, E Lott, TJ Mayer, LW Deepe, GS	<b>Fdn Oswaldo Cruz;</b> Ctr Dis Control & Prevent; Univ Cincinnati
Molecular cloning, expression analysis and cellular localization of gomesin, an anti-microbial peptide from hemocytes of the spider, <i>Acanthoscurria gomesiana</i>	Lorenzini, DM Fukuzawa, AH da Silva, PI Machado-Santelli, G Bijovsky, AT Daffre, S	<b>Univ Sao Paulo;</b> <b>Inst Butantan</b>
Molecular cloning, expression and immunological properties of LiD1, a protein from the dermonecrotic family of, <i>Loxosceles intermedia</i> spider venom	Kalapothis, E Araujo, SC de Castro, CS Mendes, TM Gomez, MV Mangili, OC Gubert, IC Chavez-Olortegui, C	<b>Univ Fed Parana;</b> <b>UFMG;</b> <b>Univ Fed Minas Gerais</b>
Molecular cloning, expression, function and immunoreactivities of members of a gene family of sphingomyelinases from <i>Loxosceles</i> venom glands	Tambourgi, DV Pedrosa, MDF van den Berg, CW Goncalves-de-Andrade, RM Ferracini, M Paixao-Cavalcante, D Morgan, BP Rushmere, NK	<b>Inst Butantan;</b> Univ Wales Coll Cardiff
Molecular cloning, purification and immunological responses of recombinants GroEL and DnaK from <i>Streptococcus pyogenes</i>	Lemos, JAC Burne, RA Castro, ACD	<b>Univ Fed Rio de Janeiro;</b> Univ Rochester
Molecular cloning, sequence analysis and expression of the snake follicle-stimulating hormone receptor	Bluhm, APC Toledo, RA Mesquita, FM Pimenta, MT Fernandes, FMC Ribela, MTCP Lazari, MFM	<b>Univ Sao Paulo;</b> <b>Butantan Inst;</b> <b>Univ Fed Sao Paulo</b>
MOLECULAR-CLONING AND SEQUENCE-ANALYSIS OF CDNAS FOR METALLOPROTEINASES FROM BROAD-BANDED COPPERHEAD AGKISTRODON CONTORTRIX LATICINCTUS	DEARAUJO, HSS OWNBY, CL	<b>OKLAHOMA STATE UNIV;</b> <b>UNIV FED SAO CARLOS</b>
Monofunctional catalase P of <i>Paracoccidioides brasiliensis</i> : identification, characterization, molecular cloning and expression analysis	Moreira, SFI Bailao, AM Barbosa, MS Jesuino, RSA Felipe, MSS Pereira, M de Almeida Soares, CM	<b>Univ Fed Goias;</b> <b>Univ Brasilia</b>
Novel cloning system for direct screening using a suicidal strategy	Barros, EVSA Bataus, LAM Valencia, FF Maranhao, AQ Astolfi, S	<b>Univ Brasilia</b>
Purification of a cysteine proteinase from <i>Carica candamarcensis</i> L. and cloning of a genomic putative fragment coding for this enzyme	Pereira, MT Lopes, MTP Meira, WO Salas, CE	<b>Univ Fed Minas Gerais</b>
Purification, characterization, and cloning of a serine proteinase inhibitor from the ectoparasite <i>Haematobia irritans irritans</i> (Diptera : Muscidae)	Azzolini, SS Santos, JMC Souza, AF Torquato, RJS Hirata, IY Andreotti, R Tanaka, AS	<b>EPM;</b> <b>Embrapa Gado Corte</b>
Purification, characterization, gene cloning and preliminary X-ray data of the exo-inulinase from <i>Aspergillus awamori</i>	Arand, M Golubev, AM Neto, JRB Polikarpov, I Wattiez, R Korneeva, OS Eneyskaya, EV Kulminskaya, AA Shabalin, KA Shishliannikov, SM Chepurnaya, OV Neustroev, KN	Russian Acad Sci; Univ Mainz; <b>Natl Synchrontron Light Lab;</b> Univ Mons; Voronesh State Technol Acad
Purification, cloning, and expression of the mitochondrial malate dehydrogenase (mMDH) from protoscolices of <i>Echinococcus granulosis</i>	Aguero, F Noe, G Hellman, U Repetto, Y Zaha, A Cazzulo, JJ	Biomed Ctr; Univ Chile; <b>Univ Fed Rio Grande Sul;</b> Univ Nacl Gen San

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
		Martin
Purification, molecular cloning, and properties of a beta-glycosidase isolated from midgut lumen of <i>Tenebrio molitor</i> (Coleoptera) larvae	Ferreira, AHP Marana, SR Terra, WR Ferreira, C	<b>Univ Sao Paulo</b>
Serological expression cloning and immunological evaluation of MTB48, a novel <i>Mycobacterium tuberculosis</i> antigen	Lodes, MJ Dillon, DC Mohamath, R Day, CH Benson, DR Reynolds, LD McNeill, P Sampaio, DP Skeiky, YAW Badaro, R Persing, DH Reed, SG Houghton, RL	
Simplified, rapid method for cloning of virus-binding polypeptides (putative receptors) via the far-Western screening of a cDNA expression library using purified virus particles	Medeiros, RB Rasochova, L German, TL	<b>Univ Brasilia;</b> Univ Wisconsin
Synthesis of cholera toxin B subunit gene: cloning and expression of a functional 6XHis-tagged protein in <i>Escherichia coli</i>	Areas, APD de Oliveira, MLS Ramos, CRR Sbrogio-Almeida, ME Raw, I Ho, PL	<b>Univ Sao Paulo;</b> <b>Inst Butantan</b>
T cell expression cloning of a <i>Mycobacterium tuberculosis</i> gene encoding a protective antigen associated with the early control infection	Skeiky, YAW Owendale, PJ Jen, S Alderson, MR Dillon, DC Smith, S Wilson, CB Orme, IM Reed, SG Campos-Neto, A	Infect Dis Res Inst; Corixa Corp; Med Sch Itajuba; Colorado State Univ; Univ Washington
The DapA gene encoding the lysine biosynthetic enzyme dihydrodipicolinate synthase from <i>Coix lacryma-jobi</i> : cloning, characterization, and expression analysis	Dante, RA Neto, GC Leite, A Yunes, JA Arruda, P	<b>Univ Estadual</b> <b>Campinas</b>
The <i>Metarhizium anisopliae</i> trp1 gene: Cloning and regulatory analysis	Staats, CC Silva, MSN Pinto, PM Vainstein, MH Schrank, A	<b>Univ Fed Rio</b> <b>Grande Sul</b>
THE MOLECULAR-CLONING OF A PHOSPHOLIPASE A(2) FROM BOTHROPS-JARARACUSSU SNAKE-VENOM - EVOLUTION OF VENOM GROUP-II PHOSPHOLIPASE A(2)S MAY IMPLY GENE DUPLICATIONS	MOURADASILVA, AM PAINE, MJI DINIZ, MRV THEAKSTON, RDG CRAMPTON, JM	Fdn Ezequiel Dias; <b>Inst Butantan;</b> UNIV LIVERPOOL
The use of the replicating pDblet plasmid as a cloning vector with enhanced stability in <i>Kluyveromyces marxianus</i>	de Souza, CG de Morais, MA	<b>Univ Fed</b> <b>Pernambuco</b>
<i>Trypanosoma cruzi</i> : Cloning and characterization of a RAB7 gene	Leal, ST Araripe, JR Urményi, TP Cross, GAM Rondinelli, E	<b>UFRJ;</b> Rockefeller Univ
<i>Trypanosoma cruzi</i> : cloning and characterization of two genes whose expression is up-regulated in metacyclic trypomastigotes	Yamada-Ogatta, SF Motta, MC Toma, HK Monteiro-Goes, V Avila, AR Muniz, BD Nakamura, C Fragoso, SP Goldenberg, S Krieger, MA	<b>Univ Fed Rio de</b> <b>Janeiro;</b> <b>Inst Biol Mol</b> <b>Parana;</b> <b>Univ Estadual</b> <b>Londrina;</b> <b>Fiocruz MS;</b> <b>Univ Estadual</b> <b>Maringa</b>
<i>Trypanosoma cruzi</i> : Isolation of an immunodominant peptide of TESA (trypomastigote excreted-secreted antigens) by gene cloning	Matsumoto, TK Cotrim, PC da Silveira, JF Stolf, AMS Umezawa, ES	<b>Univ Sao Paulo;</b> <b>UNIFESP</b>
Use of cDNA cloning to study the mechanism of action of glucocorticoid hormones at the molecular level	Armelin, MCS Sasahara, RM Flatschart, R Vedoy, C	

## b. Stem Cells

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Adiposed derived stem cells seeded on the collagen matrix a new exciting option for tissue engineering reconstruction of the lower urinary tract	Almeida, FG Schor, N Leite, K Srougi, M Bruschini, H	<b>Univ Fed Sao Paulo</b>
Age-related changes of P-glycoprotein-mediated rhodamine 123 efflux in normal human bone marrow hematopoietic stem cells	Calado, RT Machado, CG Carneiro, JJ Garcia, AB Falcao, RP	<b>Univ Sao Paulo;</b> Blood Ctr Pernambuco
Allogeneic haematopoietic stem cell transplantation - EBMT risk score evaluation for 1084 CML patients transplanted in Brazil	De Souza, CA Ruiz, MA Vigorito, AC Aranha, FJP Zulli, R Miranda, ECM Dulley, FL Tabak, D Azevedo, AM Byington, R Azevedo, WM Silla, L Maiolino, A Nucci, M Voltarelli, JC Colturato, V De Souza, MP Pasquini, R	<b>Univ Sao Paulo;</b> <b>Univ Estadual</b> <b>Campinas;</b> Sao Jose do Rio Preto Med Sch; <b>Univ Fed Minas</b> <b>Gerais;</b> <b>Univ Fed Rio</b> <b>Grande Sul;</b> <b>Univ Fed Rio de</b> <b>Janeiro;</b> Jau Ctr Hosp; <b>Univ Fed Parana</b>
Allogeneic peripheral blood stem cell versus bone marrow transplantation for chronic myeloid leukemia: A comparative study from state university of campinas (UNICAMP) and federal university of minas gerais (UFMG), Brazil.	Azevedo, WM Fagundes, EM Lodi, FM Vigorito, AC Souza, CA	<b>Univ Fed Minas</b> <b>Gerais;</b> <b>State Univ</b> <b>Campinas</b>
Allogeneic stem cell transplantation for Fanconi anaemia	Guardiola, P Socie, G Pasquini, R Dokal, I Ortega, JJ van Weel-Sipman, M Marsh, J Locatelli, F Souillet, G Cahn, JY Ljungman, P Miniero, R Shaw, J Vermynen, C Archimbaud, E Bekassy, AN Krivan, G Di Bartolomeo, P Bacigalupo, A Gluckman, E CA Severe Aplastic Anaemia Working Party; EBMT; EUFAR	Hop St Louis; Hammersmith Hosp; Huddinge Hosp; St Laszlo Hosp; Osped Civile; Osped San Martino Genova; Dept Hematol; Univ Catholique Louvain; <b>Hosp M Infantil</b> Vall Hebron; Univ Leiden Hosp; Univ Pavia; Hop Debrousse; Hop Jean Minjoz; Univ Turin; Royal Alexandra Hosp Children; Hop Edouard Herriot; Univ Lund

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Allogeneic transplantation for hematological malignancies using G-CSF mobilized, non cryopreserved, unmanipulated peripheral blood stem cells	Azevedo, WM Aranha, FJP Gouvea, JV Vigoritto, AC Marques, JFC Eid, KAB Azevedo, AM Barbosa, KB Souza, CA	<b>UNICAMP</b>
ALLOGENEIC TRANSPLANTATION FOR HEMATOLOGICAL MALIGNANCIES USING G-CSF MOBILIZED, NONCRYOPRESERVED, UNMANIPULATED PERIPHERAL-BLOOD STEM-CELLS	AZEVEDO, WM ARANHA, FJP GOUVEA, JV VIGORITTO, AC MARQUES, JFC EID, KAB AZEVEDO, AM SOUZA, CA COSTA, FF	<b>UNICAMP</b>
Allogeneic transplantation for hematological malignancies using rhG-CSF mobilized blood stem cells	Azevedo, WM Aranha, FJ Gouvea, JV Vigoritto, AC Marques, JFC Eid, KAB Azevedo, AM Barbosa, KB Souza, CA	
ALLOGENEIC TRANSPLANTATION WITH BLOOD STEM-CELLS MOBILIZED BY RHG-CSF FOR HEMATOLOGICAL MALIGNANCIES	AZEVEDO, WM ARANHA, FJP GOUVEA, JV VIGORITO, AC MARQUES, JFC EID, KAB AZEVEDO, AM SOUZA, CA	
Amniotic membrane transplantation for partial and total limbal stem cell deficiency secondary to chemical burn	Gomes, JAP dos Santos, MS Cunha, MC Mascaro, VLD Barros, JDN de Sousa, LB	<b>Univ Fed Sao Paulo</b>
Applications of flow cytometry to hematopoietic stem cell transplantation	Voltarelli, JC	<b>Univ Sao Paulo; Scripps Res Inst</b>
Are autologous bone marrow mononuclear stem cell injections a trigger for malignant ventricular arrhythmias?	Assad, JA Silva, GV Perin, EC Dohmann, HF Silva, SA Sousa, AL Borojevic, R Vaughn, WK Dohmann, HJ Mesquita, E	<b>Fed Univ Rio De Janeiro; Texas Heart Inst; Hosp Procardiaco</b>
Autologous hematopoietic stem cell transplantation for Takayasu's arteritis: Report of the first case of the literature	Voltarelli, JC Oliveira, MCB Stracieri, ABPL Godoi, DF Moraes, DA Coutinho, MA	<b>Univ Sao Paulo</b>
Autologous peripheral blood stem cells transplantation (APSBcT) as an outpatient basis. Experience of a Brazilian center.	Silva, RL Soussain, C Massumoto, C Macedo, MCA Medeiros, RSS Dzik, C Rocha, IF Silva, ACM Loterio, HA Diomede, BB Franca, GG Ostronoff, M Machado, CM DorlhiacLlacer, P Chamone, DAF Dullely, F	<b>Univ Sao Paulo; FUNDACAO PROSANGUE HEMOCTR</b>
Autologous stem cell transplantation (ASCT) for multiple myeloma followed by immunomodulation with interferon-2 alpha (IFN-2 alpha) and interleukin-2 (IL-2).	Oliveira, JSR Cecyn, KZ Faria, RMD Parisio, K Ribeiro, APMR Gomes, LS Juliane, JMF Raineri, G	Hosp Santa Marcelina
Autologous stem cell transplantation for relapsed/refractory Hodgkin's disease using Cyclophosphamide, Etoposide, BCNU and +/- Platinum.	Lerner, D Tavares, RB De Lima, MG Bouzas, LF Da Matta, JR Melo, T Byington, R Tabak, D	<b>Inst Nacl Canc</b>
Autologous stem cell transplantation for the treatment of pediatric solid tumors in Brazil	Castro, CG Seber, A Mendes, W Castro, HC Borsato, ML Gregianin, LJ Ginani, VC Barros, JCA Petrilli, AS Brunetto, AL	<b>Univ Fed Sao Paulo; Hosp Clin; Hosp AC Camargo Fund Antonio Prudente; Santa Casa de Sao Paulo</b>
Busulfan plus melfalan in autologous blood stem cell transplantation for multiple myeloma (MM).	Massumoto, C Mizukami, S Campos, MF Silva, L Graziani, S	Ctr Oncol Sirio Libanes

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
CD25 expression on donor CD4(+) or CD8(+) T cells is associated with an increased risk for graft-versus-host disease after HLA-identical stem cell transplantation in humans	Stanzani, M Martins, SLR Saliba, RM John, LSS Bryan, S Couriel, D McMannis, J Champlin, RE Molldrem, JJ Komanduri, KV	MD Anderson Canc Ctr; Univ Bologna; Fleury Diagnost Med Ctr
CD34+cells from bone marrow, peripheral blood stem cell collection and umbilical cord blood: Quantitative analysis at Hemocentro de Ribeir? Preto- USP-BRAZIL	Lemos, MM Voltarelli, JC Covas, DT Zago, MA Palma, P Orellana, M	Hemocentro
Child with Philadelphia positive (Ph plus )-acute leukemia with myeloid morphology: One case of stem cell origin	Hassan, R Otazu, IB Ornellas, MH Pires, V Carrico, MK Seunez, HN Tabak, DG Zalberg, IR	CPQ; INCa; CEMO; <b>Univ Fed Rio de Janeiro</b>
Chronic graft-versus-host disease after allogeneic transplants with peripheral blood stem cells or bone marrow: A comparative study.	Azevedo, AM Correa, MEP Vigorito, AC Aranha, FJP Eid, KAB Cintra, ML Souza, CA Azevedo, WM	<b>UNICAMP</b>
CMV infection surveillance with nested-PCR and antigenemia assays in patients who received or not ganciclovir universal prophylaxis in HLA identical sibling hematopoietic stem cell transplants.	Bonon, SHA Rossi, CL De Souza, CA Vigorito, AC Costa, SCB	<b>UNICAMP</b>
Combined use of hematopoietic peripheral blood stem cells and bone marrow treated in vitro with mafosfamide in patients with acute myeloid leukemia at first remission.	Hamerschlak, N Bacal, N Feitosa, A Ferreira, E Gansl, R Katz, A Marti, L Rosenfeld, L Pasternak, J Simon, S Sztlering, L Tabakof, J	ALBERT EINSTEIN COLL MED HOSP
Comparative analysis of the outcomes in allogeneic peripheral blood stem cell or bone marrow transplants in patients with hematological malignancies: A follow-up study of forty seven patients.	Azevedo, AM Eid, KAB Aranha, FJP Vigorito, AC Correa, MEP Regazzo, JT Souza, CA Azevedo, WM	<b>UNICAMP</b>
Comparison of gene expression of mesenchymal stem cells from the umbilical cord and from the bone marrow.	Panepucci, RA Siufi, JL Silva, WA Proto-Siqueira, R Rocha, V Covas, DT Zago, MA	<b>Univ Sao Paulo;</b> Hop St Louis
Correlation of mixed lymphocyte culture with chronic graft-versus-host disease following allogeneic stem cell transplantation	Visentainer, JEL Lieber, SR Persoli, LBL Lima, SCBD Vigorito, AC Aranha, FJP Eid, KAB Oliveira, GB Miranda, ECM de Souza, CA	<b>Univ Estadual Campinas</b>
Could the coculture of skeletal myoblasts and mesenchymal stem cells be a solution for postinfarction myocardial scar?	Carvalho, KAT Guarita-Souza, LC Rebelatto, CLK Senegaglia, AC Hansen, P Mendonca, JGR Cury, CC Francisco, JC Brofman, PRS	<b>Pontificia Univ Catolica Parana</b>
Dexamethasone-mediated down-regulation of stem cell factor in murine hepatic stellate cells is inhibited by mast cells	Brito, JM Mermelstein, CS Tempone, AJ Borojevic, R	<b>Fed Univ Rio De Janeiro</b>
Differentiation of mouse embryonic stem cells and their hybrids during embryoid body formation	Mittmann, J Kerkis, I Kawashima, C Sukoyan, M Santos, E Kerkis, A	<b>IBUSP;</b> <b>Univ Estadual Norte Fluminense</b>
DMSO removal reduces stem-cell infusion-related toxicity and allows excellent engraftment of cryopreserved unrelated cord blood and autologous stem cells	Oliveira, OMW Vieira, MJ Bastos, EMSC Delbuono, E Ginani, VC Gordan, L Gouveia, RV Cecyn, KZ Carvalho, ML Lee, MLM Petrilli, AS Seber, A	<b>Univ Fed Sao Paulo;</b> <b>UNIFESP</b>



<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Engraftment syndrome following autologous hematopoietic stem cell transplantation: definition of diagnostic criteria	Maiolino, A Biasoli, I Lima, J Portugal, AC Pulcheri, W Nucci, M	<b>Univ Fed Rio de Janeiro</b>
Establishment of new murine embryonic stem cell lines for the generation of mouse models of human genetic diseases	Sukoyan, MA Kerkis, AY Mello, MRB Kerkis, IE Visintin, JA Pereira, LV	<b>Univ Sao Paulo</b>
Evaluation of minimal residual disease in CML patients post allogeneic bone marrow (BM) or peripheral blood stem cells transplantation (PBSC).	Pagnano, KBB Vigoritto, AC Aranha, FJP Costa, FF Saad, STO Lorand-Metze, I Oliveira, GB Eid, KAB Miranda, ECM De Souza, CA	<b>UNICAMP</b>
Feasibility of peripheral blood stem cell (PBSC) collections in children with stage IV neuroblastoma after $\geq 6$ cycles of chemotherapy	Seber, A Ginani, VC Cecyn, K Morais, MF Luppi, LA Seixas, MT Toledo, SR Petrilli, AS Rizzo, MF Caran, EM	<b>UNIFESP</b>
Feasibility of peripheral blood stem cell (PBSC) collections in children with stage IV neuroblastoma after $\geq 5$ cycles of chemotherapy (CHT).	Seber, A Ginani, VC Cecyn, K Morais, MFC Luppi, LAGS Seixas, MT Toledo, SRC Cruz, GAL Petrilli, AS Rizzo, MFV Caran, EMM	<b>Univ Fed Sao Paulo</b>
Fusarium infection in hematopoietic stem cell transplant (HSCT) recipients.	Nucci, M Marr, KA Queiroz-Telles, F Martins, CA Trabasso, P Costa, S Voltarelli, JC Colombo, AL Carter, RA Pasquini, R De Souza, C Anaissie, EJ	<b>Univ Hosp Fed Rio De Janeiro;</b> <b>Univ Hosp Fed Parana;</b> <b>State Univ Hosp Campinas;</b> <b>State Univ Hosp Sao Paulo;</b> <b>Univ Hosp Fed Sao Paulo;</b> <b>Inst Nacl Canc;</b> Fred Hutchinson Canc Res Ctr; Univ Arkansas Med Sci
Fusarium infection in hematopoietic stem cell transplant recipients	Nucci, M Marr, KA Queiroz-Telles, F Martins, CA Trabasso, P Costa, S Voltarelli, JC Colombo, AL Imhof, A Pasquini, R Maiolino, A Souza, CA Anaissie, E	<b>Univ Sao Paulo;</b> <b>Univ Fed Sao Paulo;</b> <b>Univ Estadual Campinas;</b> <b>Fed Univ Rio De Janeiro;</b> <b>Inst Nacl Canc;</b> Fred Hutchinson Canc Res Ctr; Univ Washington; Univ Arkansas; <b>Univ Fed Parana</b>
Glial-guided neuronal migration in differentiated P19 embryonal carcinoma (EC) stem cell aggregates	Santiago, MF Liour, SS Mendez-Otero, R Yu, RK	Virginia Commonwealth Univ; <b>Univ Fed Rio de Janeiro</b>
Haematopoietic stem cell transplantation for refractory Takayasu's arteritis	Voltarelli, JC Oliveira, MCB Stracieri, ABPL Godoi, DF Moraes, DA Coutinho, MA Malmegrim, KCR Santos, AC	<b>Univ Sao Paulo</b>
Hematopoietic stem cell transplantation for autoimmune diseases in developing countries: current status and future prospectives	Voltarelli, JC Ouyang, J	<b>Univ Sao Paulo;</b> Nanjing Univ

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Hematopoietic stem cell transplantation in patients with genetic diseases: A new challenge to developing countries. A report from a single institution in 39 patients.	Sales-Bonfim, CM Bitencourt, MA Moreira, VA Gardin, NE Setubal, DC de Medeiros, CR Zanis-Neto, J Pasquini, R	<b>UFPR</b>
Hepatocyte growth factor increases the stem cell factor-dependent maintenance of murine mast cells in coculture with hepatic stellate cells	Brito, JM Borojevic, R	<b>Univ Fed Rio de Janeiro</b>
High-dose chemotherapy and autologous peripheral blood stem cell rescue in a patient with pleuropulmonary blastoma	de Castro, CG de Almeida, SG Gregianin, LJ Loss, JF Rivero, LF Schwartzmann, G Brunetto, AL	<b>Univ Fed Rio Grande Sul</b>
Immunological study of the first cord blood stem cell transplantation at the Brazilian National Cancer Institute (INCA).	Vasconcelos, ZFM Diamond, HR Pires, V Souza, MHO Barone, B Silva, MLM Tabak, DG Bouzas, LFS Rumjanek, VM	<b>Natl Canc Inst</b>
Improvement in MV02 and reversible perfusion defects in candidates for heart transplant after transcatheter injection of autologous bone marrow derived mononuclear stem cells	Silva, GV Perin, EC Dohmann, HF Borojevic, R Silva, SA Sousa, AL Assad, JA Vaughn, WK Mesquita, CT Belem, L Carvalho, AC Dohmann, HJ Willerson, JT	Texas Heart Inst; <b>Univ Fed Rio de Janeiro;</b> Hosp Procardiaco
In vitro and in vivo study of pluripotency in intraspecific hybrid cells obtained by fusion of murine embryonic stem cells with splenocytes	Matveeva, NM Shilov, AG Kaftanovskaya, EM Maximovsky, LP Zhelezova, AI Golubitsa, AN Bayborodin, SI Fokina, MM Serov, OL	Russian Acad Sci
Infectious complications in non-myeloablative conditioning and allogeneic peripheral blood stem cell transplantation for patients with multiple myeloma.	Lee, CK Dignani, C Barlogie, B Guido, T Morris, CL Badros, AZ Cottler-Fox, MH van Rhee, F Zanagari, M Fassas, A Anaissie, EJ	Univ Arkansas Med Sci; <b>Hosp Clin Sao Paulo;</b> Univ Maryland; Loma Linda Univ
Influence of functional MDR1 gene polymorphisms on P-glycoprotein activity in CD34(+) hematopoietic stem cells	Calado, RT Falcao, RP Garcia, AB Gabellini, SM Zago, MA Franco, RF	<b>Univ Sao Paulo;</b> FUNDHERP
Influence of patient characteristics on CD34+yield in large volume stem cell collection for autologous bone marrow transplantation	Conti, F Diniz, V Dutra, H Maiolino, A Nogueira, CM	<b>Univ Fed Rio de Janeiro</b>
Interleukin-2 (IL-2) post high dose chemotherapy mobilized autologous stem cell transplant (ASCT) for hematologic malignancies.	Oliveira, JSR Cecyn, KZ Parisio, K Faria, JR Ribeiro, MSS Chauffaille, MDLF Raineri, G	<b>Univ Fed Sao Paulo;</b> Hosp Santa Marcelina
Is it safe for pediatric donors to donate stem cells (SC) more than once?	Lobo, A Hassan, R Pires, V Tavares, R Lerner, D Bouzas, L Bonamino, M Zalberg, I Tabak, D Sampaio, E de Lima, M	<b>Inst Nacl Canc;</b> <b>FIOCRUZ</b>
Isolation and culture of umbilical vein mesenchymal stem cells	Covas, DT Siufi, JLC Silva, ARL Orellana, MD	<b>Univ Sao Paulo</b>
Kinetic evaluation of plasma cytokine levels after hematopoietic stem cell transplantation.	Stracieri, ABPL Coutinho, MA Paton, EJ Cunha, FQ Voltarelli, JC	<b>Univ Sao Paulo</b>
Large volume leukapheresis for autologous peripheral blood stem cell collection in children weighting less than 25 kg	Ginani, VC Cecyn, KZ Carvalho, ML Caram, E Macedo, CRPD Gordan, LN Gouveia, RV Bastos, EMSC Delbuono, E Lee, MLM Oliveira, OMW Vieira, MJ Seixas, MT Petrilli, AS Seber, A	<b>Univ Fed Sao Paulo</b>
Large volume stem cell collection efficiency for patients with low pre apheresis CD34+counts	Conti, F Diniz, V Dutra, H Maiolino, A Nogueira, CM	<b>Univ Fed Rio de Janeiro</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Liposomal Daunorubicin (LD) associated with cyclophosphamide for relapsed hematologic malignancies pre-peripheral blood stem cell transplantation (PBSCT).	Massumoto, C Graziani, S	<b>Ctr Oncol Hosp Sirio Libanes</b>
Mast cells can revert dexamethasone-mediated down-regulation of stem cell factor	Brito, JM Mermelstein, CS Tempone, AJ Borojevic, R	<b>Univ Fed Rio de Janeiro</b>
Mobilization of bone marrow cells (Stem cells) by granulocyte-colony stimulating factor associated or not with intracoronary stem infusion improves exercise capacity and quality of life in severe heart failure	Bocchi, EA Bacal, F	<b>Univ Sao Paulo; Fdn Prodangue Hemocentro</b>
Mobilization of bone marrow cells(stem-cells) by granulocyte-colony stimulating factor: a new hope in the treatment of severe congestive heart failure patients with heart transplantation indication	Bocchi, E Bacal, F Issa, V Guimaraes, G Esteves, A Ramires, JF Mendroni, A Chamone, D	<b>Univ Sao Paulo; ProSangue</b>
Moderately ablative chemotherapy, hematopoietic stem cell transplantation (HST), and prophylactic donor lymphocyte infusions (DLI) for poor prognosis patients (pts) with hematological malignancies.	de Lima, M Bonamino, M Vasconcelos, Z Diamond, H Zalberg, I Andrade, C Bouzas, L Matta, J Tavares, R Lerner, D Byington, R Silva, M Carvalho, L Pires, V Barone, B Maciel, C Tabak, D	<b>Inst Nacl Canc</b>
Multidrug resistance P-glycoprotein is defective in hematopoietic stem cells in aplastic anemia: A pathogenic event?	Calado, RT Garcia, AB Falcao, RP	<b>Univ Sao Paulo</b>
Murine marrow-derived mesenchymal stem cell: isolation, in vitro expansion, and characterization	Meirelles, LD Nardi, NB	<b>Univ Fed Rio Grande Sul</b>
Mycobacterial infection: A difficult and late diagnosis in stem cell transplant recipients	Cordonnier, C Martino, R Trabasso, P Held, TK Akan, H Ward, MS Fabian, K Ullmann, AJ Wulfraat, N Ljungman, P Alessandrino, EP Pretnar, J Gmur, J Varela, R Vitek, A Sica, S Rovira, M CA European Blood Marrow Transplant G	Hematol Oncol Ctr; Inst Hematol; Hop Henri Mondor; Hosp Sant Pau; Hosp Clin Barcelona; Hosp Juan Canalejo; Univ Hosp; Charite Virchow Klinikum; Univ Mainz Hosp; Ankara Univ; Royal Perth Hosp; St Laszlo Hosp; Het Wilhelmina Childrens Hosp; Huddinge Univ Hosp; Policlin San Matteo; Univ Sacred Heart; Univ Clin Ctr
Novel and classic myoepithelial/stem cell markers in metaplastic carcinomas of the breast	Reis, JS Milanezi, F Paredes, J Silva, P Pereira, EM Maeda, SA de Carvalho, LV Schmitt, FC	Univ Porto; Univ Minho; Salomao & Zoppi Associated Pathol

Título	Autores	Instituição
Outcome of 69 allogeneic stem cell transplantations for Fanconi anemia using HLA-matched unrelated donors: a study on behalf of the European Group for Blood and Marrow Transplantation	Guardiola, P Pasquini, R Dokal, I Ortega, JJ van Weel-Sipman, M Marsh, JCW Ball, SE Locatelli, F Vermylen, C Skinner, R Ljungman, P Miniero, R Shaw, PJ Souillet, G Michallet, M Bekassy, AN Krivan, G Di Bartolomeo, P Heilmann, C Zanesco, L Cahn, JY Arcese, W Bacigalupo, A Gluckman, E CA European Grp Blood Marrow; European Fanconi Anemia Registry	Univ Hosp; Hosp Civil; Hop St Louis; Hammersmith Hosp; Hosp Maternal Infantil Vall Hebron; Leiden Univ; St George Hosp; Clin Univ St Luc; Royal Victoria Infirm; Huddinge Hosp; Osped Regina Margherita; New Childrens Hosp; Hosp Debrousse; Hosp Edouard Herriot; St Laszio Hosp; Osped Civile; Rigshosp; Clin Oncoematol Pediat; Ctr Leucemie Infantili; Hosp Jean Minjoz; Univ La Sapienza; Osped San Martino Genova; Policlin San Matteo
Patient's socioeconomic status influencing overall survival and transplant-related mortality after allogeneic stem cell transplantation	Fischer, G Bittencourt, H Grossini, M Jochins, A Fogliatto, L Pilati, S Bittencourt, R Astigarraga, C Fernandes, F Bittar, C Onsten, T Silla, L	H Clin
Peripheral blood stem cell harvest in haemonetics V50 plus.	Brandao, J Massumoto, CM Gioachini, R Ochiuso, M Silva, S Sopelete, C DePaula, C Ribeiro, M Ruela, M Takahashi, K Dullely, F	HOSP ALEMAO OSWALDO CRUZ
Prophylactic donor lymphocyte infusions after moderately ablative chemotherapy and stem cell transplantation for hematological malignancies: high remission rate among poor prognosis patients at the expense of graft-versus-host disease	de Lima, M Bonamino, M Vasconcelos, Z Colares, M Diamond, H Zalcborg, I Tavares, R Lerner, D Byington, R Bouzas, L da Matta, J Andrade, C Carvalho, L Pires, V Barone, B Maciel, C Tabak, D	Inst Nacl Canc
Prophylactic meropenem during neutropenia in allogeneic stem cell transplant recipients	Nucci, M Nouer, SA Garnica, M de Oliveira, ALM Maiolino, A	Univ Fed Rio de Janeiro
Prospective surveillance of nosocomial infection among allogeneic haematological stem cell transplant recipients stratified by grade of neutropenia at a teaching hospital	Fagnani, R Cardoso, LGO Dantas, SRPE Leichsenring, ML Carvalho, MCS Trabasso, P	Univ Estadual Campinas

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Quantitative analysis of circulating CD34+cells as a guide for peripheral blood stem cell(PBSC)collections by leukapheresis	Morais, MC Massumoto, C Mizukami, S Luppi, LA Petrilli, A Seber, A	<b>UNIFESP;</b> Sirio Libanes Hosp; Santa Paula Hosp
Quantitative CD34 analysis used as predictors of stem cell harvest.	Massumoto, CM Campos, MF Mizukami, S Silva, LAG Romani, C Callera, F Chamone, DF Dulley, F	<b>Univ Sao Paulo</b>
Science, philosophy, religion, and use of embryonic stem cells - Reply	Baschetti, R	
Serum cytokine levels and acute graft-versus-host disease after HLA-identical hematopoietic stem cell transplantation	Visentainer, JEL Lieber, SR Persoli, LBL Vigorito, AC Aranha, FJP Eid, KAD Oliveira, GB Miranda, ECM de Souza, CA	<b>Univ Estadual Campinas;</b> Mackenzie Presbyterian Univ; <b>Univ Estadual Maringa</b>
Stem cell factor plays a major role in the recruitment of eosinophils in allergic pleurisy in mice via the production of leukotriene B-4	Klein, A Talvani, A Cara, DC Gomes, KL Lukacs, NW Teixeira, MM	<b>Univ Fed Minas Gerais;</b> Univ Michigan
Stem cell factor-induced leukotriene B-4 production cooperates with eotaxin to mediate the recruitment of eosinophils during allergic pleurisy in mice	Klein, A Talvani, A Silva, PMR Martins, MA Wells, TNC Proudfoot, A Luckacs, NW Teixeira, MM	<b>Univ Fed Minas Gerais;</b> <b>Fdn Oswaldo Cruz;</b> Univ Michigan; Sero Pharmaceut
Stem cell transplantation (PBSCT) for chronic myelogenous leukemia (CML).	Massumoto, C Hamerschlack, N Ferreira, E Pietrocola, M Katz, F Kutner, JM Alves, A	Hosp Sirio Libanes; Hosp Israelita Albert Einstein; <b>Ctr Hemoterapia Sao Lucas</b>
Stem cell transplantation (SCT) for patients (pts) with genetic diseases: A call for physicians from developing countries to discuss about strategies to improve diagnosis and early referral to BMT centers	Bonfim, CMS Bitencourt, MA Setubal, DC Moreira, VA Lorenzato, C Ruiz, J Neto, JZ de Medeiros, CR Pasquini, R	<b>Univ Fed Parana</b>
Stem cell transplantation for Fanconi Anemia: 20 years of progressive decrease in the dose of cyclophosphamide without irradiation	Neto, JZ Bitencourt, MA Bonfim, CMS Medeiros, CR Moreira, VA Setubal, DC Flowers, MED Pasquini, R	Fred Hutchinson Canc Res Ctr; <b>Univ Fed Parana</b>
Strongyloidiasis pre and post autologous peripheral blood stem cell transplantation	Schaffel, R Portugal, R Maiolino, A Nucci, M	<b>Univ Fed Rio de Janeiro</b>
T-lymphocyte function from peripheral blood stem-cell donors is inhibited by activated granulocytes	Vasconcelos, ZFM Santos, BM Costa, ES Lima, M Tabak, DG Bouzas, LF Azevedo, WM Barcinski, MA Bonomo, A	<b>Univ Sao Paulo;</b> <b>Inst Nacl Canc;</b> <b>Univ Fed Minas Gerais;</b> <b>Univ Fed Rio de Janeiro;</b> Univ Texas
Th1/Th2 lymphokine profile of T cells present in the blood of granulocyte-colony stimulating factor-treated stem-cell donors: up or down modulation?	Vasconcelos, ZFM Diamond, HR Tabak, DG Barcinski, MA Bonomo, A	<b>Univ Sao Paulo;</b> <b>Fed Univ Rio De Janeiro</b>
The absolute number of circulating CD34(+) cells as the best predictor of peripheral hematopoietic stem cell yield	Fontao-Wendel, R Lazar, A Melges, S Altobeli, C Wendel, S	<b>Hosp Sirio Libanes</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
The effect of lead on the bone marrow stem cells of mice infected with <i>Listeria monocytogenes</i>	Bincoletto, C Queiroz, MLS	<b>UNICAMP</b>
The profile of gene expression of human marrow mesenchymal stem cells	Silva, WA Covas, DT Panepucci, RA Proto-Siqueira, R Siufi, JLC Zanette, DL Santos, ARD Zago, MA	Fac Med
The unexpected discovery and toxicity of pulmonary hypertension after hematopoietic stem cell transplantation for malignant osteopetrosis: The possible existence of a genetic link or a physiologic consequence.	Kasow, KA Bonfim, C Asch, J Margolis, D Jenkins, J Tamburro, RF Horwitz, E	St Jude Childrens Hosp; Univ Utah; Med Coll Wisconsin; <b>Univ Fed Parana</b>
Time course of improvement following stem cell injections in humans with heart failure	Perin, EC Dohmann, HF Borejevic, R Silva, SA Sousa, AL Silva, GV Assad, JA Belem, L Carvalho, AC Esporcatte, R Vaughn, WK Dohmann, HJ Willerson, JT	Texas Heart Inst; <b>Procardiaco Hosp</b>
Unrelated peripheral blood stem cell transplantation for Fanconi anemia	Massumoto, C Moraes, JR Moraes, ME Macedo, MCA Medeiros, R Chamone, D Dulley, F	
Unrelated umbilical cord blood stem cell transplant after failure of haploidentical or matched unrelated donor hematopoietic stem cell transplant	Khorshid, O de Meis, E Martin, T Jones, RB Shpall, EJ Nieto, Y Khouri, I Shahjahan, M Gajewski, J Giralt, S Champlin, R de Lima, M	<b>Inst Nacl Canc;</b> Univ Texas; Univ Calif San Francisco; Univ Colorado Hosp
Use of stem cells in creation of embryos	Baschetti, R	

### c. Genômica Funcional

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Schistosome transcriptome: insights and perspectives for functional genomics	Verjovski-Almeida, S Leite, LCC Dias-Neto, E Menck, CFM Wilson, RA	<b>Univ Sao Paulo;</b> Univ York; <b>Inst Butantan</b>

### d. Proteômica

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Circulating nucleic acids and proteomics of plasma/serum - Clinical utility	Taback, B Hoon, DSB	John Wayne Canc Inst
Continued proteomic analysis of <i>Mycobacterium leprae</i> subcellular fractions	Marques, MAM Espinosa, BJ da Silveira, EKX Pessolani, MCV Chapeaurouge, A Perales, J Dobos, KM Belisle, JT Spencer, JS Brennan, PJ	Colorado State Univ; <b>Inst Oswaldo Cruz</b>

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Functional post-translational proteomics approach to study the role of N-glycans in the development of <i>Caenorhabditis elegans</i>	Schachter, H Chen, SH Zhang, WL Spence, AM Zhu, SX Callahan, JW Mahuran, DJ Fan, XL Bagshaw, RD She, YM Rosa, C Reinhold, AN	<b>Univ Sao Paulo;</b> Hosp Sick Children; Univ Toronto; Burnham Inst; Univ New Hampshire
High-throughput screening of structural proteomics targets using NMR	Galvao-Botton, LMP Katsuyama, AM Guzzo, CR Almeida, FCL Farah, CS Valente, AP	<b>Univ Sao Paulo;</b> <b>Univ Fed Rio de Janeiro</b>
Proteomic analysis of the human pathogen <i>Trypanosoma cruzi</i>	Paba, J Santana, JM Teixeira, ARL Fontes, W Sousa, MV Ricart, CAO	<b>Univ Brasilia</b>
Proteomic analysis of the larval stage of the parasite <i>Echinococcus granulosus</i> : Causative agent of cystic hydatid disease	Chemale, G van Rossum, AJ Jefferies, JR Barrett, J Brophy, PM Ferreira, HB Zaha, A	<b>Univ Fed Rio Grande Sul;</b> Univ Wales
Proteomic analysis of <i>Trypanosoma cruzi</i> developmental stages using isotope-coded affinity tag reagents	Paba, J Ricart, CAO Fontes, W Santana, JM Teixeira, ARL Marchese, J Williamson, B Hunt, T Karger, BL Sousa, MV	<b>Univ Brasilia;</b> Appl Biosyst Inc; Northeastern Univ
Proteomic analysis reveals alterations in the renal kallikrein pathway during hypoxia-induced hypertension	Thongboonkerd, V Gozal, E Sachleben, LR Arthur, JM Pierce, WM Cai, J Chao, J Bader, M Pesquero, JB Gozal, D Klein, JB	Univ Louisville; Max Delbruck Ctr Mol Med; <b>Escola Paulista Med;</b> Med Univ S Carolina; Vet Adm Med Ctr
Proteomic identification, nucleotide sequence, heterologous expression and immunological reactivity of the triosephosphate isomerase of <i>Paracoccidioides brasiliensis</i>	Pereira, LA Pereira, M Felipe, MSS Zancoppe-Oliveira, RM Soares, CMD	<b>Univ Brasilia;</b> <b>Fiocruz MS;</b> <b>Univ Fed Goias</b>

Título	Autores	Instituição
Proteomics application exercise of the Swiss Proteomics Society: Report of the SPS'02 session	Binz, PA Abdi, F Affolter, M Allard, L Barblan, J Bhardwaj, S Bienvenut, WV Bulet, P Burgess, J Carrette, O Corthals, G Delalande, F Diemer, H Favreau, P Giuliano, E Gueguen, Y Guillaume, E Hahner, S Man, P Michalet, S Neri, D Noukakis, D Palagi, P Paroutaud, P Pimenta, DC Quadroni, M Resemann, A Richert, S Rybak, J Sanchez, JC Scherl, A Scheurer, S Hufnagel, US Siethoff, C Suckau, D van Dorsselaer, A Redeker, WW Walter, N Stocklin, R	Appl Biosyst Inc; ULP; Inst Pharmaceut Sci; Univ Montpellier; Bruker Dalton Bremen; Spectronex ThermoFinnigan; FontisMedia; Ctr Med Univ Geneva; Applera France; Ctr Appl Toxinol; Nestec Ltd; Univ Hosp Geneva; Univ Lausanne; Atheris Labs
Proteomics in Chronic Myeloid Leukemia.	Pizzatti, L Sa, LA Deterling, LC Sousa, JM Abdelhay, E	<b>Hemorio;</b> <b>Univ Fed Rio de Janeiro</b>
Transcriptional, proteomic, and metabolic responses to lithium in galactose-grown yeast cells	Bro, C Regenber, B Lagniel, G Labarre, J Montero-Lomeli, M Nielsen, J	<b>Univ Fed Rio de Janeiro;</b> Tech Univ Denmark; Ctr Energie Atom Saclay

### 13. TEMA: SEGURANÇA BIOLÓGICA

Apresenta-se a seguir os títulos dos 9 artigos que têm pelo menos um autor vinculado a uma instituição brasileira, sobre o tema Segurança Biológica, com seus respectivos autores e instituições.

Título	Autores	Instituição
<b>Biosecurity</b> in x-ray dental equipment: Aluminim or Tin filters?	Pardini, LC Watanabe, PCA	–



Título	Autores	Instituição
Usage methods of <b>biosecurity</b> in Porto Alegre	Passos, DG Galvagni, LG Pires, MM Pires, LAG	–
An "in vivo" <b>biosafety</b> evaluation of the presence of silica in dentifrices.	Pedrazzi, V Panzeri, H Fernandes, RR Lara, EHG	–
Endodontic: <b>Biosecurity</b> evaluation in X-ray dental equipment.	Pardini, LC Silva, ABM Froner, IC	–
Brazil and the development of international scientific <b>biosafety</b> testing guidelines for transgenic crops	Capalbo, DMF Hilbeck, A Andow, D Snow, A Bong, BB Wan, FH Fontes, EMG Osir, EO Fitt, GP Johnston, J Songa, J Heong, KL Birch, ANE	<b>Embrapa Environm</b>
<b>Biosecurity</b> : dentists' knowledge and attitudes toward personal protection.	Guare, RO Zardetto, CGDC Ciamponi, AL	–
<b>Biosafety</b> : analysis of dentists' procedures	Serra, MC Garcia, PPNS Dotta, EV Matsuzaki, R	–
<b>Conduct</b> of dentists regarding biosecurity	Rabello, SB Godoy, CVC Alves, IG	–

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
<b>Biosafety</b> evaluation in dental offices at UFPI.	Houw, H Farias, LM Azevedo, VMNN Hamdan, JS Carvalho, MAR Lima, FL Christofolleti, ARN Lopes, TSP Farias, FF Fialho, AC Macedo, PS Veras, ESL	–

Em relação aos termos referentes ao tema *Segurança Biológica*, não foram localizados artigos que contenham pelo menos um autor vinculado a uma instituição brasileira.

#### **14. TEMA: SUSTENTABILIDADE AMBIENTAL**

Não foram localizados artigos que contenham especificamente o tema Sustentabilidade Ambiental.

Em relação aos termos referentes ao tema Sustentabilidade Ambiental, em um termo (Bioinseticidas) foram localizados artigos publicados por pelo menos um autor vinculado a instituição brasileira. Os títulos dos artigos, seus autores e instituições, são apresentados a seguir.

##### **a. Bioinseticidas**

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Evaluation of <i>Bacillus thuringiensis</i> bioinsecticidal protein effects on soil microorganisms	Ferreira, LHPL Molina, JC Brasil, C Andrade, G	<b>Univ Estadual Londrina</b>
Loss of the membrane anchor of the target receptor is a mechanism of bioinsecticide resistance	Darboux, I Pauchet, Y Castella, C Silva-Filha, MH Nielsen- LeRoux, C Charles, JF Pauron, D	<b>INRA; Fdn Oswaldo Cruz; Inst Pasteur</b>
Plant toxic proteins with insecticidal properties. A review on their potentialities as bioinsecticides	Carlini, CR Grossi-de-Sa, MF	<b>Univ Fed Rio Grande Sul; EMBRAPA</b>
SCREENING OF BIOINSECTICIDES AGAINST THE COTTON BOLLWORM ON COTTON	Carranomoreira, AF ALL, J	

<b>Título</b>	<b>Autores</b>	<b>Instituição</b>
Evaluation of Bacillus thuringiensis bioinsecticidal protein effects on soil microorganisms	Ferreira, LHPL Molina, JC Brasil, C Andrade, G	<b>Univ Estadual Londrina</b>
Loss of the membrane anchor of the target receptor is a mechanism of bioinsecticide resistance	Darboux, I Pauchet, Y Castella, C Silva-Filha, MH Nielsen- LeRoux, C Charles, JF Pauron, D	<b>INRA; Fdn Oswaldo Cruz; Inst Pasteur</b>
Plant toxic proteins with insecticidal properties. A review on their potentialities as bioinsecticides	Carlini, CR Grossi-de-Sa, MF	<b>Univ Fed Rio Grande Sul; EMBRAPA</b>
SCREENING OF BIOINSECTICIDES AGAINST THE COTTON BOLLWORM ON COTTON	Carranomoreira, AF ALL, J	
Evaluation of Bacillus thuringiensis bioinsecticidal protein effects on soil microorganisms	Ferreira, LHPL Molina, JC Brasil, C Andrade, G	<b>Univ Estadual Londrina</b>
Loss of the membrane anchor of the target receptor is a mechanism of bioinsecticide resistance	Darboux, I Pauchet, Y Castella, C Silva-Filha, MH Nielsen- LeRoux, C Charles, JF Pauron, D	<b>INRA; Fdn Oswaldo Cruz; Inst Pasteur</b>
Plant toxic proteins with insecticidal properties. A review on their potentialities as bioinsecticides	Carlini, CR Grossi-de-Sa, MF	<b>Univ Fed Rio Grande Sul; EMBRAPA</b>
SCREENING OF BIOINSECTICIDES AGAINST THE COTTON BOLLWORM ON COTTON	Carranomoreira,AF ALL, J	

## 2. Patentes em biotecnologia

Na tabela a seguir estão assinalados os temas/termos de biotecnologia onde foram localizados documentos nos três subconjuntos: patentes relacionadas à Amazônia, patentes relacionadas ao Brasil e patentes depositadas no Brasil. A ocorrência dos termos Amazônia e Brasil no título das patentes trouxe resultados muito limitados e por isso foram consideradas as frequências destes termos (Amazônia e Brasil) tanto no título como no resumo das patentes.

### Patentes - Distribuição por temas e termos das Patentes em biotecnologia

TEMAS/TERMOS		Relacionados à Amazônia	Relacionados ao Brasil	Depositadas no Brasil
TEMA: Biodiversidade/ Bioprospecção				
Termos da Biodiversidade/ Bioprospecção	Fitomedicamentos			X
TEMA: Bioeconomia			X	X
TEMA: Bioindústria				X
Termos da Bioindústria	Bioprodutos	X	X	
	<i>Designing</i>			X
TEMA: Biorremediação			X	X
TEMA: Certificação de qualidade biológica				
Termos da Certificação de qualidade biológica	Coleções certificadas			X
TEMA: Fertilidade e reprodução animal				
Termos da Fertilidade e reprodução animal	Clonagem			X
TEMA: Integração: alimentação, nutrição e saúde		X	X	X
Termos da Integração: alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)			X
	Produção de Vacinas em Plantas e Animais	X	X	X
TEMA: Programas de Descoberta				
Termos da Programas de Descoberta	Clonagem		X	X
	<i>Stem Cells</i>		X	X
	Engenharia Genética		X	X
	Nanobiotecnologia			X
	Proteômica	X		
TEMA: Segurança Biológica				X
TEMA: Sustentabilidade Ambiental				
Termos da Sustentabilidade Ambiental	OGMs		X	
	Bioinseticidas			X
	Biofungicidas	X		X
	Controle Biológico	X	X	

## ***I. Patentes relacionadas com a Amazônia***

A tabela a seguir mostra a frequência de patentes que citam a Amazônia no título e/ou no resumo, para os temas e termos deste estudo.

<b>TEMAS/TERMOS</b>		<b>Relacionados à Amazônia</b>
TEMA: Bioindústria		
Termos da Bioindústria	Bioprodutos	3
TEMA: Integração: alimentação, nutrição e saúde		1
Termos da Integração: alimentação, nutrição e saúde	Produção de Vacinas em Plantas e Animais	2
TEMA: Programas de Descoberta		
Termos da Programas de Descoberta	Proteômica	1
TEMA: Sustentabilidade Ambiental		
Termos da Sustentabilidade Ambiental	Biofungicidas	1
	Controle Biológico	1

### **1. TEMA: BIOINDÚSTRIA**

Não foram localizadas patentes que tratem especificamente sobre bioindústria na Amazônia.

Em relação aos termos referentes ao tema bioindústria, em um termo (*bioprodutos*) foram localizadas 3 patentes que referem-se em seu título/resumo à Amazônia, cujos títulos das patentes, resumos, depositantes, números da patentes, países de prioridade e anos de prioridade são apresentados a seguir:

## a. BIOPRODUTOS

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS de PRIOR.	ANO de PRIOR.
New polypeptide and immunogenic variants comprising amino acid sequences of particulate antigens, useful for the treatment and clinical remission of psoriasis.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Immunotherapeutic Agent: The agent of (II) or (IV) further comprise alumina. In the immunotherapeutic agent of (IV) the Leishmania protozoa further comprises at least one species selected from L. <b>amazonensis</b> , L. venezuelensis, L. brasiliensis, L. chagasi, L. donovani, L. infantum, L. major, L. panamensis, L. tropica and L. guyanensis. Alternatively, the Leishmania consists of a mixture of L. <b>amazonensis</b> , L. venezuelensis, L. brasiliensis and L. chagasi. Preparation: (I) can be prepared by standard recombinant techniques including expression and purification from a host cell.	AKIVA LLC (AKIV-Non-standard); ASTRALIS LLC (ASTR-Non-standard)	WO200274239-A3; WO200274239-A2; US6673351-B1; AU2002254097-A1; EP1458403-A2; JP2004535783-W	US	2001
Novel vaccines against Avian polyomavirus used for preventing infection in birds of the Psittaciformes order.	NOVELTY - A nucleic acid vaccine vector (I) which is protective against Avian polyomavirus (APV) infection in a bird of the Psittaciformes order is new, and comprises a nucleic acid vector comprising a suitable cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an immunogenic APV polypeptide. USE - The vaccines and methods of the invention are used to prevent Avian polyomavirus infection in birds of the Psittaciformes order, especially in macaws, <b>Amazon</b> parrots, conures, cockatoos, Pionus parrots, and African grey parrots (claimed), as well as Budgerigars, caiques, courses, Eclectus parrots, cockatiels, and parakeets. ADVANTAGE - Prior art methods of vaccinating against Avian polyomavirus have been unsuccessful. A need exists for a safe and effective vaccine against Avian polyomavirus which is cross-reactive against the disease in multiple species of Psittaciformes. This need is satisfied by the present invention. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of preventing APV infection in a Psittaciformes bird, comprising administering (I) to the bird.	UNIV GEORGIA RES FOUND INC (UYGE-Non-standard)	WO9956700-A; EP1082011-A; WO9956700-A2; AU9939700-A; EP1082011-A2; US6491921-B1	US	1994
Vaccine against avian polyomavirus in parrots - containing recombinant VP1 capsid protein.	Vaccine for protecting birds of the order Psittaciformes against avian polyomavirus contains a recombinant VP1 capsid protein of an avian polyomavirus. USE - The vaccine is especially for preventing avian polyomavirus infection in macaws, <b>Amazon</b> parrots, conures, cockatoos, Pionus parrots and African grey parrots (claimed). ADVANTAGE - The vaccine is effective for all Psittaciformes species and does not cause adjuvant related side effects.	UNIV GEORGIA RES FOUND INC (UYGE-Non-standard)	US5747045-A	US	1994

## **2. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE**

Apresenta-se a seguir o título da patente que cita Amazônia no título/resumo, sobre o tema *Integração: Alimentação, Nutrição e Saúde*, com seu respectivo título, resumo, depositante, número da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Extraction of propolis for use in health food, comprises irradiating far infrared radiation on propolis immersed in ethanol at low temperature during extraction.	TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Method: High concentration propolis extract is obtained by irradiating far infrared radiation to container containing propolis immersed in ethanol. Similarly low concentration propolis extract is obtained by irradiating for infra red radiation on comparatively less amount of propolis immersed in ethanol. The low concentration and high concentration propolis extracts are mixed at predetermined ratio and propolis extract having predetermined concentration. The extraction of high concentration and low concentration propolis extract are performed simultaneously or with a time lack. Preferred Active Ingredient: Guarana is Sapindaceae guarana genus, collected from Brazil <b>Amazon</b> having catechin as active ingredient for controlling toxicity of beta-amyloid. Maca is a plant of Brassicaceae family containing abundant nutritive in the tap-root and hypocotyl. Maca contains several active components such as alkaloid, steroid, anthocyanin, saponin, terpenoid, etc for producing tonic effect. Catuaba is a plant of Erythroxylon coca which also has a tonic effect.	SHABURON KK (SHAB-Non-standard)	JP2001275587-A	JP	2000

Em relação aos termos referentes ao tema *Integração: Alimentação, Nutrição e Saúde*, em um termo (*produção de vacinas*) foram localizadas patentes que referem-se em seu título/resumo à Amazônia. Os títulos das patentes, resumo, depositante, número da patente, país de prioridade e ano de prioridade são apresentados a seguir:



## a. PRODUÇÃO DE VACINAS

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Novel <b>vaccines</b> against Avian polyomavirus used for preventing infection in birds of the Psittaciformes order.	<p>NOVELTY - A nucleic acid vaccine vector (I) which is protective against Avian polyomavirus (APV) infection in a bird of the Psittaciformes order is new, and comprises a nucleic acid vector comprising a suitable cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an immunogenic APV polypeptide.</p> <p>USE - The vaccines and methods of the invention are used to prevent Avian polyomavirus infection in birds of the Psittaciformes order, especially in macaws, <b>Amazon</b> parrots, conures, cockatoos, Pionus parrots, and African grey parrots (claimed), as well as Budgerigars, caiques, courses, Eclectus parrots, cockatiels, and parakeets.</p> <p>ADVANTAGE - Prior art methods of vaccinating against Avian polyomavirus have been unsuccessful. A need exists for a safe and effective vaccine against Avian polyomavirus which is cross-reactive against the disease in multiple species of Psittaciformes. This need is satisfied by the present invention.</p> <p>DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of preventing APV infection in a Psittaciformes bird, comprising administering (I) to the bird.</p>	UNIV GEORGIA RES FOUND INC (UYGE-Non-standard)	WO9956700-A; EP1082011-A; WO9956700-A2; AU9939700-A; EP1082011-A2; US6491921-B1	US	1994
<b>Vaccine</b> against avian polyomavirus in parrots - containing recombinant VP1 capsid protein.	<p>Vaccine for protecting birds of the order Psittaciformes against avian polyomavirus contains a recombinant VP1 capsid protein of an avian polyomavirus.</p> <p>USE - The vaccine is especially for preventing avian polyomavirus infection in macaws, <b>Amazon</b> parrots, conures, cockatoos, Pionus parrots and African grey parrots (claimed).</p> <p>ADVANTAGE - The vaccine is effective for all Psittaciformes species and does not cause adjuvant related side effects.</p>	UNIV GEORGIA RES FOUND INC (UYGE-Non-standard)	US5747045-A	US	1994

### **3. TEMA: PROGRAMAS DE DESCOBERTA**

Em relação aos termos referentes ao tema programas de descoberta, em um destes termos (*proteômica*) foi localizada uma patente que se refere em seu título à Amazônia. O título da patente, resumo, depositante, número da patente, país de prioridade e ano de prioridade são apresentados a seguir.

a. **PROTEÔMICA**

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Identification of a molecular target of a cell growth inhibitor, comprises target prediction processes to identify at least one modulated gene or gene product.</p>	<p>NOVELTY - Identifying a molecular target of a cell growth inhibiting compound by:(a) identifying a compound or composition inhibiting growth in a population of cells;(b) performing target prediction processes to identify a modulated gene or gene product; and(c) comparing by target prediction process with the gene or gene product identified by other prediction processes.</p> <p>USE - The method is used for identifying the molecular target of a cell growth inhibitor. The cells are selected from organisms such as protozoa, bacterium, fungus, ameba and mycoplasma (claimed). The mycoplasma is selected from Mycoplasma pneumoniae, M. fermentans, M. hominis and U. urealyticum. The fungus is selected from Histoplasma capsulatum, Coccidioides immitis, Paracoccidioides brasiliensis, Blastomyces dermatitidis, Cryptococcus neoformans, Candida albicans, Candida tropicalis, Candida parapsilosis, Candida guilliermondii, Candida glabrata, Candida krusei, Candida granuloma, Aspergillus fumigatus, Aspergillus flavus and Aspergillus niger. The protozoa is selected from Entamoeba histolytica, Naegleria fowleri, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, Plasmodium falciparum, Babesi microti, Babesi divergens, Leishmania chagasi, Leishmania mexicana, Leishmania <b>amazonensis</b>, Leishmania braziliensis, Leishmania guyanensis, Leishmania panamensis, Leishmania peruviana, Leishmania lainsoni, Leishmania naiffi, Leishmania columbiensis, and Trypanosoma cruzi. The bacterium is gram-positive (such as bacillaceae, micrococcaceae or peptococcaceae) or gram-negative (such as acetobacteriaceae, alcaligenaceae, bacteroidaceae, chromatiaceae).</p>	<p>GENOME THERAPEUTICS CORP (GENO-Non-standard); SULAVIK M (SULA-Individual); LING L L (LING-Individual); OPPERMANN T (OPPE-Individual); MOIR D T (MOIR-Individual); BUNKER C (BUNK-Individual)</p>	<p>WO200216940-A; WO200216940-A2; AU200188360-A; US2003108872-A1</p>	<p>US</p>	<p>2000</p>

#### **4. TEMA: SUSTENTABILIDADE AMBIENTAL**

Não foram localizadas patentes que tratem especificamente sobre *Sustentabilidade Ambiental* relacionadas à Amazônia.

Em relação aos termos referentes ao tema bioindústria, em dois termos (*Biofungicida* e *Controle Biológico*) foram localizadas patentes que referem-se à Amazônia em seu título/resumo. Os títulos das patentes, resumo, depositante, número da patente, país de prioridade e ano de prioridade são apresentados a seguir:

a. **BIOFUNGICIDA**

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Improving soil and plant seeds micro-organism population - comprises preparations containing living micro-organisms.	<p>NOVELTY - Preparations containing living micro-organisms useful for the treatment of the soil and plant seeds, are new.</p> <p>DETAILED DESCRIPTION - Preparations containing living micro-organism(s) which are able to multiply in a certain type of soil, environment of a plant, and are pesticide resistant, comprising cultures of at least one of the following microorganisms: (1) Azospirillum lipoferum ssp. Lip7R885 (NCAIM P(B) 001253), (2) Azospirillum <b>amazonese</b> ssp K21R 887 (NCAIM P(B) 001256), (3) Azospirillum irakense ssp. 5041R 889 (NCAIM P(B) 001125), (4) Azospirillum brasilienses ssp. A41R 879 (NCAIM P(B) 001254), (5) Azotobacter vinelandii ssp. ESZ 2132 (NCAIM P(B) 001257), (6) Pseudomonas sp. Szeged 344 O.P. 14 (NCAIM P(B) 001251), (7) Pseudomonas fluorescens var. MOB24, Res24 (NCAIM P(B) 001252), (8) Bacillus circulans var. Res. 97 (NCAIM P(B) 001261), (9) Bacillus mageritensis var. Res. 54 (NCAIM P(B) 001250), (10) Rhizobium meliloti var. PolRes. 7 (NCAIM P(B) 001259), (11) Alcaligenes faecalis var. Res36 (NCAIM P(B) 001260) and (12) Phyll06-R+324 (NCAIM P(B) 001258).</p>	PHYLAXIA PHARMA RT (PHYL-Non-standard); - PHARMA GYOGYSZER OLTOANYAG & AG (PHYL-Non-standard)	WO9909834-A; WO9909834-A2; HU9701446-A1; AU9889935-A	HU	1997

## b. CONTROLE BIOLÓGICO

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Inoculation of auxiliary microbes to mucorrhizae - promotes water/mineral absorption, plant growth, disease/drought resistance etc.</p>	<p>A microbial inoculant prepn. having auxiliary microbes that enhance the infective activity of infective sources of mycorrhizae, pref. VA mycorrhizae to plants and/or germination of spores and/or elongation of hyphae, contg. infection sources of mycorrhizae, pref. contains an extending agent mixed with the auxiliary microbe and/or the infective sources of mycorrhizae.</p> <p>Pref. VA mycorrhizae are those of genera Gigaspora, pref. G. margarita, G. albida, Scutellospora, pref. S. gregaria, Glomus, pref. G. fasciculatum, G. etunicatum, Acaulospora, pref. A. laevis, Sclerocystis, pref. S. dussii and/or Entrophospora, pref. E. kinfrequens. Pref. auxiliary microbes are nitrogen-fixing bacteria pref. genera Rhizobium pref. R. melitoti, R. trifolii and/or R. leguminosarum, Bradyrhizobium, Azospirillum, pref. A. brasilense, A. liposerum and/or A. <b>amazonense</b>, Azobacteria pref. A. chlorococcum and/or A. vinelandii, Xanthomonas, pref. X. maltophila, Xanthobacter, Klebsiella, Enterobacter, pref. E. cloacae, Azomonas, Frankia, Clostridium and/or Cytobacter, phosphate-solubilising microbes, pref. genera Lactobacillus pref. L. acidophilus, Bacillus pref. B. substilis and/or B. polymyxa, Micrococcus, Aspergillus, Fusarium, Escherichia, Flavobacterium, Brevibacterium and/or Aerobacter, plant growth-promoting rooting zone microbes, pref. Pseudomonas, pref. P. fluorescens, P. putida, P. aeruginosa and/or P. chloroaphis and/or Alcaligenes, pref. A. faecalis, antibiotics-producing microbes, pref. general Streptomyces, pref. S. griseus and/or Penicillia and/or mucous fluid-producing microbes pref. genera Myxococcus pref. M. xanthus, Rhodococcus pref. R. erythropolis, Archangium, Cystobacter and/or Polyangium.</p>	<p>OSAKA GAS CO LTD (OSAG)</p>	<p>JP7231781-A</p>	<p>JP</p>	<p>1994</p>

## II. Patentes relacionadas com o Brasil

A tabela a seguir mostra a freqüência de patentes que citam Brasil no título ou resumo, para os temas e termos deste estudo.

TEMAS/TERMOS		Relacionados ao Brasil
		RESUMO
TEMA: Bioeconomia		72
TEMA: Bioindústria		
Termos da Bioindústria	Bioprodutos	44
TEMA: Biorremediação		1
TEMA: Integração: alimentação, nutrição e saúde		2
Termos da Integração: alimentação, nutrição e saúde	Produção de Vacinas em Plantas e Animais	11
TEMA: Programas de Descoberta		
Termos da Programas de Descoberta	Clonagem	10
	<i>Stem Cells</i>	2
	Engenharia Genética	1
TEMA: Sustentabilidade Ambiental		
Termos da Sustentabilidade Ambiental	OGMs	2
	Controle Biológico	10

### 1. TEMA: BIOINDÚSTRIA

Para este tema não foram localizadas patentes que citam explicitamente o Brasil no título/resumo. Dentre os termos relacionados ao tema, apenas no termo *bioprodutos* foi localizado uma patente, cujo título, resumo, depositante, número da patente, país de prioridade e ano de prioridade são apresentados a seguir:

## a. BIOPRODUTOS

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
A new triterpene and its preparation, useful as cell adhesion inhibitors and anti-inflammatory agents.	<b>Technology Focus/Extension Abstract:</b> EXAMPLE - 100, 500 ml Erlenmeyer flasks containing 60 g rice and 20 ml tap water were prepared. Each 3 platinum loop of <i>Chaetomium brasiliense</i> MK13089 was inoculated to them and cultured at 27degreesC for 14 days. 160 ml/flask of 50 % aqueous acetone was added and stood overnight and filtered to give 10.9 l extract. It was concentrated in vacuo to give 4.6 l of a concentrate. It was extracted with 4.5 l ethyl acetate and the extract was concentrated in vacuo to give 2.3 g oil. It was fed to a silica gel column and stepwisely eluted by chloroform-methanol to give 376.1 mg oil. It was purified by an ODS column and a Toyopearl HW-40s column to give MK13089A substance, MK13089B substance and MK13089C substance.	MEIJI SEIKA KAISHA LTD (MEIJ) MITSUBISHI CHEM CORP (MITU)	JP2000319287-A	JP	1999
<b>Brazilian</b> molluscs specific identification technique consists of recognition of specific nucleic acid sequences via initiators.	NOVELTY - The <b>Brazilian</b> molluscs specific identification technique comprises recognition of the specific nucleic acid sequences of the Biomphalaria mollusc species, by polymerase chain reaction (PCR). Initiators, nucleotides and buffer solution, Taq poly	CRUZ F O (CRUZ-Individual) UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	BR200002538-A	BR	2000
cDNA encoding a Hevea <b>brasiliensis</b> small rubber particle-associated protein useful for producing rubber from latex.	NOVELTY - A 910 base pairs cDNA sequence (S1), fully defined in the specification, and encoding a Hevea <b>brasiliensis</b> small rubber particle-associated protein (SRPP) that binds to rubber particles with a diameter of less than 10 micro-m, is new.	KOREA KUMHO PETROCHEMICAL CO LTD (KOKU-Non-standard) MALAYSIAN RUBBER BOARD (NARP)	EP1050582-A; EP1050582-A2; JP2000316586-A; KR2000072911-A; KR302100-B	KR	1999



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Composition for treating immune diseases, especially autoimmune diseases, has agent targeting interleukin-15 receptor and agent that inhibits costimulatory signal transmitted between T cell and antigen-presenting cell.	NOVELTY - A therapeutic composition (I), comprising a first agent (A1) that targets an interleukin-15 receptor (IL-15R) and a second agent (A2) that inhibits a costimulatory signal transmitted between a T cell and an antigen-presenting cell (APC), is new. USE - (I) is useful for suppressing an immune response in a patient, having an immune disease, particularly an autoimmune disease including rheumatic disease, such as systemic lupus erythematosus, Sjogren's syndrome, scleroderma, mixed connective tissue disease, dermatomyositis, polymyositis, Reiter's syndrome, Behcet's disease, rheumatoid arthritis, type I or type II diabetes, Hashimoto's thyroiditis, Grave's disease, autoimmune disease of the central nervous system including multiple sclerosis, myasthenia gravis and encephalomyelitis, variety of pemphigus such as pemphigus vulgaris, pemphigus vegetans, pemphigus foliaceus, Senear-Usher syndrome and <b>Brazilian</b> pemphigus, psoriasis, inflammatory bowel disease, acquired immune deficiency syndrome (AIDS) or at risk of developing the autoimmune disease. (I) is also useful for suppressing an immune response in a patient who has received a transplant of a biological organ, tissue or cell or vascular injury and also for eliminating a malignant or immune system cell that expresses a receptor for IL-15. (All claimed).	BETH ISRAEL DEACONESS MEDICAL CENT (BETH-Non-standard)	EP1284747-A; WO200187330-A2; AU200161585-A; US2002128436-A1; EP1284747-A2; JP2003533488-W; CN1441675-A; US6797263-B2; US2004219148-A1	US	2000
Detecting a dimorphic fungus, useful for diagnosing fungal infections, comprises detecting the presence or absence of an internal transcribed spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a sample.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: In detecting a dimorphic fungus, the dimorphic fungus is <i>Histoplasma capsulatum</i> , <i>Blastomyces dermatitidis</i> , <i>Coccidioides immitis</i> , <i>Penicillium marneffei</i> , or <i>Paracoccidioides brasiliensis</i> , or their hybrid.	US DEPT HEALTH & HUMAN SERVICES (USSH)	WO2003027329-A; WO2003027329-A1; EP1438429-A1	US	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Detecting infection or contamination by Paracoccidioides - using specific primers for nucleic acid amplification.	Paracoccidioides infection is detected by: (1) hybridising a primer, complementary to Paracoccidioides nucleic acid target, to a biological sample; (2) amplifying the target sequence; and (3) detecting it. A similar method can be used to detect contamination; in this case nucleic acid is extracted before hybridisation with the primer. Also new are primers corresponding, or complementary to, a sequence specific for <i>P. brasiliensis</i> nucleic acid.	UNIV BOSTON (UYBO-Non-standard)	WO9629432-A; WO9629432-A1; AU9653662-A	US	1995
Detection of Leishmania protozoa - comprises amplifying specific DNA fragments to distinguish <i>L. braziliensis</i> from <i>L. mexicana</i> .	Leishmania protozoa derived DNA is detected by specific gene amplification of Leishmania derived DNA (as template) with a polynucleotide contg. a sequence of 263 bp (designated F10) or a sequence of 125 bp (designated F4), both given in the specification	SUMITOMO ELECTRIC IND CO (SUME)	WO9631623-A1; JP8275799-A; EP819766-A1; US6022690-A	JP	1995
Diagnosing primary congenital glaucoma for facilitating early treatment of the disease and better treatment planning for affected individuals, comprises detecting nucleotide mutations in the human cytochrome P4501B1 gene.	For rapid mutation screening, fragments containing portions of the human cytochrome P4501B1 gene were amplified from genomic DNA with primers, using a polymerase chain reaction (PCR). The PCR products were analyzed on polyacrylamide minigels consisting of 5% acrylamide/bis solution (19:1), 15 percent urea, and 1 x TBE (Tris, boric acid and ethylene diamine tetraacetate (EDTA)). The mutations were either sporadic or familial, and found in one or more individuals or families from varying geographical populations (families of Israel, United Kingdom, Turkey, United States of America, Bulgaria, Lebanon and <b>Brazil</b> origin).	UNIV CONNECTICUT (UYCO-Non-standard)	WO200068432-A; EP1255855-A; US6127128-A; WO200068432-A2; AU200048240-A; EP1255855-A2; JP2003513614-W	US	1999
Enantio-selective production of (S)-cyanohydrin compounds - comprises reaction of carbonyl compound with cyano donor in presence of recombinant (S)-hydroxy nitrile lyase.	Production of a (S)-cyanohydrin (I) comprises reaction of an aldehyde or ketone (II) with a cyanide group donor (III) in an organic diluent in the presence of a recombinant (S)-hydroxynitrile lyase (Hnl) from <i>Hevea brasiliensis</i> and isolating (I) from the	DSM CHEMIE LINZ GMBH (STAM) DSM FINE CHEM AUSTRIA GMBH (STAM) DSM FINE CHEM AUSTRIA NFG GMBH & CO KG (STAM)	WO9830711-A1; AU9731674-A; EP951561-A1; AT9700041-A; AT406959-B; EP951561-B1; DE59704263-G; JP2001513625-W; ES2161466-T3; US6337196-B1	AT	1997

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Enzymatic prodn. of aliphatic (S)-cyanohydrin - by reacting aliphatic aldehyde or asymmetrical ketone with hydrocyanic acid in the presence of (S)-oxy-nitrilase from Hevea <b>brasiliensis</b> .	An enzymatic process for prodn. of aliphatic (S)-cyanohydrins comprises reacting an aliphatic aldehyde or asymmetrical aliphatic ketone with hydrocyanic acid in a diluent in the presence of (S)-oxynitrilase from Hevea <b>brasiliensis</b> at a temp. of 10C.	CHEMIE-LINZ GMBH (OSTS) DSM CHEMIE LINZ GMBH (STAM) DSM FINE CHEMICALS AUSTRIA GMBH (STAM) DSM FINE CHEM AUSTRIA GMBH (STAM)	EP632130-A; EP632130-A1; AT9301055-A; CA2124783-A; JP7051076-A; AT400035-B; US5714356-A; EP632130-B1; DE59408424-G; JP3482239-B2	AT	1993
Enzymatic prodn. of aliphatic (S)-cyanohydrin(s) - by conversion of aliphatic aldehyde(s) in a diluting agent using (S) oxy-nitrilase from Hevea <b>brasiliensis</b> at temp. up to 10 deg. C.	Enzymatic prodn. of aliphatic (S)-cyanohydrins by converting an aliphatic aldehyde in a diluting agent using HCN in the presence of (S)-oxynitrilase from Hevea <b>brasiliensis</b> at temps. 10C. Also claimed is the use of (S)-oxynitrilase, pref. 104	CHEMIE-LINZ DEUT GMBH (OSTS)	DE4322064-A1	DE	1993
Expressing somatotropin in plants, for use in e.g. the aquaculture industry, comprises expressing nucleic acid encoding somatotropin linked to nucleic acid encoding oleosin protein to target the fusion polypeptide to the lipid phase.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: (M1) further involves separating (II) from cellular host cell components by selective partitioning into a lipid phase that comprises oil bodies. Preferably, (II) is separated by addition of oil body components and reconstitution of the oil bodies. Preferred Plant: (IV) is rape seed (Brassica spp.), linseed/flax (Linum usitatissimum), safflower (Carthamus tinctorius), sunflower (Helianthus annuus), maize (Zeamays), soybean (Glycine max), mustard (Brassica spp.) and (Sinapis alba), crambe (Crambe abyssinica), eruca (Eruca sativa), oil palm (Elaeis guineensis), cottonseed (Gossypium spp.), groundnut (Arachis hypogaea), coconut (Cocos nucifera), castor bean (Ricinus communis), coriander (Coriandrum sativum), squash, (Cucurbita maxima), <b>Brazil</b> nut (Bertholletia excelsa) or jojoba (Simmondsia chinensis).	MOLONEY M M (MOLO-Individual) HABIBI H R (HABI-Individual)	US2002100073-A1	US	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Hevea <b>brasiliensis</b> S-hydroxy:nitrilase - and recombinant equivalent of high specific activity, for chiral synthesis of cyano:hydrin(s).	Purified, isolated (S)-hydroxynitrilase (HN), is new. Also new are: (1) DNA encoding (S)-HN; (2) vector contg. the DNA; (3) host cell having the DNA introduced by the vector; and (4) recombinant protein produced by the cell.	DSM CHEMIE LINZ GMBH (STAM) DSM FINE CHEMICALS AUSTRIA GMBH (STAM) CHEMIE-LINZ GMBH (OSTS) DSM FINE CHEM AUSTRIA NFG GMBH & CO KG (STAM)	WO9703204-A; EP840792-A; WO9703204-A2; WO9703204-A3; EP840792-A2; AT9501182-A; AT404837-B; JP11508775-W; US6046042-A; EP840792-B1; DE59608804-G; TW469293-A; ES2170251-T3	AT	1995
Improving stability of protein or peptide in yeast - by expressing with a peroxisomal targeting sequence, allowing accumulation of unstable or toxic products, and new yeast strains useful as food additives.	The method is esp. used where (I) is the 2S storage protein (BZN) of <b>Brazil</b> nuts or the synthetic proteins E and ELE (or their polymers). Yeast expressing these (I) are useful as food additives (having a high content of essential amino acids, partic. Met or Cys).	EUROLYSINE (EURO-Non-standard)	WO9424289-A1; FR2704237-A1; AU9466810-A	FR	1993
Isolated allergenic proteins of natural rubber latex - used to develop prods. for detecting allergies and as de-sensitising agents for treating allergies.	(A) Allergenic proteins from the latex or tissue of Hevea <b>brasiliensis</b> (HB) in purified form, and allergenic subunits or aggregates are claimed. Also claimed are: (B) a monoclonal antibody (MAb) against an allergenic protein as in (A); (C) a method for e	RUBBER RES INST MALASIA (NARP)	EP704457-A; EP704457-A1; JP8277295-A; JP3431371-B2; JP2003267999-A; JP2003268000-A; US6759517-B1	MY	1995
Macrolide 0466HK-1 useful as antifungal agent obtained by culturing Nocardia <b>brasiliensis</b> strain.	NOVELTY - A new antifungal macrolide 0466HK-1.	HIGETA SHOYU KK (HGET)	JP2001072698-A	JP	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Method of culturing <b>Brazilian</b> bushroom mycelium and extracting protein polysaccharide.	NOVELTY - The inoculum of <i>Agaricus blazci</i> Murrill is inoculated on liquid culture medium, sterile air is introduced and cultured for 2-4 weeks to obtain mycelium of <i>Agaricus blazci</i> Murrill and culture liquor, and the mycelium is undergone the processes o	LI H (LIHH-Individual)	CN1269423-A	CN	1999
Microbial mixture for fixing nitrogen and increasing solubility of phosphorus compounds to improve fertility of soil, comprises the co-fermentation of <i>Azotobacter croococcum</i> , <i>Azospirillum brasiliense</i> and <i>Bacillus megaterium</i> .	NOVELTY - Preparing a mixture (I) of micro-organisms by co-fermentation of the micro-organisms in nutrient soil, which is nitrogen free but contains phosphorus, is new.	POLLAK A (POLL-Individual)	FR2806420-A1; SK200000386-A3; NL1017592-C2	SK	2000
Mutant (S)-Hydroxynitrile lyase enzyme with enhanced substrate acceptance useful for converting aldehydes or ketones to (S)-cyanohydrins.	NOVELTY - (S)-Hydroxynitrile lyase (HNL) enzyme comprising a <i>Hevea brasiliensis</i> or <i>Manihot esculenta</i> HNL in which one or more bulky amino acids are replaced by less bulky amino acids is new.	DSM FINE CHEM AUSTRIA GMBH (STAM) DSM FINE CHEM AUSTRIA NFG GMBH & CO KG (STAM)	EP969095-A; EP969095-A2; CA2277594-A1; JP2000125886-A; AT9801159-A; AT407397-B; US6319697-B1; EP969095-B1; DE59910627-G	AT	1998

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New 4-cyano-4-deformylsordarin derivatives - used for treating fungal infections e.g. candidiasis, and for controlling phytopathogenic fungi in plants.	They are used in pharmaceutical and agrochemical compositions for the treatment and prevention of fungal infections in animals and the control of phytopathogenic fungi in plants (claimed). In animals, including humans, they may be used to treat fungal infections caused by <i>Candida</i> ( <i>C. albicans</i> , <i>C. glabrata</i> , <i>C. tropicalis</i> , <i>C. pseudotropicalis</i> ), <i>Cryptococcus neoformans</i> , <i>Pneumocystis carinii</i> , <i>Aspergillus</i> spp. ( <i>A. flavus</i> , <i>A. fumigatus</i> ), <i>Coccidioides</i> ( <i>C. immitis</i> ), <i>Paracoccidioides</i> ( <i>P. brasiliensis</i> ), <i>Histoplasma</i> ( <i>H. capsulatum</i> ) or <i>Blastomyces</i> ( <i>B. dermatitidis</i> ) as well as <i>Trichophyton</i> ( <i>T. mentographytes</i> , <i>T. rubrum</i> ), <i>Microsporum</i> ( <i>M. canis</i> ) or <i>Epidermophyton</i> ( <i>E. floccosum</i> ), mucosal infections caused by <i>C. albicans</i> , species of filamentous fungi such as <i>Geotrichum</i> ( <i>G. clavatum</i> ), <i>Trichosporon</i> ( <i>T. beigelii</i> ), <i>Blastoschizomyces</i> ( <i>B. capitatus</i> ), <i>Sporothrix</i> ( <i>S. schenckii</i> ), <i>Scedosporium</i> ( <i>S. apiosperum</i> ), <i>Cladosporium</i> ( <i>C. carrionii</i> ) and <i>Pityrosporum ovale</i> , and infections caused by parasites such as <i>Toxoplasma</i> , <i>Cryptosporidium</i> , <i>Leishmania</i> , <i>Tripanosoma</i> , <i>Giardia</i> and <i>Trichomonas</i> .	MERCK & CO INC (MERI)	WO9909974-A; EP1007031-A; WO9909974-A1; AU9889123-A; US5972996-A; EP1007031-A1; CZ200000632-A3; HU200002708-A2; SK200000209-A3; JP2001513553-W; AU740477-B; NZ502763-A; EP1007031-B1; DE69815355-E; ES2198064-T3	GB	1997
New anthracycline antibiotic SO-75R1 - is used as an antiviral agent of against gram-positive bacteria, e.g., <i>Nocardia</i> .	Antibiotic SO-75R1 of formula (I) is new. (I) is produced by incubating a strain of <i>Nocardia</i> (e.g., <i>Nocardia brasiliensis</i> IFM 0075, FERM P-13071) on a nutrition medium (pH 7) containing carbon source, nitrogen source and minerals at 25-40 deg.C for a period of 1-6 days.	MIYARISAN SEIBUTSU IGAKU KENKYUSHO KK (MIYA-Non-standard)	JP6041180-A	JP	1992
New dichloropyrrole type antibiotic, useful for treating bacterial infections in animals and plants, produced by <i>Streptomyces</i> DSM 14527.	TF TECHNOLOGY FOCUS - BIOLOGY - Preferred Microorganism: DSM 14527 is an endophyte of the <b>Brazilian</b> plant <i>Mayfenus aquifolia</i> . Preparation: DSM 14527, or its mutants or variants, are grown under submerged aerobic conditions on a conventional growth medium, at 22-30 degreesC and pH 5-9.5, preferably 6.5-7.5, for 48-144 hours. The biomass and broth are separated; both extracted with an organic solvent; the extracts concentrated and the residue purified, e.g. by column chromatography on silica; gel chromatography on dextran and then HPLC on a reverse-phase silica column, to isolate (I).	KNOELL-INST NATURSTOFF-FORSCH EV HANS (KNOE-Non-standard)	DE10151215-A1	DE	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New human monoclonal antibody against Staphylococcus aureus, useful for treating and preventing infections, including those caused by methicillin-resistant strains.	TF TECHNOLOGY FOCUS - BIOLOGY - Preferred Antibody: (I) is immunoglobulin (Ig) G1-G4, IgM, IgA1, IgA2, IgAsec, IgD or IgE, most preferably IgG1k. (I) can bind to at least one methicillin-resistant S. aureus strain, especially to strains Iberian, Emrsa, Ontario or <b>Brazilian</b> .	MEDAREX INC (MEDA-Non-standard)	WO200071585-A; EP1173485-A; WO200071585-A1; AU200058671-A; EP1173485-A1; JP2003503015-W; AU2004201429-A1	US	1999
New macrolide antibiotic compound 0406 - having immunosuppressant activity.	Macrolides of formula (I), referred to as compound 0406, are new. R1 Also claimed is a Nocardia <b>brasiliensis</b> strain capable of producing (I).	HIGETA SHOYU KK (HGET)	EP808843-A; EP808843-A2; JP9295980-A; US6004995-A; US6090610-A; EP808843-B1; DE69720101-E	JP	1996
New monoterpene compounds BMT having antitumor and antibacterial activities.	Nocardia <b>brasiliensis</b> IFM 0667 strain (FERM BP-6727) was inoculated in 2% glucose-added Brain Heart Infusion liquid medium (25 ml), and cultured with shaking at 30degreesC for 72 hours. The culture (2 ml) was further cultured in the same medium (200 ml).	HIGETA SHOYU KK (HGET)	JP2001002613-A	JP	1999
New nucleic acid encoding an isopentenyl diphosphate isomerase from Hevea <b>brasiliensis</b> comprising 234 amino acids, useful in rubber biosynthesis.	NOVELTY - A nucleic acid (A) encoding an isopentyl diphosphate (IPP) isomerase from Hevea <b>brasiliensis</b> having a sequence (I) of 234 amino acids, given in the specification, is new.	KOREA KUMHO PETROCHEMICAL CO LTD (KOKU-Non-standard)	EP1046709-A; EP1046709-A1	EP	1999
New oligo:nucleotide hybridisation assay probes - used for the detection or quantification of Blastomyces dermatitidis or Paracoccidioides <b>brasiliensis</b> .	An oligonucleotide (ON) hybridisation assay probe (I), is new, which is able to detect the presence of Blastomyces dermatitidis (BD) and Paracoccidioides <b>brasiliensis</b> (PB), where the probe has a length of 15-100 nucleotides and can form a stable hybrid u	GEN-PROBE INC (GENP-Non-standard)	US5558990-A	US	1994

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New tetra:cyclic anthraquinone derivative 0089 compounds - having antibacterial and especially antitumour activity, prepared by culturing new Nocardia <b>brasiliensis</b> strain.	Tetracyclic anthraquinone derivatives of formula (I), designated '0089' compounds, and their salts are new. R = ristosamine, -OH or -OCH <sub>3</sub> , in compound '0089-A', '0089-B' or '0089-C' respectively. Also claimed are new Nocardia <b>brasiliensis</b> strains having t	HIGETA SHOYU KK (HGET)	JP9309861-A	JP	1996
New vector comprising a nucleic acid, an E. coli and Actinomycetes origin of replication, a cos cosmid cloning site, and an origin of transfer, useful for expressing polypeptides and for manipulating Actinomycetes biosynthesis genes.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Vector: The vector comprises a sequence that permits passage of the vector from a first prokaryotic cell to a second prokaryotic cell by direct transfer. The direct transfer is by conjugation. The E. coli origin of replication is Co1E1 and the Actinomycetes origin of replication is pJV1. The first prokaryotic cell is E. coli. The second prokaryotic cell is Actinomycetes. The second prokaryotic cells is Acetobacter xylinum, Achrombacter parvulus, Acinetobacter spp., Aeromonas spp., Agrobacterium spp., Alcaligenes spp., Anabaena spp., Azospirillum <b>brasilense</b> , Azotobacter spp., Bordetella spp., Caulobacter spp., Enterobacteriaceae, Haemophilus influenza, Hypomicrobium X, Legionella pneumophila, Methylophilus methyltrophus, Ethylosinus trichosporium, Myxococcus xanthus, Neisseria spp., Paracoccus denitrificans, Pseudomonas spp., Rhizobium spp., Rhodopseudomonas spp., Rhodospirillum spp., Thiobacillus spp., Vibrio cholerae, Xanthomonas spp., Yersinia enterocolitica, Myxococcus Bacteroides.	WYETH (AMHP)	WO2003083087-A; WO2003083087-A1; US2003224484-A1; AU2003224802-A1	US	2002
Novel fusion protein comprising an adenosine triphosphate generating thermostable sulfurylase polypeptide bound to luciferase polypeptide and at least one affinity tag, useful for sequencing nucleic acid.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Fusion Protein: (I) is encoded by a nucleic acid comprising (S2). In (II), the ATP generating polypeptide is chosen from ATP sulfurylase, hydrolase and ATP synthase. The ATP sulfurylase is a thermostable sulfurylase encoded by (S1). The nucleotide sequence encodes (S4). The thermostable sulfurylase is active at room temperature. The ATP sulfurylase is from a thermophile. The thermophile is a thermophilic bacteria is chosen from Bacillus stearothermophilus, Thermus thermophilus, B. caldolyticus, B. subtilis, B. thermoleovorans, etc. The ATP generating polypeptide and ATP converting polypeptide are from a	SRINIVASAN M (SRIN-Individual) REIFLER M (REIF-Individual) 454 CORP (FOUR-Non-standard)	WO2003054142-A3; US2003113747-A1; WO2003054142-A2; AU2002365146-A1; EP1451293-A2	US	2002



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
	<p>eukaryote or a prokaryote. The eukaryote is chosen from animal (e.g., mammal, rodent, insect, worm, mollusk, reptile, bird and amphibian), plant (e.g., Arabidopsis thaliana, Brassica napus, Allium sativum, Amaranthus caudatus, Hevea <b>brasiliensis</b>, etc), fungus (e.g., Penicillium chrysogenum, Stachybotrys chartarum, Aspergillus fumigatus, Podospora anserina, Trichoderma reesei and Riftia pachyptila) and yeast (e.g., Saccharomyces cerevisiae, Candida tropicalis, C. lypolitica, C. utilis, Kluyveromyces lactis, Schizosaccharomyces pombe, Yarrowia lipolytica, Candida spp., Pichia spp. and Hansenula spp.).</p>				
<p>Novel genetic polymorphisms in the Van Buchem-sclerosteosis disease region that are associated with abnormal bone formation useful for diagnosis and assessment of osteoporosis or sclerosteosis in humans.</p>	<p>The three disease-associated polymorphisms were detected by PCR-amplification of the appropriate genomic DNA-fragment from Van Buchem's and sclerosteosis patients, followed by sequencing of the fragments and comparison to DNA of healthy individuals. To make high throughput screening possible a PCR-based assay was developed for two mutations. For the mutation in the <b>Brazilian</b> patients, a modified primer was designed creating a Mbol restriction site in the mutated allele.</p>	<p>HOFFMANN LA ROCHE &amp; CO AG F (HOFF) UNIV INTELLING ANTWERPEN UIA (UYIN-Non-standard) UNIV ANTWERPEN INTELLING (UYAN- Non-standard) BALEMANS W (BALE-Individual) EBELING M (EBEL- Individual) FOERNZLER D (FOER-Individual) PATEL N (PATE- Individual) VAN HUL W (</p>	<p>WO200198491- A; EP1366156-A; WO200198491- A2; AU200172482-A; EP1366156-A2; JP2004520005- W; US2004132021- A1</p>	<p>EP</p>	<p>2000</p>

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Novel isolated DNA encoding monomeric anthranilate synthase useful for conferring tolerance to a tryptophan analog to a plant and/or altering tryptophan content in a plant, or for making an animal feed or a human food.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred DNA: In (I), the expression of monomeric AS elevates the level of L-tryptophan in the plant relative to an untransformed plant having the same genetic background. The monomeric AS is from <i>Agrobacterium tumefaciens</i> , <i>Rhizobium meliloti</i> (Genbank Accession No. GI 95177), <i>Mesorhizobium loti</i> (Genbank Accession No. GI 13472468), <i>Brucella melitensis</i> (Genbank Accession No. GI 17982357), <i>Nostoc</i> sp. (Genbank Accession No. GI 17227910, GI 17230725), <i>Azospirillum brasilense</i> (Genbank Accession No. GI 1174156) or <i>Anabaena</i> (Genbank Accession No. GI 152445).	RENESEN LLC (RENE-Non-standard) MONSANTO CO (MONS) WEAVER L M (WEAV-Individual) LIANG J (LIAN-Individual) CHEN R (CHEN-Individual) JEONG S S (JEON-Individual) MITSKY T (MITS-Individual) SLATER S (SLAT-Individual) RAPP W (RAPP-Individual)	WO200290497-A2; US2003097677-A1; AU2002257246-A1	US	2001
Novel isolated nucleic acid molecule encoding isopentenyl diphosphate, IPP, pathway enzyme, useful for obtaining nucleic acid molecule encoding IPP pathway enzyme, and for regulating IPP biosynthesis in organism.	TF TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Host Cell: (IX) is chosen from bacteria, yeast, filamentous fungi, algae and green plants. Preferably, the host cell is <i>Aspergillus</i> , <i>Trichoderma</i> , <i>Saccharomyces</i> , <i>Pichia</i> , <i>Candida</i> , etc, or is a rubber tree ( <i>Hevea brasiliensis</i> ), tobacco ( <i>Nicotiana</i> spp.), tomato ( <i>Lycopersicon</i> spp.), potato ( <i>Solanum</i> spp.), hemp ( <i>Cannabis</i> spp.), etc.	DU PONT DE NEMOURS & CO E I (DUPO) HALLAHAN D L (HALL-Individual) KEIPER-HRYNKO N M (KEIP-Individual)	WO2003010294-A; WO2003010294-A2; US2003119098-A1; EP1434784-A2; AU2002355297-A1; MX2004000645-A1	US	2001
Novel nucleic acid molecule of <i>Hevea</i> isopentyl diphosphate isomerase, useful for manufacturing rubber.	USE - (I) is useful for manufacturing rubber in vitro and in vivo (claimed). ADVANTAGE - (I) enables manufacture of rubber. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) a vector (II) containing (I); (2) a transformed host (III) containing (II); (3) manufacturing (M1) rubber in vitro involving isolating (I), producing (III) in which (I) is transduced, and cultivating (III) in a culture medium in which isopentyl diphosphate isomerase	KOREA KUMHO PETROCHEMICAL CO LTD (KOKU-Non-standard)	JP2003144183-A	US	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
	of <i>Hevea brasiliensis</i> (IPIHb) is produced, and synthesizing rubber in vitro, using IPIHb;				
Novel oligonucleotide primers useful for detecting <i>Mycobacterium tuberculosis</i> complex alpha-antigen in clinical specimens or in vitro cultures.	The analytical sensitivity of this system using (S1) and (S3) SDA primer pair was shown to be approximately 50 genome equivalents of <i>Mycobacterium tuberculosis</i> DNA. Twenty-four isolates of <i>M. tuberculosis</i> from North and South America, Asia, Africa, and Europe were tested in SDA using (S1) and (S3), (S4) and (S5). All yielded specific products by primer extension analysis with (S8), as did four North American isolates of <i>M. bovis</i> , <i>M. canum</i> , <i>M. microti</i> . The (S1), (S3), (S4) and (S5) primer set was also tested for cross reactivity with other species of <i>Mycobacterium</i> . No significant cross-reaction was observed among 36 strains of non-tuberculous mycobacterium comprising 10 isolates of <i>M. avium</i> - <i>M. intracellulare</i> , seven of <i>M. fortuitum</i> five of <i>M. xenopi</i> , four of <i>M. malmoense</i> , three of <i>M. chelonae</i> and one each of <i>M. scrofulaceum</i> , <i>M. gordonae</i> , <i>M. abscessus</i> and <i>M. celatum</i> . Similarly, no cross reaction was detected with the phylogenetically related organisms <i>Actinomyces israeli</i> , <i>Corynebacterium diphtheriae</i> , <i>Nocardia brasiliensis</i> , <i>Rhodococcus rhodocrous</i> and <i>Streptomyces albus</i> .	SPEARS P A (SPEA-Individual) HELLYER T J (HELL-Individual) DESJARDIN L E (DESJ-Individual) CAVE M D (CAVE-Individual) EISENACH K D (EISE-Individual)	US6156508-A	US	1997
Nucleic acid molecule encoding a novel isopentenyl diphosphate isomerase is useful in catalyzing rubber preparation.	USE - The IPI can be used in the preparation of rubber. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a nucleic acid molecule (II) encoding the nucleic acid sequence (S2) of 1288 nucleotides (nts) fully defined in the specification; (2) a nucleic acid molecule (III) separated by hybridization to (I) under a severe washing condition using 0.45 M NaCl, 0.04 M sodium citrate and 0.1 5 sodium dodecyl sulfate at 45 degreesC; (3) a vector (IV) containing the above nucleic acid molecule;	KOREA KUMHO PETROCHEMICAL CO LTD (KOKU-Non-standard)	JP2000300276-A; KR2000067734-A; US6316695-B1; JP3416081-B2; KR379832-B	US	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
	<p>(4) a transformed host which can express a nucleic acid molecule and contains (IV);</p> <p>(5) preparing in vitro rubber consisting of providing the above nucleic acid molecule, producing a transformed host cell by transferring the nucleic acid molecule to the host cell and culturing said transformed host in a proper medium to produce IPI Hevea <b>Brasiliensis</b> (IPIHb), and promoting rubber synthesis by using said IPIHb.</p>				
<p>Preparation of enantiomer-enriched cyanohydrins for use in synthesis of, e.g. alpha-hydroxy acids for producing biologically active substances, by reacting acetal or ketal in the presence of cyanide group donor with hydroxynitrile lyase.</p>	<p>TECHNOLOGY FOCUS - BIOLOGY - Preferred Components: The HNL is a native (S)-HNL from manioc or Hevea <b>brasiliensis</b>; recombinant (S)-HNL from genetically modified microorganisms consisting of Pichia pastoris, Escherichia coli, or Saccharomyces cerevisiae; native (R)-HNL from Prunus amygdalus, Prunus laurocerasus, or Prunus serotina; or recombinant (R)-HNL. It may be present as immobilized.</p>	<p>DSM FINE CHEM AUSTRIA NFG GMBH &amp; CO KG (STAM) DSM FINE CHEM AUSTRIA GMBH (STAM) SKRANC W (SKRA-Individual) POECHLAUER P (POEC-Individual) WIRTH I (WIRT-Individual) NEUHOFER R (NEUH-Individual) MAYRHOFER H (MAYR-Individual)</p>	<p>CA2415168-A1; AT411064-B; AT200102032-A; JP2003235594-A; EP1323828-A2; US2003129713-A1</p>	<p>AT</p>	<p>2001</p>

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Preparation of enantiomer-enriched heterocyclic (R)- and (S)-cyanohydrin compounds by reacting ketone compounds with (R)- or (S)-hydroxynitrile lyase in presence of cyanide group donor.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Components: The HNL is a native (S)-HNL from manioc or Hevea <b>brasiliensis</b> , recombinant (S)-HNL from genetically modified microorganisms consisting of Pichia pastoris, Escherichia coli, or Saccharomyces cerevisiae, native (R)-HNL from Prunus amygdalus, Prunus laurocerasus, or Prunus serotina, or recombinant (R)-HNL. The HNL is optionally immobilized.	DSM FINE CHEM AUSTRIA NFG GMBH & CO KG (STAM) POECHLAUER P (POEC-Individual) SKRANC W (SKRA-Individual) MAYRHOFER H (MAYR-Individual) WIRTH I (WIRT-Individual) NEUHOFER R (NEUH-Individual) GRIENGL H (GRIE-Individual) FECHTER M (FECH-Individual) DSM FINE C	CA2415185-A1; AT200102033-A; US2003129712-A1; EP1323830-A2; AT411065-B; JP2003250593-A	AT	2001
Preparation of enantiomers of optically active cyanohydrins.	TF TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred materials: An aliphatic, aromatic or heteroaromatic aldehyde or an asymmetric ketone is used in the reaction. The cyanide group donor is hydrocyanic acid. The native S-hydroxynitril lyase is derived from Manihot esculenta or Hevea <b>brasiliensis</b> .	DSM FINE CHEM AUSTRIA GMBH (STAM) DSM CHEMIE LINZ GMBH (STAM)	EP927766-A; EP927766-A1; JP11243983-A; CA2257562-A1; AT9702192-A; AT406961-B; US6225095-B1	AT	1997
Producing chymosin in seeds of plants such as rice, flax, rape seed, by transforming plant cell with a nucleic acid encoding chymosin operably linked to transcription regulator and terminator sequences.	USE - The method is useful for producing plant seeds, in particular seeds of soybean, rape seed, sunflower, cotton, corn, tobacco, alfalfa, wheat, barley, oats, sorghum, Arabidopsis thaliana, potato, flax/linseed, safflower, oil palm, groundnut, <b>Brazil</b> nut, coconut, castor, coriander, squash, jojoba and rice containing 0.5%, 1%, 2% or 4% (w/w) chymosin in the total seed protein (claimed).	SEMBIOSYS GENETICS INC (SEMB-Non-standard)	WO200114571-A; EP1216306-A; WO200114571-A1; AU200066780-A; EP1216306-A1; MX2002001904-A1	US	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Production of protected enantiomer-enriched cyanohydrins useful as intermediates comprises reacting an aldehyde or ketone with a cyanofornate ester in the presence of an (R)- or (S)-hydroxynitrile lyase.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Enzyme: The enzyme is a native (S)-hydroxynitrile lyase derived from manioc or Hevea <b>brasiliensis</b> , a recombinant (S)-hydroxynitrile lyase derived from genetically modified <i>Pichia pastoris</i> , <i>Escherichia coli</i> or <i>Saccharomyces cerevisiae</i> , a native (R)-hydroxynitrile lyase derived from <i>Prunus amygdalis</i> , <i>Prunus laurocerasus</i> or <i>Prunus serotina</i> , or a recombinant (R)-hydroxynitrile lyase.	DSM FINE CHEM AUSTRIA NFG GMBH & CO KG (STAM) SKRANC W (SKRA-Individual) POECHLAUER P (POEC-Individual) WIRTH I (WIRT-Individual) NEUHOFER R (NEUH-Individual) MAYRHOFER H (MAYR-Individual) DSM FINE CHEM AUSTRIA GMBH (STAM)	EP1323829-A; AT200102044-A; EP1323829-A2; CA2415190-A1; US2003129714-A1; AT410792-B; JP2003210187-A	AT	2001
Production of recombinant hydroxynitrile lyase, useful for producing cyanohydrins, intermediates for e.g. pharmaceuticals, using low concentration of inducer.	The (A)-encoding gene is present on a plasmid, e.g. pQE4. Preferred Enzymes: (A) is a naturally occurring enzyme or its mutant, especially from <i>Sorghum bicolor</i> , <i>Manihot esculenta</i> , Hevea <b>brasiliensis</b> , <i>Linum usitatissimum</i> or <i>Prunus</i> spp. Especially it is a (S)-hydroxynitrile lyase.	EFFENBERGER F (EFFE-Individual) JFC JUELICH FINE CHEMICALS GMBH (JFCJ-Non-standard) WAJANT H (WAJA-Individual) FORSTER S (FORS-Individual)	WO200148178-A; EP1246909-A; WO200148178-A1; DE19963485-A1; AU200131645-A; EP1246909-A1; US2003148440-A1	DE	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Stereoselective preparation of cyclohexylcyanohydrin derivatives, useful as intermediates for herbicides and pesticides.	TF TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Process: Preparation of trans-(I) is carried out by reacting (II) in the presence of (R)-oxynitrilase obtained from bitter almonds ( <i>Prunus amygdalus</i> ). It is also possible to use (S)-oxynitrilase obtained from manioc ( <i>Manihot esculenta</i> ) or the rubber tree ( <i>Hevea brasiliensis</i> ).	BAYER AG (FARB) BAYER CROPSCIENCE AG (FARB)	WO9963104-A; EP1082449-A; DE19824491-A1; WO9963104-A1; AU9942647-A; EP1082449-A1; MX2000011921-A1; JP2002517203-W; US6465222-B1; EP1082449-B1; DE59904461-G; ES2189512-T3	DE	1998
Variant endoglucanase-III, useful in treatment of cellulose containing textile and wood pulp, in treatment of biomass to glucose and as a feed additive, is a variant of EGIII from <i>Trichoderma reesei</i> .	Genomic DNA was obtained from <i>Acremonium brachyphenium</i> , <i>Chaetomium brasiliense</i> , <i>C. vitellium</i> , <i>Emericella desertoru</i> , <i>Fusarium equiseti</i> , <i>Gliocladium roseum</i> , <i>Hemicola grisea</i> , <i>Myceliophthora thermophila</i> , <i>Penicillium notatum</i> and <i>Phanerochaete chrysosporium</i> and isolated. Polymerase chain reaction (PCR) was performed on a standard PCR machine.	GENENCOR INT INC (GEMV) GUALFETTI P (GUAL-Individual) MITCHINSON C (MITC-Individual) PHILLIPS J (PHIL-Individual)	EP1305429-A; WO200212462-A; WO200212462-A2; AU200179095-A; EP1305429-A2; US6623949-B1; US2003186418-A1; US2003203467-A1; JP2004519212-W	US	2000

## **2. TEMA: BIORREMEDIAÇÃO**

Apresenta-se a seguir o título da patente que cita Brasil no título/resumo, sobre o tema *biorremediação*, com seu respectivo título, resumo, depositante, número da patente, país de prioridade e ano de prioridade.



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Degradation of polychlorinated biphenyls pollutant in air, soil and ground waste water, involves treating pollutants with butane-utilizing bacteria in presence butane from butane substrate under aerobic conditions.</p>	<p>TECHNOLOGY FOCUS - BIOLOGY - Preferred Bacteria: The butane-utilizing-bacteria in the degradation of PCB pollutant belonging to the genus of Pseudomonas, Variovorax, Nocardia, Chryseobacterium, Comamonas, Aeromonas, Sternotrophomonas, Sphingobacterium, Shewanella, Phyllobacterium, Clavibacter, Alcaligenes, Gordona, Carynebacterium and/or Cytophaga. The butane-utilizing-bacteria belongs to the species putida, rubrisubalbicans, aeruginosa, paradoxus, aestriodes, <b>brasilinesis</b>, restricta, globerula, indologenes, meningosepticum, acidovorans, delafieldii, rhodochrous, erythropolis, fascians, barkeri, esteroaromaticum, saperdae, varians, kristinae, caviae, maltophilia, thalpopphilum, spiritivorum, putrefaciens B, myrsinacearum, michiganense, xylosoxydans, terrae, aquaticum B and/or johnsonae.</p>	<p>ANTHONY F (ANTH-Individual)</p>	<p>US6156203-A</p>	<p>US</p>	<p>1996</p>

### **3. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE**

Apresentam-se a seguir o título das patentes que citam Brasil no título/resumo, sobre o tema *Integração: Alimentação, Nutrição e Saúde*, com seus respectivos títulos, resumos, depositantes, números da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Germinated seed powder as health/nutritional food, is obtained by drying and grinding seed powders e.g. rice and wheat without modifying functional components e.g. ferulic acid, phytic acid, inositol phosphate and polyphenol.</p>	<p>Technology Focus/Extension Abstract: TECHNOLOGY FOCUS - BIOLOGY - Preferred Ingredients: The functional component enriched components are cereal seed, buckwheat seed, grass seed, millet seed, amaranthus seed or sorghum seed; soybean seed, adzuki bean, mung bean, kidney bean, green peas, broad beans, lima bean, Lens esculenta, sword bean, Mucuna pruriens, Cyamopsis tetragonolobus, windged beans or scarlet runner bean; chestnut, ginkgo nut, walnut, opium poppy seed, horse chestnut fruit, Japanese oak fruit, chinquapin fruit, water caltrop fruit, pine nuts, pistachio nut, <b>Brazil</b> nut or cashew nut; green pepper, paprika, nutmeg, pepper, anise, cardamom, caraway, cumin, dill, coriander, vanilla bean, mustard, cayenne pepper, sesame, garlic, hemp or mustard seed; and Coffea arabica, cacao, coconut, Kochia scoparia or maize seed.</p>	<p>PBM KK (PBMP-Non-standard)</p>	<p>JP2003334012-A</p>	<p>JP</p>	<p>2002</p>
<p>Production of natural food with honey and plant constituents, e.g. coating, starting material for natural remedy, additive or instant drink powder or granulate, involves mixing warm honey with powder mixture of plant parts and vitamins.</p>	<p>Technology Focus/Extension Abstract: TECHNOLOGY FOCUS - FOOD - Preferred Food: The dried plant parts are freeze-dried plant parts in powder form. Suitable plant parts are fruits, including berries and/or wild fruits; spices and herbs, preferably fennel, elder-blossom, peppermint, St. John's wort, rosemary, vanilla, cinnamon, cloves, aniseed, ginger, thyme, camomile, coriander, curry, caraway, sesame, pistachio, <b>Brazil</b> nuts, peanuts, walnuts or hazel nuts, vegetable fats or oils, micro-organisms and/or synthetic aromas. The vitamin used is vitamin C. The honey is heated to 35-50, preferably 39degreesC. The product contains not less than 70 parts weight honey and its flavor depends on the plant constituents. It may also contain other products from bees, preferably bee-bread, pollen, royal jelly and/or propolis extract. Flavor enhancers, nutrients and/or an acidulating agent may also be added. The honey may be (partly) replaced by artificial honey.</p>	<p>KAISER K (KAIS-Individual)</p>	<p>WO200042866-A1; AU200032711-A; DE10003362-A1; DE10080086-T</p>	<p>DE</p>	<p>1999</p>

Em relação aos termos referentes ao tema *Integração: Alimentação, Nutrição e Saúde*, em um termo (*Produção de Vacinas*) foram localizadas patentes que estão relacionadas ao Brasil em seu título/resumo. Os títulos das patentes, resumo, depositante, número da patente, país de prioridade e ano de prioridade são apresentados a seguir:

## a. TERMO: PRODUÇÃO DE VACINAS

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New monoclonal antibody mAb PAB-1 that binds to a surface antigen on nematode third stage larvae, useful for diagnosing, preventing, treating or reducing the susceptibility to nematode infection in animals, in particular sheep.	NOVELTY - An isolated monoclonal antibody mAb PAB-1 (ATCC PTA-4005), which binds to a surface antigen on nematode third stage larvae (L3), is new. USE - The monoclonal antibody is useful for detecting nematode infection in sheep. The surface antigens are useful for eliciting an antibody response in the gut mucus of sheep of other susceptible animals, or in manufacturing a composition for preventing, treating or reducing the susceptibility to nematode infection or infestation in animals, in particular sheep from nematodes, such as <i>Trichostrongylus colubriformis</i> , <i>Cooperia curticei</i> , <i>Nematodirus spathiger</i> , <i>Haemonchus contortus</i> , <i>Ostertagia circumcincta</i> , <i>T. axei</i> , <i>T. vitrinus</i> , <i>O. ostertagi</i> , <i>C. oncophora</i> , <i>N. brasiliensis</i> , or <i>D. eckerti</i> (claimed). The monoclonal antibody is also useful in identifying and isolating the surface antigen for development into a vaccine or other immunotherapy against nematode infections.	AGRESEARCH LTD (AGRE-Non-standard); OVITA LTD (OVIT-Non-standard)	WO2003064475-A; WO2003064475-A1; AU2003206466-A1; EP1468022-A1	AU	2002
New multivalent vaccine comprising one or more heat-inactivated fungal pathogens, useful for treating and preventing fungal infections, and for inducing immunity to fungal pathogens.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Vaccine: The antigen is derived from <i>Epidermophyton floccosum</i> , <i>Microsporium audouini</i> , <i>M. canis</i> , <i>M. distortum</i> , <i>M. equinum</i> , <i>M. gymsum</i> , <i>M. nanum</i> , <i>Trichophyton centricum</i> , <i>T. equinum</i> , <i>T. gallinae</i> , <i>T. gypseum</i> , <i>T. megnin</i> , <i>T. mentragrophytes</i> , <i>T. quinckeanum</i> , <i>T. rubrum</i> , <i>T. schoenleini</i> , <i>T. tonsurans</i> , <i>T. verrucosum</i> , <i>T. verrucosum var. album</i> , <i>var. discoides</i> , <i>var. ochraceum</i> , <i>T. violaceum</i> , and/or <i>T. faviforme</i> , <i>Aspergillus fumigatus</i> , <i>A. flavus</i> , <i>A. niger</i> , <i>A. nidulans</i> , <i>A. terreus</i> , <i>A. sydowi</i> , <i>A. flavatus</i> , <i>A. glaucus</i> , <i>Blastoschizomyces capitatus</i> , <i>Candida albicans</i> , <i>C. enolase</i> , <i>C. tropicalis</i> , <i>C. glabrata</i> , <i>C. krusei</i> , <i>C. parapsilopsis</i> , <i>C. stelatoidea</i> , <i>C. kusei</i> , <i>C. parakwsei</i> , <i>C. lusitaniae</i> , <i>C. pseudotropicalis</i> , <i>C. guilliermondi</i> , <i>C. carrionii</i> , <i>Coccidioides immitis</i> , <i>Blastomyces dermatidis</i> , <i>Cryptococcus neoformans</i> , <i>Geotrichum clavatum</i> , <i>Histoplasma capsulatum</i> , <i>Klebsiella pneumoniae</i> , <i>Paracoccidioides brasiliensis</i> , <i>Pneumocystis carinii</i> , <i>Pythium insidiosum</i> , <i>Pityrosporum ovale</i> , <i>Saccharomyces cerevisiae</i> , <i>S. boulardii</i> , <i>S. pombe</i> , <i>Scedosporium apiosperum</i> , <i>Sporothrix schenckii</i> , <i>Trichosporon beigeli</i> , <i>Toxoplasma gondii</i> , <i>Penicillium marneffe</i> , <i>Malassezia spp.</i> , <i>Fonsecaea spp.</i> , <i>Wangiella spp.</i> , <i>Sporothrix spp.</i> , <i>Basidiobolus spp.</i> , <i>Conidiobolus spp.</i> , <i>Rhizopus spp.</i> , <i>Mucos spp.</i> , <i>Absidia spp.</i> , <i>Mortierella spp.</i> , <i>cunninghamella spp.</i> or <i>Saksenaea spp.</i> The inactivated pathogen of the oral vaccine is a fungus or its part. Preferred Immunogen: The immunogen is administered to the host without an immune adjuvant. The immune response is directed against fungal infection. The amount of immunogen comprised in the pill is 0.000001-20 % by weight.	JIRA V (JIRA-Individual); JIRATHITIKAL V (JIRA-Individual); JIRATHITIKAL V (JIRA-Individual)	WO2003018051-A; US2003039667-A1; WO2003018051-A1; AU2002326766-A1	US	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
Stimulating immune responses in a patient for preventing or treating Leishmaniasis, by administering a vaccine comprising a polypeptide comprising an immunogenic portion or epitope of Leishmania antigen.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: The non-specific immune response enhancer is an adjuvant, preferably <i>L. braziliensis</i> antigen (Lbelf4A) or a cytokine. The vaccine preferably comprises a polypeptide having an immunogenic portion of a Leishmania antigen comprising a 199 or 546 residue amino acid sequence, given in the specification. The vaccine further comprises a delivery vehicle which comprises a biodegradable microsphere.	CORIXA CORP (CORI-Non-standard)	US6365165-B1	US	1995
Identifying targeting peptides useful for treating e.g. diabetes mellitus, inflammatory diseases, cancer, or autoimmune diseases, comprises exposing a sample to a phage display library and recovering phage bound to the sample.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Methods: In identifying targeting peptides, the phage are recovered by infecting pilus positive bacteria, or by amplifying phage inserts, ligating the amplified inserts to phage DNA, and producing phage from the ligated DNA. The sample is a thin section of an organ or tissue. The bound phage is recovered by Positioning and Ablation with Laser Microbeams (PALMS), or by Biopanning and Rapid Analysis of Selective Interactive Ligands (BRASIL).	UNIV TEXAS SYSTEM (TEXA); ARAP W (ARAP-Individual); PASQUALINI R (PASQ-Individual)	WO200220722-A2; AU200190652-A; EP1315965-A2; US2004048243-A1; JP2004515751-W	US	2000
Yeast and fungal nucleic acids encoding proteins involved in a pathway leading to programmed cell death, useful for treating proliferative disorders, yeast and fungal infections, or for preventing apoptosis in certain diseases.	NOVELTY - Nucleic acids (NA's) from yeast and fungi encoding proteins involved in a pathway leading to programmed cell death, are new.  USE - The nucleic acids, polypeptides, antibodies and compounds which bind to and modulate the expression or functionality of the polypeptides are useful for preparing medicaments for treating diseases associated with yeast and fungi infections, such as diseases caused by <i>Candida</i> spp. (especially <i>C. albicans</i> when using antibodies as a medicament), <i>Aspergillus</i> spp., <i>Microsporium</i> spp., <i>Trichophyton</i> spp., <i>Fusarium</i> spp., <i>Zygomycetes</i> spp., <i>Botritis</i> spp., <i>Cladosporium</i> spp., <i>Malassezia</i> spp., <i>Epidermophyton floccosum</i> , <i>Blastomyces dermatitidis</i> , <i>Coccidioides immitis</i> , <i>Histoplasma capsulatum</i> , <i>Paracoccidioides brasiliensis</i> , <i>Cryptococcus neoformans</i> or <i>Sporothrix schenckii</i> . The genetically modified yeast or fungus is useful in the preparation of a medicament for modifying endogenous flora of humans and other mammals. They are also useful for treating proliferative disorders or for preventing apoptosis in certain diseases (all claimed). The medicaments are useful for treating humans and plants having the yeast or fungal infections. The nucleic acids and polypeptides represent potential targets for the identification of new compounds which can be used in alleviating diseases or conditions associated with yeast or fungal infections.	JANSSEN PHARM NV (JANC)	WO200102550-A; EP1196635-A; WO200102550-A2; AU200057984-A; NO200200011-A; EP1196635-A2; JP2003504013-W; KR2003000012-A; NZ515568-A; ZA200110481-A	EP	1999

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
New adjuvant for oral administration of antigen vaccine.	<p>TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred antigen: The antigen is a bacterial, fungal, protozoal, viral, helmenthic or other microbial pathogenic antigen, preferably Streptococcus pyogenes, S. pneumoniae, Neisseria gonorrhoea, N. meningitidis, Corynebacterium diptheriae, Clostridium botulinum, C. perfringens, C. tetani, Haemophilus influenzae, Klebsiella pneumoniae, K. ozaenae, K. rhinoscleromatis, Staphylococcus aureus, Vibrio choleae, E. coli, Pseudomonas aeruginosa, Campylobacter (Vibrio) fetus, C. jejuni, Aeromonas hydrophila, Bacillus cereus, Edwardsiella tarda, Yersinia enterocolitica, Y. pestis, Y. pseudotuberculosis, Shigella dysenteriae, S. flexneri, S. sonnei, Salmonella typhimurium, Treponema pallidum, T. pertenuae, T. carateneum, Borrelia vincentii, Leptospira icterohemorrhagiae, Mycobacterium tuberculosis, Toxoplasma gondii, Pneumocystis carinii, Francisella tularensis, Brucella abortus, B. suis, B. melitensis, Mycoplasma spp., Rickettsia prowazeki, R. tsutsugumushi, Chlamydia spp., Helicobacter pylori, Coccidioides immitis, Aspergillus fumigatus, Candida albicans, Blastomyces dermatitidis, Cryptococcus neoformans, Histoplasma capsulatum, Entamoeba histolytica, Trichomonas tenax, T. hominis, T. vaginalis, Trypanosoma Cruzi, Leishmania donovani, L. tropica, L. braziliensis, Pneumocystis pneumonia, Enterobius vermicularis, Trichuris trichuria, Ascaris lumbricoides, Trichinella spiralis, Strongyloides stercoralis, Schistosoma japonicum, S. mansoni, S. haematobium, or variola, vaccinia, cowpox, varicella-zoster, Herpes Simplex 1 or 2, influenza, parainfluenza, respiratory syncytial, Hepatitis A, B, C or E, or non-A or non-B hepatitis virus, or measles, mumps or rubella antigen.</p>	TULANE EDUCATIONAL FUND (TULA); SMITHKLINE BEECHAM (SMIK)	WO9947164-A; WO9947164-A1	US	1998
A new mutant of Escherichia coli holotoxin useful as an adjuvant.	<p>TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred holotoxin: The mutant LT is encoded by a plasmid which expresses both subunit A and subunit B of LT. Preferred antigen: The antigen is a bacterial, fungal, protozoal, viral, helmenthic or other microbial pathogenic antigen, preferably Streptococcus pyogenes, S. pneumoniae, Neisseria gonorrhoea, N. meningitidis, Corynebacterium diptheriae, Clostridium botulinum, C. perfringens, C. tetani, Haemophilus influenzae, Klebsiella pneumoniae, K. ozaenae, K. rhinoscleromatis, Staphylococcus aureus, Vibrio cholerae, E. coli, Pseudomonas aeruginosa, Campylobacter (Vibrio) fetus, C. jejuni, Aeromonas hydrophila, Bacillus cereus, Edwardsiella tarda, Yersinia enterocolitica, Y. pestis, Y. pseudotuberculosis, Shigella dysenteriae, S. flexneri, S. sonnei, Salmonella typhimurium, Treponema pallidum, T. pertenuae, T. carateneum, Borrelia vincentii, Leptospira icterohemorrhagiae, Mycobacterium tuberculosis, Toxoplasma gondii, Pneumocystis carinii, Francisella tularensis, Brucella abortus, B. suis, B. melitensis, Mycoplasma spp., Rickettsia prowazeki, R. tsutsugumushi, Chlamydia spp., Helicobacter pylori, Coccidioides immitis, Aspergillus fumigatus, Candida albicans, Blastomyces dermatitidis, Cryptococcus neoformans, Histoplasma capsulatum, Entamoeba histolytica, Trichomonas tenax, T. hominis, T. vaginalis, Trypanosoma Cruzi, Leishmania donovani, L. tropica, L. braziliensis, Pneumocystis pneumonia, Enterobius vermicularis, Trichuris trichiura, Ascaris lumbricoides, Trichinella spiralis, Strongyloides stercoralis, Schistosoma japonicum, S. mansoni, S. haematobium, or variola, vaccinia, cowpox, varicella-zoster,</p>	TULANE EDUCATIONAL FUND (TULA)	WO9947167-A; WO9947167-A1; AU9930893-A; US6033673-A	US	1998

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
	Herpes Simplex 1 or 2, influenza, parainfluenza, respiratory syncytial, Hepatitis A, B, C or E, or non-A or non-B hepatitis virus, or measles, mumps or rubella antigen. Preferred immune response: The immune response is serum, cell-mediated, or mucosal.				
Leishmania <b>braziliensis</b> or L. major homologues of the eukaryotic ribosomal protein eIF4A.	NOVELTY - Leishmania <b>braziliensis</b> or Leishmania major homologues of the eukaryotic ribosomal protein eIF4A, designated LbeIF4A and LmeIF4A respectively, are new.	CORIXA CORP (CORI-Non-standard)	WO9929341-A; WO9929341-A2; AU9917249-A; US6013268-A; US6660840-B1	US	1994
New Leishmania <b>braziliensis</b> antigen LbeIF4A - useful for stimulating a Th1 immune response in peripheral blood mononuclear cells, and as a vaccine for treating Leishmaniasis.	NOVELTY - A new LbeIF4A polypeptide is encoded by a DNA sequence selected from: (a) nucleotides 115-1323 (I) of a 1618 bp sequence (full length genomic sequence of LbeIF4A); or (b) DNA sequences that hybridize to a nucleotide sequence complementary to (I), where the DNA sequence encodes a polypeptide that stimulates a Th1 immune response in peripheral blood mononuclear cells (PBMCs) obtained from Leishmania-infected individuals.	CORIXA CORP (CORI-Non-standard)	US5876966-A	US	1994



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Preparation of emulsion formulation used in food or feed and pharmaceutical products, etc. - comprises washing oil bodies from cell and formulating washed oil body preparation into emulsion.	<p>Preparation of an emulsion formulation comprises: (1) obtaining oil bodies from a cell; (2) washing the oil bodies to obtain a washed oil body preparation and (3) formulating the washed oil body preparation into an emulsion. Also claimed is the emulsion formulation.</p> <p>The cell is preferably a plant cell obtained from spores, pollen, seed or a vegetative plant organ, particularly seeds from an oil seed plant selected from rapeseed (<i>Brassica</i> spp.), soybean (<i>Glycine max</i>), sunflower (<i>Helianthus annuus</i>), oil palm (<i>Elaeis guineensis</i>), cottonseed (<i>Gossypium</i> spp.), groundnut (<i>Arachis hypogaea</i>), coconut (<i>Cocos nucifera</i>), castor (<i>Ricinus communis</i>), safflower (<i>Carthamus tinctorius</i>), mustard (<i>Brassica</i> spp. and <i>Sinapis alba</i>), coriander (<i>Coriandrum sativum</i>), squash (<i>Cucurbita maxima</i>), linseed/flax (<i>Linum usitatissimum</i>), <b>Brazil</b> nut (<i>Bertholletia excelsa</i>), jojoba (<i>Simmondsia chinensis</i>) and maize (<i>Zea mays</i>). The method comprises grinding plant seeds, removing solids from the ground seeds and separating the oil body phase from the aqueous phase. A liquid phase, preferably water, is added prior to or following the grinding step.</p>	<p>SEMBIOSYS GENETICS INC (SEMB-Non-standard); DECKERS H M (DECK-Individual); ROOIJEN G V (ROOI-Individual); BOOTHE J (BOOT-Individual); GOLL J (GOLL-Individual); MOLONEY M M (MOLO-Individual); DALMIA B K (DALM-Individual); SCHRYVERS A B (SCHR-Individual); ALCANTARA J (ALCA-Individual); HUTCHINS W A (HUTC-Individual); VAN ROOIJEN G (VROO-Individual)</p>	<p>WO9853698-A; EP986309-A; US6183762-B2; WO9853698-A1; AU9875178-A; ZA9804459-A; NO9905802-A; EP986309-A1; CN1258198-A; BR9809691-A; US6146645-A; US6183762-B1; US6210742-B1; KR2001013047-A; NZ501404-A; AU737896-B; JP2002503268-W; US2002037303-A1; US6372234-B1; US2002071846-A1; US2002071852-A1; US2002106337-A1; US2002114820-A1; IL132908-A; RU2200420-C2; TW505508-A; US6582710-B2; US6599513-B2; US6596287-B2; NO316731-B1; US6761914-B2; MX217186-B; CA2290278-A1; AU200185511-A; CA2290278-C; AU772919-B2</p>	US	1997

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Compositions comprising LbelF4A and LmelF4A polypeptide(s) and an antigen or DNA vaccine - elicits or enhances an immune response against a tumour in a patient.</p>	<p>A novel compsn. comprises an antigen or DNA vaccine and an LbelF4A or LmelF4A polypeptide comprising an amino acid sequence encoded by a DNA sequence selected from: (a) nucleotides 115-1323 of the 1618 bp sequence (I) of the Leishmania <b>braziliensis</b> homologue of the eukaryotic initiation factor 4A (eIF4A) or nucleotides 117-1325 of the 1867 bp sequence (II) of the Leishmania major homologue of eIF4A; and (b) DNA sequences which hybridise to the sequences of (a) under moderately stringent conditions; where the DNA sequence encodes a polypeptide that stimulates a Th1 immune response in peripheral blood mononuclear cells obtained from a Leishmania-infected individual, for use in the manufacture of a medicament for enhancing or eliciting an immune response to an antigen or DNA vaccine in a patient. Also claimed are: (1) an LbelF4A polypeptide encoded by (I); and (2) an LmelF4A polypeptide encoded by (II).</p>	<p>CORIXA CORP (CORI-Non-standard); REED S G (REED-Individual)</p>	<p>WO9639524-A; EP832236-A; WO9639524-A1; AU9659880-A; NO9705730-A; EP832236-A1; CN1194000-A; US5876735-A; US5879687-A; BR9608898-A; NZ309659-A; MX9709737-A1; KR99022654-A; JP2001503014-W; AU200055037-A</p>	<p>US</p>	<p>1994</p>

#### **4. TEMA: PROGRAMAS DE DESCOBERTA**

Dentre os termos relacionados ao tema, nos termos *clonagem*, *stem cells* e *engenharia genética* foram localizadas patentes cujos títulos, resumos, depositantes, números da patente, país de prioridade e ano de prioridade são apresentados na tabela a seguir.

## a. CLONAGEM

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
Isolated nucleic acid molecule encoding a cis-prenyltransferase enzyme for transfection of plant cells to alter rubber production has a sequence of nucleotides as that of found in natural rubber producing plant e.g. sunflower.	TECHNOLOGY FOCUS - BIOLOGY - Preferred Components: The host cell is selected from Taraxacum kok-saghyz (russian dandelion), Hevea <b>brasiliensis</b> (rubber tree), Parthenium argentatum (guayule), Helianthus spp. (sunflower), Nicotiana spp. (tobacco), Lycopersicon spp. (tomato), Solanum spp. (potato), Cannabis spp. (hemp), Sorghum vulgare (sorghum), Triticum spp. (wheat), Zea mays (maize), Oryza sativa (rice), Secale cereale (rye), Avena spp. (oats), Hordeum vulgare (barley), Brassica spp. (rapeseed), Vicia faba (broad bean), Phaseolus vulgaris (french bean), Vigna spp. (other bean species), Lens culinaris (lentil), Glycine max (soybean), Arabidopsis thaliana (arabidopsis), Gossypium hirsutum (cotton), Petunia hybrida (petunia), Linum usitatissimum (flax), Daucus carota sativa (carrot), Aspergillus, Saccharomyces, Pichia, Candida Hansenula, Bacillus, Escherichia, Salmonella and Shigella.	DU PONT DE NEMOURS & CO E I (DUPO)	WO2004044173-A2; AU2003295489-A1	US	2002
New vector comprising a nucleic acid, an E. coli and Actinomycetes origin of replication, a cos cosmid cloning site, and an origin of transfer, useful for expressing polypeptides and for manipulating Actinomycetes biosynthesis genes.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Vector: The vector comprises a sequence that permits passage of the vector from a first prokaryotic cell to a second prokaryotic cell by direct transfer. The direct transfer is by conjugation. The E. coli origin of replication is Co1E1 and the Actinomycetes origin of replication is pJV1. The first prokaryotic cell is E. coli. The second prokaryotic cell is Actinomycetes. The second prokaryotic cells is Acetobacter xylinum, Achrombacter parvulus, Acinetobacter spp., Aeromonas spp., Agrobacterium spp., Alcaligenes spp., Anabaena spp., Azospirillum <b>brazilense</b> , Azotobacter spp., Bordetella spp., Caulobacter spp., Enterobacteriaceae, Haemophilus influenza, Hypomicrobium X, Legionella pneumophila, Methylophilus methyltrophus, Ethylosinus trichosporium, Myxococcus xanthus, Neisseria spp., Paracoccus denitrificans, Pseudomonas spp., Rhizobium spp., Rhodopseudomonas spp., Rhodospirillum spp., Thiobacillus spp., Vibrio cholerae, Xanthomonas spp., Yersinia enterocolitica, Myxococcus or Bacteroides. The vector has a vector map. Preferred Method: In expressing a polypeptide in a prokaryotic cell, the expressed protein is encoded by a nucleic	WYETH (AMHP)	WO2003083087-A; WO2003083087-A1; US2003224484-A1; AU2003224802-A1	US	2002

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
	acid having a modified nucleotide sequence, where the expressed protein is a modified protein. The nucleic acid sequence comprises a modification comprising insertion of a heterologous nucleotide sequence, deletion of a nucleotide sequence or alteration of at least one nucleotide within the sequence. The nucleic acid encoding the protein is further incorporated into the second prokaryotic cell genome by homologous recombination.				
Novel promoter of soybean ( <i>Glycine max</i> ) useful for transforming plants, which is capable of transcribing heterologous nucleic acid sequences in seeds.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Sequence: In (II), (I) is operably linked to a second nucleic acid sequence which encodes a protein selected from zeins 7S protein, <b>brazil</b> nut protein, phenylalanine free protein, beta conglycinin, 11S protein, alpha-hordothionin, arcelin, seed storage protein, lectin and glutenin.	MONSANTO TECHNOLOGY LLC (MONS); WANG Q (WANG-Individual); DUBOIS P (DUBO-Individual); MONSANTO CO (MONS)	WO2003020016-A2; US2003093828-A1; EP1440151-A2; AU2002341829-A1; US6825398-B2	US	2001
Novel isolated nucleic acid molecule encoding isopentenyl diphosphate, IPP, pathway enzyme, useful for obtaining nucleic acid molecule encoding IPP pathway enzyme, and for regulating IPP biosynthesis in organism.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Host Cell: (IX) is chosen from bacteria, yeast, filamentous fungi, algae and green plants. Preferably, the host cell is <i>Aspergillus</i> , <i>Trichoderma</i> , <i>Saccharomyces</i> , <i>Pichia</i> , <i>Candida</i> , etc, or is a rubber tree ( <i>Hevea brasiliensis</i> ), tobacco ( <i>Nicotiana</i> spp.), tomato ( <i>Lycopersicon</i> spp.), potato ( <i>Solanum</i> spp.), hemp ( <i>Cannabis</i> spp.), etc.	DU PONT DE NEMOURS & CO E I (DUPO); HALLAHAN D L (HALL-Individual); KEIPER-HRYNKO N M (KEIP-Individual)	WO2003010294-A; WO2003010294-A2; US2003119098-A1; EP1434784-A2; AU2002355297-A1; MX2004000645-A1	US	2001
New DNA construct, useful for controlling the ripening of papaya fruit and conferring resistance to papaya ringspot virus coat in transgenic plants.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred DNA: The DNA construct further comprises an operably linked heterologous DNA promoter, and an operably linked 3' regulatory region. One or more of the DNA molecules are in the sense (5'-3') orientation. The DNA molecules are inserted in the antisense (3'-5') orientation. The DNA molecules encode a non-translatable RNA. One or more of the DNA molecules are selected from the group of the variable regions and conserved regions of the DNA molecules. The DNA molecule that encodes a protein or polypeptide that controls papaya fruit ripening is selected from a group of a beta-galactosidase, a pectinmethylesterase, a polygalacturonase, or their combinations. The papaya ringspot virus coat protein DNA molecule is derived from a gene encoding	CORNELL RES FOUND INC (CORR); PAIS M S S (PAIS-Individual); GONSALVES D (GONS-Individual); BALDE A (BALD-Individual); CHIANG C (CHIA-Individual)	WO200282889-A; WO200282889-A1; US2003204869-A1; AU2002307320-A1	US	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
	<p>a papaya ringspot virus coat protein in a papaya ringspot virus strain selected from the group of Thailand (TH), Kapoho (KA), Mexico (ME), Taiwan (YK), <b>Brazil</b> (BR), Jamaica (JA), Oahu (OA), Venezuela (VE), or their combinations. Preferred Host Cell: The cell is selected from the group of a bacterial cell, a virus, a yeast cell, and a plant cell, where the cell is preferably a plant cell, particularly papaya. Preferred Transgenic Plant: The plant is preferably papaya. Preferred Method: The DNA construct promotes or delays ripening of papaya fruit. Resistance is conferred to a papaya ringspot virus strain selected from the group of TH, KA, ME, YK, BR, JA, OA, and VE. The plant cell transformed is a papaya plant cell.</p>				
<p>Expressing somatotropin in plants, for use in e.g. the aquaculture industry, comprises expressing nucleic acid encoding somatotropin linked to nucleic acid encoding oleosin protein to target the fusion polypeptide to the lipid phase.</p>	<p>TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: (M1) further involves separating (II) from cellular host cell components by selective partitioning into a lipid phase that comprises oil bodies. Preferably, (II) is separated by addition of oil body components and reconstitution of the oil bodies. Preferred Plant: (IV) is rape seed (<i>Brassica</i> spp.), linseed/flax (<i>Linum usitatissimum</i>), safflower (<i>Carthamus tinctorius</i>), sunflower (<i>Helianthus annuus</i>), maize (<i>Zeamays</i>), soybean (<i>Glycine max</i>), mustard (<i>Brassica</i> spp.) and (<i>Sinapis alba</i>), crambe (<i>Crambe abyssinica</i>), eruca (<i>Erucasativa</i>), oil palm (<i>Elaeis guineensis</i>), cottonseed (<i>Gossypium</i> spp.), groundnut (<i>Arachis hypogaea</i>), coconut (<i>Cocusnucifera</i>), castor bean (<i>Ricinus communis</i>), coriander (<i>Coriandrum sativum</i>), squash, (<i>Cucurbita maxima</i>), <b>Brazil</b> nut (<i>Bertholletia excelsa</i>) or jojoba (<i>Simmondsia chinensis</i>). Preferred Seed: (V) is obtained from a dicotyledonous plant, where the somatotropin is expressed in the embryogenic tissue of the seed. In (VI), the somatotropin is expressed as a fusion protein. The fusion protein preferably comprises somatotropin and oleosin, and is expressed in the embryogenic tissue of the seed. (VI) is preferably obtained from a dicotyledonous plant as described above, and is an exalbuminous seed. Preferred Fusion Polypeptide: In (VII), the somatotropin is biologically active. (VII) has a fully defined sequence of 366 amino acids, given in the specification. Preferred Nucleic Acid: (III) has a sequence of 1101 nucleotides, given in the specification.</p>	<p>MOLONEY M M (MOLO-Individual); HABIBI H R (HABI-Individual)</p>	<p>US2002100073-A1</p>	<p>US</p>	<p>1991</p>

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
New isolated nucleic acid representing a synthetic BAX-gene, useful as medicament for treating, preventing and/or alleviating yeast or fungal infections or proliferative disorders, or for preventing apoptosis in certain diseases.	The disease is associated with yeast or fungi selected from <i>Candida</i> spp., <i>Aspergillus</i> spp., <i>Microsporum</i> spp., <i>Trichophyton</i> spp., <i>Fusarium</i> spp., <i>Zygomycetes</i> spp., <i>Botritis</i> spp., <i>Cladosporium</i> spp., <i>Malassezia</i> spp., <i>Epidermophyton floccosum</i> , <i>Blastomyces dermatitidis</i> , <i>Coccidioides immitis</i> , <i>Histoplasma capsulatum</i> , <i>Paracoccidioides brasiliensis</i> , <i>Cryptococcus neoformans</i> , and <i>Sporothrix schenckii</i> . Identifying compounds for stimulating or inhibiting apoptosis comprises the use of at least one of (IV) or its human homologue and/or at least one of (III) or its human homologue and/or the genetically modified mammalian cell or non-human organism.	JANSSEN PHARM NV (JANC); CONTRERAS R H (CONT-Individual); EBERHARDT I (EBER-Individual); REEKMANS R J (REEK-Individual)	WO200264766-A2; EP1346044-A2; AU2002249105-A1; US2004161840-A1	EP	2000
New tissue specific plant promoter, specifically for <i>Lolium perenne</i> cinnamoyl CoA:NADP oxidoreductase, useful for manipulating lignin biosynthesis in plants or regulating gene expression in lignin-producing tissues of plants.	The plant also includes <i>Dactylis glomerata</i> , <i>Poa palustris</i> , <i>P. pratensis</i> , <i>Bromus catharticus</i> , <i>B. sitchensis</i> or <i>Miscanthus</i> spp. The transgenic plant also includes woody species such as <i>Populus</i> spp., <i>Eucalyptus</i> spp., <i>Hevea</i> spp. (e.g. <i>H. brasiliensis</i> ), <i>Quercus</i> spp., <i>Betula</i> spp., <i>Fagus</i> spp., <i>Fraxinus</i> spp., <i>Ulmus</i> spp., <i>Liriodendron</i> spp., <i>Liquidambar</i> spp. or <i>Robinia</i> spp.. The gymnosperm includes conifers such as <i>Pinus</i> spp. (e.g. <i>P. taeda</i> , <i>P. radiata</i> , <i>P. silvestris</i> , <i>P. lambertiana</i> , <i>P. elliotii</i> , <i>P. palustris</i> ), <i>Picea</i> spp. (e.g. <i>P. abies</i> , <i>P. rubra</i> , <i>P. stichensis</i> , <i>P. mariana</i> , <i>P. glauca</i> ), <i>Larix</i> spp. (e.g. <i>L. leptolepis</i> , <i>L. decidua</i> , <i>L. occidentalis</i> , <i>L. laricina</i> ), <i>Abies</i> spp. (e.g. <i>A. grandis</i> , <i>A. fraserii</i> , <i>A. concolor</i> , <i>A. procera</i> , <i>A. balsamea</i> ), <i>Pseudotsuga</i> spp. (e.g. <i>P. menziesii</i> ), <i>Tsuga</i> spp., <i>Thuja</i> spp.	DANMARKS JORDBRUGSFORSKNING (DAJO-Non-standard)	WO200250294-A; WO200250294-A1; AU200221582-A	DK	2000
Transgenic plants for the farming industry and for providing somatotropins such as fish growth hormone, comprise a chimeric nucleic acid encoding a somatotropin and an oleosin fragment.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred somatotropin: Preferably the somatotropin is a fish growth hormone, more preferably carp growth hormone. Preferably plant: The transformed plant is preferably rapeseed, linseed, safflower, sunflower, maize, soybean, mustard, crambe, eruca, oil palm, cottonseed, groundnut, coconut, castor bean, coriander, squash, <b>brazil</b> nut or jojoba. Preferred plant seed: The seed is preferably from a dicot plant where the somatotropin is expressed in the embryogenic tissue and is fish growth hormone.	SEMBIOSYS GENETICS INC (SEMB-Non-standard)	US6288304-B1	US	1991
New cotton cells expressing heterologous genes for pest resistance.	The hevein ( <i>Hevea brasiliensis</i> ) coding region (HEV1) was ligated to plant cloning vector pGA643 which contains the CaMV 35S promoter. PGA643 can be obtained from Dr. N. Raikhel, MSU-DOE Plant Research Lab, Michigan State University, MI,	YENOFSKY R L; FINE M; RANGAN T S; ANDERSON D M	WO9961635-A; EP1080214-A; WO9961635-A2; AU9943172-A;	US	1998

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
	48824. The plasmid was transformed into cotton cell suspensions, grown and selected for positive colonies using ELISA. Positive cell cultures were incubated with newly hatched corn ear worm larvae, and after 7 days the average larval weight increase was 95% of the controls.		BR9910777-A; EP1080214-A2; CN1303441-A; ZA200006380-A; MX2000011754-A1; AU750527-B; US2004016019-A1; US6710228-B1		

## b. STEM CELLS

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
Generating a population of dendritic cells, useful for inducing protective immune response against infections, cancers or autoimmune diseases by culturing or expanding CD34+ precursor cells in the presence of one or more cytokines.	The fungi is selected from Acremonium spp., Aspergillus spp., Basidiobolus spp., Bipolaris spp., Blastomyces dermatidis, Candida spp., Cladophialophora carrionii, Coccidioides immitis, Conidiobolus spp., Cryptococcus spp., Curvularia spp., Epidermophyton spp., Exophiala jeanselmei, Exserohilum spp., Fonsecaea compacta, Fonsecaea pedrosoi, Fusarium Oxysporum, Fusarium solani, Geotrichum candidum, Histoplasma capsulatum var. capsulatum, Histoplasma capsulatum var. duboisii, Hortaea werneckii, Lacazia loyai, Lasiodiplodia theobromae, Leptosphaeria senegalensis, Madurella grisea, Madurella mycetomatis, Malassezia furfur, Microsporum spp., Neotestudina rosatii, Onychocola Canadensis, Paracoccidioides brasiliensis, Phialophora verrucosa, Piedra ia hortae, Piedra ia hortae, Pityriasis versicolor, Pseudallesheria boydii, Pyrenochaeta romeroi, Rhizopus arrhizus, Scopulariopsis brevicaulis, Scytalidium dimidiatum, Sporothrix schenckii, Trichophyton spp., Trichosporon spp., Zygomycete fungi, Absidia corymbifera, Rhizomucor pusillus and Rhizopus arrhizus. The bacteria are selected from Bacillus anthracis, Bordetella pertussis, Vibrio cholerae, Escherichia coli, Shigella dysenteriae, Clostridium perfringens, Clostridium botulinum, Clostridium tetani, Corynebacterium diphtheriae, Pseudomonas aeruginosa, Bacillus anthracis, Bordetella Pertussis, Staphylococcus aureus and Streptococcus pyogenes.	CORP ORDER SISTERS OF MERCY IN QUEENSLAN (ORDE-Non-standard); ORDER OF SISTERS OF MERCY IN QUEENSLAND (ORDE-Non-standard)	WO2004020613-A1; AU2003254412-A1	AU	2002



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAIS PRIOR.	ANO PRIOR.
<p>Modifying plant morphological, biochemical and/or physiological traits, e.g. enhancing grain yield, by expressing Cdc25 phosphoprotein phosphatase in the plant operably under the control of a regulatable promoter sequence.</p>	<p>The regulatable promoter sequence comprises:(i) a cinnamoyl alcohol dehydrogenase gene promoter sequence;(ii) a laccase gene promoter sequence;(iii) a cellulose synthase gene promoter sequence; or(iv) a xyloglucan endotransglucosylase. Preferably, the promoter sequence is the auxin-inducible SAUR or the rolB promoter sequence. Specifically, the woody plant is Eucalyptus spp., Populus spp., Quercus spp., Acer, Juglans spp., Fagus spp., Acacia spp. or teak. The expression of Cdc25 under the control of a regulatable promoter sequence that is operable in the seed (preferably the endosperm of the seed) of a plant, or the cell , tissue or organ of the seed, will result in modified characteristics consisting of:(i) enhanced seed set and size;(ii) enhanced grain yield; or(iii) enhanced endoreduplication in the seed of the plant. The regulatable promoter comprises a promoter sequence of the following genes: barley Amy32b, a Cathepsin beta-like gene, wheat ADP-glucose pyrophosphorylase, maize zein, rice glutelin, legumin, NapA, <b>Brazil</b> Nut albumin, pea vicilin, sunflower oleosin, barley ltr1 gene, or barley Hor2. The regulatable promoter sequence may also comprise a rice prolamin NRP33 promoter sequence, or a synthetic promoter that contains a rice REB gene promoter sequence.</p>	<p>CROPDESIGN NV (CROP-Non-standard); UNIV AUSTRALIAN NAT (AUSU)</p>	<p>WO200052171-A; WO200052171-A1; AU200027859-A</p>	<p>US</p>	<p>1999</p>

## c. ENGENHARIA GENÉTICA

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Yeast and fungal nucleic acids encoding proteins involved in a pathway leading to programmed cell death, useful for treating proliferative disorders, yeast and fungal infections, or for preventing apoptosis in certain diseases.</p>	<p>The nucleic acids, polypeptides, antibodies and compounds which bind to and modulate the expression or functionality of the polypeptides are useful for preparing medicaments for treating diseases associated with yeast and fungi infections, such as diseases caused by <i>Candida</i> spp. (especially <i>C. albicans</i> when using antibodies as a medicament), <i>Aspergillus</i> spp., <i>Microsporum</i> spp., <i>Trichophyton</i> spp., <i>Fusarium</i> spp., <i>Zygomycetes</i> spp., <i>Botritis</i> spp., <i>Cladosporium</i> spp., <i>Malassezia</i> spp., <i>Epidermophyton floccosum</i>, <i>Blastomyces dermatitidis</i>, <i>Coccidioides immitis</i>, <i>Histoplasma capsulatum</i>, <i>Paracoccidioides brasiliensis</i>, <i>Cryptococcus neoformans</i> or <i>Sporothrix schenckii</i>. The genetically modified yeast or fungus is useful in the preparation of a medicament for modifying endogenic flora of humans and other mammals. They are also useful for treating proliferative disorders or for preventing apoptosis in certain diseases (all claimed). The medicaments are useful for treating humans and plants having the yeast or fungal infections. The nucleic acids and polypeptides represent potential targets for the identification of new compounds which can be used in alleviating diseases or conditions associated with yeast or fungal infections.</p>	<p>JANSSEN PHARM NV (JANC)</p>	<p>WO200102550-A; EP1196635-A; WO200102550-A2; AU200057984-A; NO200200011-A; EP1196635-A2; JP2003504013-W; KR2003000012-A; NZ515568-A; ZA200110481-A</p>	<p>EP</p>	<p>1999</p>

## 5. TEMA: SUSTENTABILIDADE AMBIENTAL

Para este tema não foram localizadas patentes que citam explicitamente o Brasil no título/resumo. Dentre os termos relacionados ao tema, nos termos *OGM* e *Controle Biológico* foram localizadas patentes, cujos títulos, resumos, depositantes, números da patente, país de prioridade e ano de prioridade são apresentados na tabela a seguir.

## a. TERMO: OGM

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Novel isolated nucleic acid molecule encoding isopentenyl diphosphate, IPP, pathway enzyme, useful for obtaining nucleic acid molecule encoding IPP pathway enzyme, and for regulating IPP biosynthesis in organism.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Host Cell: (IX) is chosen from bacteria, yeast, filamentous fungi, algae and green plants. Preferably, the host cell is Aspergillus, Trichoderma, Saccharomyces, Pichia, Candida, etc, or is a rubber tree ( <i>Hevea brasiliensis</i> ), tobacco ( <i>Nicotiana</i> spp.), tomato ( <i>Lycopersicon</i> spp.), potato ( <i>Solanum</i> spp.), hemp ( <i>Cannabis</i> spp.), etc.	DU PONT DE NEMOURS & CO E I (DUPO); HALLAHAN D L (HALL-Individual); KEIPER-HRYNKO N M (KEIP-Individual)	WO2003010294-A; WO2003010294-A2; US2003119098-A1; EP1434784-A2; AU2002355297-A1; MX2004000645-A1	US	2001
New DNA construct, useful for controlling the ripening of papaya fruit and conferring resistance to papaya ringspot virus coat in transgenic plants.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred DNA: The DNA construct further comprises an operably linked heterologous DNA promoter, and an operably linked 3' regulatory region. One or more of the DNA molecules are in the sense (5'-3') orientation. The DNA molecules are inserted in the antisense (3'-5') orientation. The DNA molecules encode a non-translatable RNA. One or more of the DNA molecules are selected from the group of the variable regions and conserved regions of the DNA molecules. The DNA molecule that encodes a protein or polypeptide that controls papaya fruit ripening is selected from a group of a beta-galactosidase, a pectinmethylesterase, a polygalacturonase, or their combinations. The papaya ringspot virus coat protein DNA molecule is derived from a gene encoding a papaya ringspot virus coat protein in a papaya ringspot virus strain selected from the group of Thailand (TH), Kapoho (KA), Mexico (ME), Taiwan (YK), <b>Brazil</b> (BR), Jamaica (JA), Oahu (OA), Venezuela (VE), or their combinations. Preferred Host Cell: The cell is selected from the group of a bacterial cell, a virus, a yeast cell, and a plant cell, where the cell is preferably a plant cell, particularly papaya. Preferred Transgenic Plant: The plant is preferably papaya. Preferred Method: The DNA construct promotes or delays ripening of papaya fruit. Resistance is conferred to a papaya ringspot virus strain selected from the group of TH, KA, ME, YK, BR, JA, OA, and VE. The plant cell transformed is a papaya plant cell.	CORNELL RES FOUND INC (CORR); PAIS M S S (PAIS-Individual); GONSALVES D (GONS-Individual); BALDE A (BALD-Individual); CHIANG C (CHIA-Individual)	WO200282889-A; WO200282889-A1; US2003204869-A1; AU2002307320-A1	US	2001

## b. TERMO: CONTROLE BIOLÓGICO

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New multivalent vaccine comprising one or more heat-inactivated fungal pathogens, useful for treating and preventing fungal infections, and for inducing immunity to fungal pathogens.	TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Vaccine: The antigen is derived from Epidermophyton floccosum, Microsporum audouini, M. canis, M. distortum, M. equinum, M. gymsum, M. nanum, Trichophyton centricum, T. equinum, T. gallinae, T. gypseum, T. megnin, T. mentragrophytes, T. quinckeanum, T. rubrum, T. schoenleini, T. tonsurans, T. verrucosum, T. verrucosum var. album, var. discoides, var. ochraceum, T. violaceum, and/or T. faviforme, Aspergillus fumigatus, A. flavus, A. niger, A. nidulans, A. terreus, A. sydowi, A. flavatus, A. glaucus, Blastoschizomyces capitatus, Candida albicans, C. enolase, C. tropicalis, C. glabrata, C. krusei, C. parapsilopsis, C. stelatoidea, C. kusei, C. parakwsei, C. lusitaniae, C. pseudotropicalis, C. guilliermondi, C. carrionii, Coccidioides immitis, Blastomyces dermatidis, Cryptococcus neoformans, Geotrichum clavatum, Histoplasma capsulatum, Klebsiella pneumoniae, Paracoccidioides <b>brasiliensis</b> , Pneumocystis carinii, Pythium insidiosum, Pityrosporum ovale, Saccharomyces cerevisiae, S. boulardii, S. pombe, Scedosporium apiosperum, Sporothrix schenckii, Trichosporon beigeli, Toxoplasma gondii, Penicillium marneffeii, Malassezia spp., Fonsecaea spp., Wangiella spp., Sporothrix spp., Basidiobolus spp., Conidiobolus spp., Rhizopus spp., Mucos spp., Absidia spp., Mortierella spp., cunninghamella spp. or Saksenaea spp.. The inactivated pathogen of the oral vaccine is a fungus or its part. Preferred Immunogen: The immunogen is administered to the host without an immune adjuvant. The immune response is directed against fungal infection. The amount of immunogen comprised in the pill is 0.0000001-20 % by weight.	JIRA V (JIRA-Individual); JIRATHITIKAL V (JIRA-Individual)	WO2003018051-A; US2003039667-A1; WO2003018051-A1; AU2002326766-A1	US	2001

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Composition for treating soil or seeds, useful e.g. for improving plant growth and soil structure, is mixture of specific microorganisms.	DETAILED DESCRIPTION - Preparation (A) for treating soil or seeds contains at least one live microorganism (B) that can propagate in different types of soil in the environment of a plant and a wet or dry carrier. (B) is 5x10 <sup>0000</sup> -10 <sup>11</sup> , particularly 10 <sup>7</sup> -10 <sup>10</sup> , cells/g of at least one of <i>Azospirillum brasiliense</i> ssp. SW51; <i>Azobacter vinelandi</i> ssp. M657; <i>Pseudomonas fluorescens</i> var. SW11; <i>Bacillus polymyxa</i> var. SW17; <i>Bacillus megaterium</i> var. M326; <i>Micrococcus roseus</i> ssp. A21; <i>Bradyrhizobium japonicum</i> var. PH25 and/or <i>Streptomyces album</i> var. 0003LP, deposited as NCAIM/P/B 001293; 001292; 001296; 001295; 001291; 001294; 001302 and 001301, respectively. These are able to grow at low temperatures, preferably below 20 degrees C, and low pH, preferably below pH 5.0.	AGRO BIO HUNGARY KFT (AGRO-Non-standard); BIOFIL KFT (BIOF-Non-standard); AGRO.BIO HUNGARY KFT (AGRO-Non-standard)	WO2003016241-A; WO2003016241-A1; HU200103294-A1; AU2002321675-A1; KR2004032915-A; BR200211920-A	HU	2001
Microbial medium for growing agronomically beneficial microbes to preset density such as <i>Azospirillum</i> , comprises aqueous extract of legumes prepared by boiling legumes in water and removing solids.	For growing agronomically beneficial microbes such as <i>Azospirillum</i> , <i>Bacillus</i> , <i>Pseudomonas</i> , <i>Rhizobia</i> , phototrophic and cellulose degrading bacteria, <i>Clostridium</i> , <i>Trichoderma</i> , <i>Azospirillum brasiliense</i> and <i>Azospirillum brasilense</i> SAB MKB NRRL B-30082 and B-30081 strains.	TATKO BIOTECH INC (TATK-Non-standard)	US6468779-B1	US	1998
Biocontrol composition useful for inhibiting development of plant pathogenic diseases such as Fusarium Head Blight, comprises a mixture of microorganisms e.g. <i>Pantoea</i> agglomerans and <i>Bacillus megaterium</i> , and a carrier.	NOVELTY - A biocontrol composition (I) comprises a mixture of at least 1 microorganism (especially a bacteria e.g. <i>Pantoea</i> agglomerans and <i>Bacillus megaterium</i> ) which is an antagonist against plant pathogens and a carrier for the microorganism (the microorganism is present in an amount effective for inhibiting plant pathogen development), is new.	EMPRESA BRASIL PESQUISA AGROPECUARIA (EMPR-Non-standard);	US2002119124-A1; BR200009629-A; US6599503-B2	BR	2000

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Selective biological control of microorganisms.	<p>TECHNOLOGY FOCUS - BIOLOGY - Preferred Microorganism: The preferred (M1) is a fungus preferably pathogenic and is selected from the (S) Absidia, Actinomadura madurae, Actinomyces, Allescheria boydii, Alternaria, Anthopsis deltoidea, Aphanomyces , Apophysomyces elegans, Armillaria , Arnium leoporinum, Aspergillus , Aureobasidium pullulans, Basidiobolus ranarum, Bipolaris , Blastomyces dermatitidis, Botrytis , Candida , Centrospora , Cephalosporium , Ceratocystis , Chaetoconidium , Chaetomium , cladosporium , Coccidioides immitis, Colletotrichum , Conidiobolus , Corynebacterium tenuis, Cryptoporiopsis , Cyllindrocladium , Cryptococcus , Cunninghamella bertholletiae, Curvularia , Dactylaria , Diplodia , Epidermophyton , Epidermophyton floccosum, Exserophilum , Exophiala , Fonsecaea , Fulvia , Fusarium , Geotrichum, Guignardia , Helminthosporium , Histoplasma , Lecythophora , Macrophomina , Madurella , Magnaporthe , Malassezia furfur, Microsporum , Monilinia , Mucor , Mycoentrospora acerina, Nectria , Nocardia , Oospora , Ophiobolus , Paecilomyces , Paracoccidioides <b>brasiliensis</b>, Pencillium , Phaeosclera dematioides, Phaeoannellomyces , Phialemonium obovatum, Phialophora , Phlyctaena , Phoma , Phomopsis , Phymatotrichum , Phytophthora , Pythium , Piedraia hortai, Pneumocystis carinii, Puccinia , Pythium insidiosum, Rhinocladiella aquaspersa, Rhizomucor pusillus, Rhizoctonia , Rhizopus , Saccharomyces , Saksenaea vasiformis, Sarcinomyces phaeomuriformis, Scerotium , Sclerotinia , Sphaerotheca , Sporothrix schenckii, Syncephalastrum racemosum, Taeniocella boppii, Taphrina , Thielaviopsis , Torulopsis , Trichophyton , Trichosporon , Ulocladium chartarum, Ustilago , Venturia , Verticillium , Wangiella dermatitidis, Whetzelinia , and Xylohypha and their synonyms.</p>	MICROBIA INC (MICR-Non-standard); WHITEHEAD INST BIOMEDICAL RES (WHED)	WO9953762-A; EP1071334-A; WO9953762-A1; AU9936443-A; EP1071334-A1; JP2002512007-W; US6440409-B1; AU763134-B	US	1998

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
<p>Microorganism raw material for crop cultivation - contains predetermined amount of water component and <i>Azospirillum brasilense</i> in a carrier.</p>	<p>TECHNOLOGY FOCUS - BIOLOGY - Preferred Microorganism: The preferred (M1) is a fungus preferably pathogenic and is selected from the (S) <i>Absidia</i>, <i>Actinomadura madurae</i>, <i>Actinomyces</i>, <i>Allescheria boydii</i>, <i>Alternaria</i>, <i>Anthopsis deltoidea</i>, <i>Aphanomyces</i>, <i>Apophysomyces elegans</i>, <i>Armillaria</i>, <i>Arnium leoporinum</i>, <i>Aspergillus</i>, <i>Aureobasidium pullulans</i>, <i>Basidiobolus ranarum</i>, <i>Bipolaris</i>, <i>Blastomyces dermatitidis</i>, <i>Botrytis</i>, <i>Candida</i>, <i>Centrospora</i>, <i>Cephalosporium</i>, <i>Ceratocystis</i>, <i>Chaetoconidium</i>, <i>Chaetomium</i>, <i>cladosporium</i>, <i>Coccidioides immitis</i>, <i>Colletotrichum</i>, <i>Conidiobolus</i>, <i>Corynebacterium tenuis</i>, <i>Cryptoporiopsis</i>, <i>Cylindrocladium</i>, <i>Cryptococcus</i>, <i>Cunninghamella bertholletiae</i>, <i>Curvularia</i>, <i>Dactylaria</i>, <i>Diplodia</i>, <i>Epidermophyton</i>, <i>Epidermophyton floccosum</i>, <i>Exserophilum</i>, <i>Exophiala</i>, <i>Fonsecaea</i>, <i>Fulvia</i>, <i>Fusarium</i>, <i>Geotrichum</i>, <i>Guignardia</i>, <i>Helminthosporium</i>, <i>Histoplasma</i>, <i>Lecythophora</i>, <i>Macrophomina</i>, <i>Madurella</i>, <i>Magnaporthe</i>, <i>Malassezia furfur</i>, <i>Microsporum</i>, <i>Monilinia</i>, <i>Mucor</i>, <i>Mycocentrospora acerina</i>, <i>Nectria</i>, <i>Nocardia</i>, <i>Oospora</i>, <i>Ophiobolus</i>, <i>Paecilomyces</i>, <i>Paracoccidioides brasiliensis</i>, <i>Pencillium</i>, <i>Phaeosclera dematioides</i>, <i>Phaeoannellomyces</i>, <i>Phialemonium obovatum</i>, <i>Phialophora</i>, <i>Phlyctaena</i>, <i>Phoma</i>, <i>Phomopsis</i>, <i>Phymatotrichum</i>, <i>Phytophthora</i>, <i>Pythium</i>, <i>Piedraia hortai</i>, <i>Pneumocystis carinii</i>, <i>Puccinia</i>, <i>Pythium insidiosum</i>, <i>Rhinocladiella aquaspersa</i>, <i>Rhizomucor pusillus</i>, <i>Rhizoctonia</i>, <i>Rhizopus</i>, <i>Saccharomyces</i>, <i>Saksenaea vasiformis</i>, <i>Sarcinomyces phaeomuriformis</i>, <i>Scerotium</i>, <i>Sclerotinia</i>, <i>Sphaerotheca</i>, <i>Sporothrix schenckii</i>, <i>Syncephalastrum racemosum</i>, <i>Taeniocella boppii</i>, <i>Taphrina</i>, <i>Thielaviopsis</i>, <i>Torulopsosis</i>, <i>Trichophyton</i>, <i>Trichosporon</i>, <i>Ulocladium chartarum</i>, <i>Ustilago</i>, <i>Venturia</i>, <i>Verticillium</i>, <i>Wangiella dermatitidis</i>, <i>Whetzelinia</i>, and <i>Xylohypha</i> and their synonyms.</p>	<p>IDEMITSU KOSAN CO LTD (IDEK)</p>	<p>JP11266857-A</p>	<p>JP</p>	<p>1998</p>



TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Microbial inoculant useful for improving soil quality and increasing plant production.	NOVELTY - A microbial inoculant (I) comprising <i>Azospirillum brasilense</i> SAB MKB effective for application to a plant or soil is new.	TATKO BIOTECH INC (TATK-Non-standard)	WO200034440-A; US5951978-A; WO200034440-A1; AU200019349-A; EP1135462-A1; BR9916134-A; JP2002531117-W; MX2001005785-A1	US	1998
Disease control composition for gramineous crops - comprises microorganisms of genus <i>Chaetomium</i> .	<p>Composition used to control diseases in gramineous crops comprises microorganisms of genus <i>Chaetomium</i>. Also claimed are the control of diseases in gramineous crops by spraying the composition on gramineous crop plants and strains of genus <i>Chaetomium</i> capable of controlling diseases in gramineous crops.</p> <p>The composition preferably contains cell bodies and/or metabolites of microorganisms of genus <i>Chaetomium</i> that have the capability to control diseases in crops of family Gramineaceae. The microorganisms are <i>Chaetomium brasiliense</i> JT-866, <i>C. cochlioides</i> JT-867, <i>C. spirale</i> JT-868 and/or <i>C. globosum</i> JT-869. The strains, aerobic ascomycetes, can be cultured at 15-33 (preferably 23-25)C, at pH 3-10 (preferably 5-7), for 2-3 weeks. The cell bodies and/or metabolites can be used directly, or prepared as liquid, wettable powder, powder, granule or emulsion using solid or liquid carriers.</p>	JAPAN TOBACCO INC (NISB)	JP10001407-A	JP	1996

TÍTULO DA PATENTE	RESUMO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Microorganism formulation for promoting growth of Leguminosae plant - contains Azospirillum <b>brasilense</b> NI-10 strain and root nodule bacteria.	<p>Microorganism formulation for Leguminosae plant contains Azospirillum <b>brasilense</b> NI-10 strain and root nodule bacteria.</p> <p>The ratio of the number of cells of Azospirillum <b>brasilense</b> NI-10 strain and that of the root nodule bacteria is pref. 0.1-10. 105-1012 cells of Azospirillum <b>brasilense</b> NI-10 strain and root nodule bacteria are pref. contained in 1g of the formulation. The water content in the formulation is pref. 5-97 wt.%.</p> <p>ADVANTAGE - The microorganism formulation has good growth promoting effect and prod. weight increasing effect for Leguminosae plant.</p>	IDEMITSU KOSAN CO LTD (IDEK)	JP8109109-A; JP3574686-B2	JP	1994
Microorganisms for culturing tomato growth stimulation of tomatoes - involves adding Azospirillum microorganism obtd. by culturing rhizosphere microorganisms in nitrogen-free medium.	<p>Culture soln. of tomato contains Azospirillum genera microorganisms, partic. Azospirillum <b>brasilense</b>, esp. NI-6 (FERM P-13585), NI-8 (FERM P-13586), NI-9 (FERM P-13587), or NI-10 (FERM P-13588) strains, isolated by culturing rhizosphere microorganisms in nitrogen-free medium; screening nitrogenase active and forming red colonies in Congo red contg. medium, and g growth stimulative for tomato, in culture medium.</p>	NORINSUISANSHO NOGYO SEIBUTSU SHIGEN (NORQ); IDEMITSU KOSAN CO LTD (IDEK)	JP6311826-A	JP	1993

### III. Patentes depositadas no Brasil

A tabela a seguir mostra a frequência das patentes depositadas no Brasil para os temas e termos deste estudo.

TEMAS/TERMOS		Depositadas no Brasil
TEMA: Biodiversidade/ Bioprospecção		
Termos da Biodiversidade/ Bioprospecção	Fitomedicamentos	4
TEMA: Bioeconomia		1
TEMA: Bioindústria		72
Termos da Bioindústria	<i>Designing</i>	3
TEMA: Biorremediação		2
TEMA: Certificação de qualidade biológica		
Certificação de qualidade biológica	Coleções certificadas	1
TEMA: Fertilidade e reprodução animal		
Termos da Fertilidade e reprodução animal	Clonagem	3
TEMA: Integração: alimentação, nutrição e saúde		3
Termos da Integração: alimentação, nutrição e saúde	Nutracêuticos (Alimentos Funcionais)	7
	Produção de Vacinas em Plantas e Animais	7
TEMA: Programas de Descoberta		
Termos da Programas de Descoberta	Clonagem	25
	<i>Stem Cells</i>	32
	Engenharia Genética	9
	Nanobiotecnologia	1
TEMA: Sustentabilidade Ambiental		
Termos da Sustentabilidade Ambiental	Bioinseticidas	69
	Biofungicidas	13

## 1. TEMA: BIODIVERSIDADE/BIOPROSPECÇÃO

Para o tema Biodiversidade/Bioprospecção não foram localizadas patentes depositadas no Brasil. Dentre os termos relacionados ao tema, no termo *fitomedicamentos* foram localizadas 4 patentes depositadas no Brasil, cujos títulos, depositantes, números da patente, país de prioridade e ano de prioridade são apresentados na tabela a seguir.

### a. TERMO: FITOMEDICAMENTOS

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Preparing a phytotherapeutic composition for treating Alzheimer's disease by processing asclepiadacea fruit, gives a high rate of symptom remission.	CHEMAS R C (CHEM-Individual)	<b>BR200004807-A</b>	BR	2000
Phytotherapeutical compound for treatment of venous ulcer and is formed from substances extracted from herbs and/or medicinal plants.	DARC DE ALVARENGA J (DALV-Individual)	<b>BR200106527-A</b>	BR	2001
Phytotherapeutic formula for neoplasia treatment, comprises a composition preventing new tumor formation.	SOC ESPIRITA NUNES MARIA (ESPI-Non-standard)	<b>BR200203084-A</b>	BR	2002
Hyposensitizing phytotherapeutic breathing aid - comprises medicine extracted from resin of cordia.	TEIXEIRA J P (TEIX-Individual)	<b>BR9801953-A</b>	BR	1998

## 2. TEMA: BIOECONOMIA

Apresenta-se a seguir o título da patente depositada no Brasil, sobre o tema *bioeconomia*, com seu respectivo título, depositante, número da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Temperature-sensitive dtsR genes encoding surfactant-resistant, temperature-sensitive and biotin-inhibitory proteins - useful for transforming mutant Corynebacteria with surfactant resistance, in stable and economic fermentation production of L-glutamic acid and L-lysine.	AJINOMOTO CO INC (AJIN)	WO9902692-A; EP1002866-A; WO9902692-A1; AU9879374-A; EP1002866-A1; <b>BR9810990-A</b> ; CN1265702-A; JP11508433-X; AU732093-B; US2003077765-A1	JP	1997

### **3. TEMA: BIOINDÚSTRIA**

Na tabela a seguir são listados os títulos das patentes depositadas no Brasil, sobre o tema *bioindústria*, com seus respectivos títulos, depositantes, números da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
A collagen product extracted from the skin of cold water fish in paste form, useful as a fining agent for the brewing and wine industries, or as a foodstuff, medicament, nutraceutical or cosmetic.	NEW ZEALAND INST CROP & FOOD RES LTD (NZCR-Non-standard) MACDONALD G A (MACD-Individual) HOFMAN K (HOFM-Individual)	WO200138396-A; WO200138396-A1; AU200119027-A; <b>BR200016032-A</b> ; EP1233985-A1; NZ501386-A; US2003004315-A1; JP2003514919-W; CN1402736-A; NZ519878-A	NZ	1999
A novel glutathione synthase-lacking Saccharomyces cerevisiae useful for producing gamma-glutamylcysteine and then cysteine for application in food industry to improve flavor.	AJINOMOTO CO INC (AJIN) AJINOMOTO KK (AJIN) NISHIUCHI H (NISH-Individual) SANO K (SANO-Individual) SUGIMOTO R (SUGI-Individual) UEDA Y (UEDA-Individual)	EP1201747-A; WO200190310-A1; <b>BR200106663-A</b> ; EP1201747-A1; KR2002019564-A; CN1386134-A; US2003124684-A1; JP2001587106-X; EP1201747-B1	JP	2000
Anaerobic system for treating urban garbage, agro-industrial residues, and biomass comprises inoculate composed of microorganisms whose cultures are maintained in a laboratory.	SANAB SANEAMENTO AMBIENTAL E BIOTECNOLOG (SANA-Non-standard) SANAB SANEAMENTO AMBIENTAL & BIOTECNOLOG (SANA-Non-standard)	WO200245725-A; WO200245725-A1; AU200221358-A; <b>BR200006628-A</b>	BR	2000
Austenitic stainless steel sheet for vats used in wine fermentation, milk processing, pharmaceutical industry and hospitals.	UGINE SA (UGIN) USINOR (UNSI)	EP951954-A1; FR2777811-A1; NO9901912-A; AU9923841-A; CA2269430-A1; <b>BR9903052-A</b> ; MX9903744-A1	FR	1998
Bio-fouling monitor for aqueous systems including industrial water systems, comprises column in between inlet and exit pressure sensors, microorganism nutrient pump and optionally heating system.	BUCKMAN LAB INT INC (BUCL)	WO200034758-A; EP1141674-A; WO200034758-A1; AU200020381-A; <b>BR9916958-A</b> ; EP1141674-A1; US6311546-B1; CN1330768-A; JP2002532071-W; ZA200104394-A; AU757998-B; MX2001005806-A1; NZ512124-A	US	1998
Capsules comprise a mineral outer layer and a liquid core in which is a biologically active material for use in the fermentation, biomedical, food, and chemical industries.	RHODIA CHIM (RHOD)	WO200025761-A; EP1124542-A; WO200025761-A1; FR2785292-A1; AU9963469-A; EP1124542-A1; <b>BR9914907-A</b> ; JP2003515310-W; AU764016-B; NZ511365-A	FR	1998
Carboxy(alkyl)-cyclopentanone or cyclopentenone deriv. prepn. - comprises microbial beta-oxidn. of side-chain of higher homologue,	FIRMENICH SA (FIRM)	EP743985-A; WO9618742-A; WO9618742-A1; EP743985-A1; <b>BR9408528-A</b> ; US5667995-A; JP9509331-W; EP743985-B1; DE69426126-E	WOIB	1994

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
useful in perfume or fragrance industry.				
Coating of droplets or particles of nano-meter - by mixing and immediate spray-drying of solns. contg. active ingredients and coating polymer.	LAB CUSI SA (CUSI-Non-standard) ALCON CUSI SA (ALCO-Non-standard)	WO9531975-A; EP717989-A; WO9531975-A1; ES2078190-A1; AU9475379-A; NO9600232-A; EP717989-A1; <b>BR9407333-A</b> ; FI9601348-A; ES2078190-B1; JP9501101-W; CN1130868-A; AU696400-B; US5851452-A; EP717989-B1; DE69426568-E	ES	1994
Composition for inhibiting growth of microorganisms, in industrial process water - comprises peracetic acid and non-oxidising biocide selected from 2-methyl-4,5-tri:methylene-4-iso-thiazolin-3-one and 2-(thio-cyano-methyl-thio)benzothiazole.	NALCO CHEM CO (NALC)	EP875145-A; US5785867-A; EP875145-A2; NO9801904-A; AU9863607-A; CA2236160-A; NZ330265-A; JP11035410-A; ZA9803525-A; <b>BR9801495-A</b> ; KR98081830-A; MX9803340-A1; AU735264-B; CA2236160-C; TW520272-A	US	1997
Controlling sex ratio of mammalian offspring by inserting a transgene that prevents normal sperm function, useful in the agricultural industry, particularly cattle and pig farming.	PIG IMPROVEMENT CO UK LTD (PIGI-Non-standard) MILEHAM A (MILE-Individual) NABEEL A (NABE-Individual) GRAHAM P (GRAH-Individual)	EP1272030-A; WO200132008-A1; AU200111591-A; <b>BR200015313-A</b> ; EP1272030-A1; CN1402612-A; US2003087860-A1	GB	1999
Culture medium useful for detecting fungi and/or yeast in food industry installations, has specific amounts of monobasic potassium phosphate, ammonium chloride, heptahydrate magnesium sulfate, saccharose and water.	COCA-COLA FEMSA BUENOS AIRES SA (COKE)	US2004157315-A1; <b>BR200305481-A</b>	AR	2002
Degradation of microbial polysaccharides useful in the process industry e.g. paper by contacting polysaccharides with an enzyme preparation comprising endo-beta-1,2-galactanase.	VALTION TEKNILLINEN TUTKIMUSKESKUS (VALW)	WO200123534-A; EP1224269-A; WO200123534-A1; FI9902095-A; AU200074244-A; <b>BR200014375-A</b> ; EP1224269-A1; FI109921-B1; ZA200202840-A	FI	1999
Efficient secretory production of foreign proteins e.g. transglutaminase employing transformant coryneform	AJINOMOTO CO INC (AJIN) AJINOMOTO KK (AJIN)	WO200123591-A; WO200123591-A1; AU200074494-A; <b>BR200014059-A</b> ; EP1219713-A1; KR2002038787-A;	JP	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
bacterium, simply on industrial scale with direct recovery for use in food processing and pharmaceutical industry.		CN1377413-A; JP2001526973-X; US2003082746-A1; RU2224796-C2		
Efficient, cheap production of L-glutamic acid, especially for food and pharmaceutical industries - by culturing Corynebacterium strain in liquid medium for accumulation in culture medium and then harvesting.	AJINOMOTO CO INC (AJIN)	WO9907853-A; EP1004671-A; WO9907853-A1; AU9885615-A; EP1004671-A1; <b>BR9811151-A</b> ; CN1275165-A; AU742609-B; JP2000506337-X	JP	1997
Enhancing the production of protein or peptide, for e.g. an industrial enzyme (e.g. amylase) or a research or diagnostic enzyme (e.g. DNA polymerase), by transforming a host cell with a nucleic acid encoding a pyruvate carboxylase enzyme.	UNIV GEORGIA RES FOUND INC (UYGE-Non-standard) EITEMAN M A (EITE-Individual) ALTMAN E (ALTM-Individual) GOKARN R R (GOKA-Individual)	WO200127258-A; EP1235903-A; WO200127258-A2; AU200112068-A; <b>BR200014758-A</b> ; EP1235903-A2; JP2003511067-W; MX2002003634-A1	US	1999
Enzymatic bleach composition useful in fabric washing pulp bleaching in the paper industry comprises a phenol oxidizing enzyme and an enhancer.	UNILEVER NV (UNIL) UNILEVER PLC (UNIL) HINDUSTAN LEVER LTD (HIND-Non-standard) BREEL G J (BREE-Individual) UNILEVER HOME & PERSONAL CARE USA DIV CO (UNIL)	WO200100769-A; EP1187899-A; WO200100769-A1; AU200055308-A; US6323014-B1; EP1187899-A1; <b>BR200011820-A</b> ; ZA200109306-A	EP	1999
Fermentative production of valuable compound(s) - by fermentation of a microbial strain on an industrial scale using a chemically defined medium and recovery of the compound(s).	GIST-BROCADES BV (KONN) DSM NV (STAM) DE LAAT W T A M (DLAA-Individual) PREUSTING J C G (PREU-Individual) KOEKMAN B P (KOEK-Individual)	WO9837179-A; WO9837179-A2; AU9864000-A; EP970236-A2; CZ9902954-A3; <b>BR9807362-A</b> ; CN1248294-A; KR2000075487-A; MX9907691-A1; JP2001512970-W; US2002039758-A1; CN1495259-A	EP	1997
Fermenter for wine industry - comprises vat with diaphragm to retain fermentation gas bubbles to allow small bubbles to form large bubbles.	CASTLE COMML ENTERPRISES LTD (CAST-Non-standard) MARIN F (MARI-Individual)	WO9845403-A; EP979269-A; WO9845403-A1; ZA9800412-A; AU9851342-A; NZ331923-A; EP979269-A1; AU715195-B; CN1254372-A; US6125736-A; <b>BR9714566-A</b> ; HU200002986-A2; MX9909096-A1; IT1295976-B; HU220699-B1; EP979269-B1; DE69715466-E; CA2253861-C; ES2181035-T3; MX214673-B	ITUD	1997
Flow cytometer system for sorting living sperm cells, e.g. bovine or	XY INC (XYXY-Non-standard)	WO200140765-A; EP1238261-A; WO200140765-A2; US6263745-B1;	US	1999



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
equine sperm cells, for research, clinic, or animal insemination industry, has single torsional orientation nozzle below injection point.		AU200132728-A; US2002005076-A1; US6357307-B2; NO200202536-A; US2002129669-A1; GB2372466-A; EP1238261-A2; KR2002063584-A; <b>BR200016121-A</b> ; JP2003515337-W; CN1402831-A; HU200300587-A2; US6604435-B2; MX2002005488-A1; TW538243-A; US2004050186-A1; US6782768-B2		
Genetic transformation system is for industrial yeasts or for laboratory lineages sensitive to L-canavanine and comprises yeast cloning vector denominated as Y1pC, formed by double circular DNA film.	CNPQ CONSELHO NACIONAL DESENVOLVIMENTO (CNPQ-Non-standard)	<b>BR200014793-A</b>	BR	2000
Immobilisation of horseradish peroxidase VI for paper industry effluent clearing - consists of decoloration by e.g. titanium oxide based enzymatic retention.	UNICAMP UNIV ESTADUAL CAMPINAS (UNIC-Non-standard)	<b>BR9702823-A</b>	BR	1997
Improved production of esters, useful as industrial solvent and reagent, from an organic acid and an alcohol, involves separation of time scales.	STALEY MFG CO A E (STAL)	WO200031016-A; EP1131278-A; WO200031016-A1; AU200016237-A; <b>BR9916754-A</b> ; EP1131278-A1; JP2002530362-W; MX2001004603-A1; US6664413-B1	US	1998
Industrial laundry compsn. contg. specific alkaline protease from Bacillus strains - stable under high temp. and high pH conditions and in presence of other detergent ingredients.	SOLVAY ENZYMES GMBH & CO KG (SOLV) AMORY A (AMOR-Individual) GENENCOR INT GMBH (GENV) GENENCOR INT INC (GEMV)	EP686692-A; WO9527049-A; DE4411223-A; EP753058-A; DE4411223-A1; WO9527049-A1; AU9516175-A; JP7286194-A; FI9501520-A; EP686692-A2; AU9520731-A; CA2146063-A; <b>BR9501401-A</b> ; EP753058-A1; FI9603829-A; EP686692-A3; BR9507237-A; MX9604399-A1; JP10505741-W; NZ282821-A; US5880080-A; AU705385-B; AU710223-B; US6165960-A; CN1148406-A; US6190904-B1; MX200584-B; EP686692-B1; DE59510341-G; EP753058-B1; DE59510914-G	DE	1994

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Inhibitors of cellulolytic, xylanolytic or beta-glucanolytic enzymes - useful in the brewing, baking and paper and pulp industries.	LEUVEN RES & DEV (LEUV-Non-standard) KU LEUVEN RES & DEV (KULE-Non-standard)	WO9849278-A; EP996709-A; WO9849278-A1; AU9877611-A; EP996709-A1; <b>BR9809348-A</b> ; CN1254374-A; MX9910037-A1; JP2001523104-W; AU751631-B	EP	1997
Large scale recovery of concentrated and active protein of interest from interstitial fluid of plant tissues, useful in pharmaceutical and industrial applications comprises subjecting plant tissue and buffer solution to vacuum.	BIOSOURCE TECHNOLOGIES INC (BIOS-Non-standard) LARGE SCALE BIOLOGY CORP (LARG-Non-standard) TURPEN T H (TURP-Individual) GARGER S J (GARG-Individual) MCCULLOCH M J (MCCU-Individual) CAMERON T I (CAME-Individual) SAMONEK-POTTER M L (SAMO-Individual) HOLTZ R B (HOLT-Individual)	WO200009725-A; EP1104479-A; WO200009725-A2; AU9953967-A; EP1104479-A2; US6284875-B1; KR2001072372-A; ZA200101100-A; <b>BR9912875-A</b> ; US6441147-B1; JP2002522559-W; NZ510358-A; US2003073209-A1; AU759813-B; US6617435-B2; MX2001001445-A1; US2004047923-A1; AU2003213542-A1	US	1998
Method for concentrating trace genes expressed even in presence of large amounts of (un)known genes, useful in screening industrial enzymes, and pharmaceutical and agrochemical leads from nature.	SUNTORY LTD (SUNR) SUNTORY BIOMEDICAL RES LTD (SUNT-Non-standard) NAKAZATO H (NAKA-Individual)	WO200250268-A; WO200250268-A1; AU200222693-A; EP1344822-A1; KR2003064846-A; <b>BR200116199-A</b> ; US2004058360-A1; CN1473196-A; JP2002552145-X	JP	2000
Micro-industrial double distilled alcoholic drink fabricator, comprises carob syrup pressing and fermentation means, with oak aging barrels and a copper still.	DA SILVA C G (DSIL-Individual)	<b>BR200206189-A</b>	BR	2002
Modified xylanase exhibiting increased thermostability and alkalophilicity useful for industrial processing e.g. for pulp manufacturing.	NAT RES COUNCIL CANADA (CANA) SUNG W L (SUNG-Individual)	WO200192487-A; WO200192487-A2; AU200167171-A; SE200203555-A; US2003166236-A1; FI200202120-A; <b>BR200111316-A</b>	US	2000
Modifying galactomannans in guar plants - used to provide compounds with increased galactose-to-mannose ratio, useful for the food industry.	DANISCO AS (DANI-Non-standard)	WO9854335-A1; AU9874463-A; EP983369-A1; GB2342920-A; <b>BR9809493-A</b> ; CN1264428-A; AU733483-B; GB2342920-B; KR2001012962-A; NZ500951-A; JP2002500515-W	GB	1997
Must cooking tank used in the wine industry - includes a bricked spiral tube leading from the bottom firebox	VARGAS E (VARG-Individual)	<b>BR9800028-A</b>	BR	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
of the tank.				
Mutant Chrysosporium strain comprising nucleic acid encoding proteins, particularly industrially important enzymes such as cellulases, xylanases, pectinases, lipases and proteases.	AARL INC (AARL-Non-standard) EMALFARB M A (EMAL-Individual)	WO200020555-A; EP1117808-A; WO200020555-A2; AU9962326-A; <b>BR9914278-A</b> ; EP1117808-A2; CN1330717-A; KR2001103596-A; MX2001003462-A1; AU771539-B2	WOEP	1998
New Brassica plants and seeds having elevated long chain monounsaturated fatty acid content, for industrial uses, e.g. engine lubricants.	CARGILL INC (CRGI)	WO200007433-A; EP1100310-A; WO200007433-A1; AU9953353-A; EP1100310-A1; <b>BR9912710-A</b> ; CN1315826-A; US2002092038-A1; US6414223-B1; JP2002528050-W; MX2001001224-A1; US6649782-B2; US2004083503-A1; AU772286-B2	US	1998
New construct for expressing genes in prokaryotes under control of the tryptophan operon, useful in human/animal medicine, nutrition, cosmetics, agriculture or chemical industry.	FABRE MEDICAMENT SA PIERRE (FABR)	WO9953080-A; EP1071798-A; FR2777292-A1; WO9953080-A1; AU9931540-A; <b>BR9909643-A</b> ; EP1071798-A1; CN1303439-A; MX2000010057-A1; JP2002511273-W; AU768595-B	FR	1998
New elongase gene extends 16, 18 and 20 carbon fatty acids, useful to manipulate plants to produce polyunsaturated fatty acids for the foodstuffs, cosmetics and pharmaceutical industries.	BASF AG (BADI) HEINZ E (HEIN-Individual) ZANK T (ZANK-Individual) ZHRINGER U (ZHR-Individual) LERCHL J (LERC-Individual) RENZ A (RENT-Individual)	WO200159128-A; EP1254238-A; WO200159128-A2; AU200139244-A; DE10023893-A1; DE10063387-A1; CZ200202502-A3; NO200203757-A; EP1254238-A2; KR2002073580-A; <b>BR200108198-A</b> ; CN1398300-A; HU200300081-A2; JP2003523746-W; MX2002007078-A1; US2004111763-A1	DE	2000
New isolated aminopeptidase polypeptides used in, e.g. food industry.	NOVO-NORDISK AS (NOVO) NOVO NORDISK BIOTECH INC (NOVO) ASAHI CHEM IND CO LTD (ASAHI) NOVO NORDISK AS (NOVO) JAPAN TOBACCO INC (NISB) NOVOZYMES BIOTECH INC (NOVO) NOVOZYMES AS (NOVO)	WO9931226-A; EP1042457-A; US6184020-B2; WO9931226-A1; AU9913328-A; EP1042457-A1; <b>BR9813608-A</b> ; US6184020-B1; CN1282369-A; KR2001033182-A; US6303360-B1; NZ505066-A; US2002177210-A1; AU755387-B; JP2003525573-W	DK	1998
New method, useful in screening anti-microbial agents for controlling slimes	KURITA WATER IND LTD (KURK) IIZUMI T (IIZU-Individual) SUZUKI H (SUZU-Individual)	WO200254865-A; WO200254865-A1; JP2002205902-A; JP2003020598-A;	JP	2001

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
in papermaking industry or monitoring anti-microbial effect, comprises microbial analysis step and anti-microbial selection step.	TASHIRO H (TASH-Individual)	JP2003164281-A; EP1350431-A1; US2004132095-A1; <b>BR200206375-A</b> ; CN1496224-A		
New nucleic acid molecules encoding R1-protein, useful for forming transgenic plants producing starch with controllable properties, e.g. for use in the food industry.	AVENTIS CROPSCIENCE GMBH (AVET) ABEL G (ABEL-Individual) LORZ H (LORZ-Individual) LUTTICKE S (LUTT-Individual) SCHMIDT R (SCHM-Individual)	WO200077229-A; EP1185678-A; DE19926771-A1; WO200077229-A2; AU200058107-A; EP1185678-A2; <b>BR200011499-A</b> ; US6462256-B1; JP2003502049-W; US2003077805-A1; CN1402789-A	DE	1999
New phenol oxidizing enzyme, also useful in the detergent, paper and pulp, textile or food industries, especially in modifying the color associated with dyes and colored compounds, as well as in anti-dye transfer applications.	GENENCOR INT INC (GEMV)	WO200121809-A; EP1214421-A; US6168936-B1; WO200121809-A2; AU200074767-A; NO200201386-A; EP1214421-A2; KR2002034195-A; CN1391611-A; JP2003528582-W; MX2002003035-A1; <b>BR200014229-A</b> ; NZ518004-A	US	1999
New plant desaturase polynucleotides useful for modifying fatty acid compositions in plants or plant cells, and in transforming plants for producing vegetable oils for edible and industrial uses.	CALGENE LLC (CALJ) FILLATTI J (FILL-Individual) FILLATTI J J (FILL-Individual)	WO200114538-A; EP1206558-A; WO200114538-A2; AU200069134-A; <b>BR200013607-A</b> ; EP1206558-A2; CN1378602-A; JP2003507062-W; US2003079250-A1; US2003084480-A1; US2003172399-A1; US2004098762-A1	US	1999
New polyenoic fatty acid isomerase polypeptides and polynucleotides, useful for producing conjugated fatty acids from polyenoic fatty acyl substrates, which are useful in industrial, animal feed and human nutritional applications.	MONSANTO CO (MONS) MONSANTO TECHNOLOGY LLC (MONS)	WO200109296-A; EP1218497-A; WO200109296-A1; AU200067494-A; <b>BR200012873-A</b> ; EP1218497-A1; MX2002001086-A1	US	1999
New protease derived from <i>Aranicola proteolyticus</i> , useful in industrial applications e.g. detergents, cosmetics, leather processing agents, softening agents for food, feed additives and for treating digestive ailments.	KOREA RES INST BIOSCIENCE & BIOTECHNOLOG (KORE-Non-standard) PARK H (PARK-Individual) SON K (SONK-Individual) PARK D (PARK-Individual) SHIN S (SHIN-Individual) OH H (OH-H-Individual) KIM M (KIMM-Individual) SHIN D (SHIN-Individual)	WO200157222-A; EP1165807-A; WO200157222-A1; AU200132151-A; EP1165807-A1; KR2001077591-A; <b>BR200011186-A</b> ; KR2001112928-A; CN1345376-A; JP2003521926-W; US2004162417-A1	KR	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New subtilase enzyme variants - having modifications in amino acid positions 134 and/or 137, used in detergents or the leather or wool industries.	NOVO-NORDISK AS (NOVO) NOVO NORDISK AS (NOVO) NOVOZYMES AS (NOVO)	WO9911769-A; EP1012251-A; WO9911769-A1; AU9890617-A; EP1012251-A1; <b>BR9811412-A</b> ; CN1272137-A; KR2001023468-A; MX2000001889-A1; JP2001514846-W; US6558938-B1	DK	1997
New subtilase enzyme variants - having modifications in amino acid positions 95, 97 and/or 98, used in detergents or the leather or wool industries.	NOVO-NORDISK AS (NOVO) NOVO NORDISK AS (NOVO) NOVOZYMES AS (NOVO)	WO9911770-A1; AU9890618-A; EP1007646-A1; <b>BR9811396-A</b> ; CN1272881-A; KR2001023448-A; MX2000001890-A1; JP2001514847-W	DK	1997
Novel endo-beta-1,4-glucanase useful in various industrial applications including degradation of cellulose-containing biomass, detergent, paper, pulp and textile industries.	NOVO NORDISK AS (NOVO) NOVOZYMES AS (NOVO)	WO200073428-A; EP1185631-A; WO200073428-A1; AU200047449-A; EP1185631-A1; <b>BR200010998-A</b> ; KR2002012249-A; CN1353751-A; JP2003501021-W; MX2001012179-A1	DK	1999
Novel isolated and purified bovine or porcine collagens and gelatins useful in medical, pharmaceutical, food and cosmetic industries, as vaccine, and for treating autoimmune disorders, infections and cancer.	FIBROGEN INC (FIBR-Non-standard) BELL M P (BELL-Individual) NEFF T B (NEFF-Individual) POLAREK J W (POLA-Individual) SEELEY T W (SEEL-Individual)	WO200134647-A; EP1232182-A; WO200134647-A2; AU200115918-A; EP1232182-A2; <b>BR200015507-A</b> ; JP2003513659-W; CN1420892-A; US2004005663-A1; US2004018592-A1	US	2000
Novel isolated protease polypeptide useful in laboratory, clinical, pharmaceutical, chemical, diagnostic, personal care and industrial applications.	DSM NV (STAM) DSM IP ASSETS BV (STAM)	WO200268623-A; WO200268623-A2; EP1377664-A2; KR2003080229-A; AU2002308306-A1; CN1492924-A; <b>BR200207517-A</b>	EP	2001
Novel nucleic acid isolated from <i>Lesquerella fendleri</i> encodes a condensing enzyme involved in fatty acid synthesis and is useful to produce plants which synthesize hydroxylated very long chain fatty acids for industrial applications.	UNIV BRITISH COLUMBIA (UYBR-Non-standard) KUNST L (KUNS-Individual) SMITH M A (SMIT-Individual) MOON H (MOON-Individual)	EP1285073-A; WO200190364-A2; AU200174408-A; EP1285073-A2; <b>BR200111115-A</b> ; US2004049806-A1	US	2000
Novel plasmid derived from <i>Gluconobacter</i> bacteria, useful for genetic manipulation of the bacteria to produce industrially superior strains,	AJINOMOTO CO INC (AJIN) AJINOMOTO KK (AJIN)	EP979875-A; EP979875-A1; JP2000050869-A; CN1256308-A; US6127174-A; <b>BR9903646-A</b> ; KR2000017225-A	JP	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
which produce D-xylulose and xylitol.				
Novel polynucleotides encoding <i>Corynebacterium glutamicum</i> pyruvate carboxylase useful for industrial fermentation processes comprises a specific nucleotide sequence.	SINSKEY A J (SINS-Individual) LESSARD P A (LESS-Individual) WILLIS L B (WILL-Individual) MASSACHUSETTS INST TECHNOLOGY (MASI)	WO200039305-A; EP1147198-A; WO200039305-A1; AU9922033-A; <b>BR9816106-A</b> ; EP1147198-A1; CN1336958-A; KR2001112232-A; JP2003503006-W; MX2001006290-A1	WOUS	1998
Novel recombinant nucleic acid encoding proteinaceous molecule, useful for producing flavor, fragrance and/or biocontrol agent which is useful as food additive in processed food industry and as antimicrobial agent.	PLANT RES INT BV (PLAN-Non-standard)	EP1379663-A; WO200264764-A; EP1231273-A1; WO200264764-A2; EP1379663-A2; <b>BR200207164-A</b> ; AU2002233824-A1; US2004161819-A1	EP	2001
Nucleic acid fragments useful in the production of industrial agents for eg. lubricants or cosmetics.	DU PONT DE NEMOURS & CO E I (DUPO)	WO9949050-A; EP1064387-A; WO9949050-A3; WO9949050-A2; AU9931849-A; EP1064387-A2; NO200004680-A; KR2001042015-A; MX2000009177-A1; HU200102912-A2; <b>BR9908381-A</b> ; JP2002528048-W; AU763296-B; NZ505988-A	US	1998
Obtaining cellulosic wet sheet used e.g. as thickening agent in food and beverage industry, comprises heating solution containing glucose mass and yeast extract in water, adding inoculum <i>Acetobacter xylinum</i> , and fermenting in covered trays.	LEVY N L F (LEVY-Individual) FERREIRA LEVY N L (LEVY-Individual)	WO2004050986-A1; <b>BR200205499-A</b> ; AU2003283089-A1	BR	2002
Process for degradation or modification of fibers or fabric in laundering and textile processing industries, containing plant material, involves treating fibers or fabric with polymethyl galacturonase enzyme.	NOVO NORDISK AS (NOVO) NOVOZYMES AS (NOVO)	WO200056867-A; EP1163328-A; WO200056867-A1; AU200034183-A; US6296671-B1; <b>BR200009184-A</b> ; EP1163328-A1; KR2001109318-A; CN1344316-A; JP2003524708-W; MX2001009492-A1	US	1999
Producing cells expressing a protein having factor VIII procoagulant activity especially, human factor VIII in an	BAYER CORP (FARB) CHO M (CHOM-Individual) CHAN S (CHAN-Individual) KELSEY W (KELS-Individual) YEE H (YEEH-Individual)	WO200034505-A; WO200034505-A1; AU200021701-A; NO200102718-A; EP1137797-A1; <b>BR9916069-A</b> ;	US	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
industrial scale, involves expressing a vector comprising a sequence coding for factor VIII in human cells.		CZ200102024-A3; SK200100792-A3; US6358703-B1; US2002102730-A1; HU200200558-A2; KR2002013481-A; US2002115152-A1; MX2001005667-A1; JP2002531137-W; NZ512234-A; AU761801-B		
Producing enzymatic preparation for treating industrial and domestic effluents of high fat, protein, carbohydrate content, involves using <i>Penicillium restrictum</i> in solid-state fermentation process.	UNIV RIO DE JANEIRO (UYRI-Non-standard) DE FIGUEIREDO J G (DFIG-Individual) UNIV FEDERAL RIO DE JANEIRO UFRJ (UYRI-Non-standard) CAMMAROTA M C (CAMM-Individual) GUIMARAES FREIRE D M (FREI-Individual) LIPPEL SANT ANNA G (ANNA-Individual) RUSSO C (RUSS-Individual) DIAS DE CARVALHO FREIRE D (FREI-Individual) DOS REIS CASTILHO L (CAST-Individual)	WO200233055-A; EP1337628-A; WO200233055-A1; <b>BR200007101-A</b> ; AU200193524-A; EP1337628-A1; US2004055953-A1; JP2004510451-W; CN1478144-A	BR	2000
Producing full mutant polyploidy plants, e.g. wheat with altered starch - by treating polyploid plants with non-full mutant allele with mutagen, useful to produce wheat with low amylose content for food industry.	EXSEED GENETICS LLC (EXSE-Non-standard)	WO9815621-A; EP946716-A; WO9815621-A1; AU9748959-A; EP946716-A1; <b>BR9712502-A</b> ; CN1239509-A; US6143963-A; JP2001501828-W; NZ334873-A; MX9903298-A1; US6361935-B1; AU200143916-A	US	1997
Producing lactic acid bacteria defective in pyruvate formate-lyase production - comprises selection by metabolic engineering, useful in, e.g. food industry as starter cultures for wine manufacture.	CHR HANSEN AS (CHRH-Non-standard) NILSSON D (NILS-Individual)	WO9807843-A; WO9807843-A1; AU9738475-A; EP928333-A1; <b>BR9711341-A</b> ; AU723153-B; US6645754-B1; US2004086955-A1	US	1996
Producing phytase in yeast useful for the food and feed industries.	CORNELL RES FOUND INC (CORR)	WO9967398-A; EP1090129-A; WO9967398-A2; AU9950837-A; EP1090129-A2; <b>BR9911549-A</b> ; KR2001043988-A; CN1313898-A; HU200102800-A2; MX2000012794-A1; CZ200004805-A3; JP2002518052-W; US2002102692-A1; US6451572-B1; AU772071-B2	US	1998
Production of active transglutaminase from denatured enzyme by two-stage refolding process for industrial	AJINOMOTO CO INC (AJIN)	WO200040706-A; EP1142990-A; WO200040706-A1; AU200017991-A; EP1142990-A1; <b>BR9916627-A</b> ; CN1334867-	JP	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
production of active enzyme for use in food production.		A; JP2000592404-X; US2002090675-A1; AU762951-B		
Production of enzyme granules with improved characteristics, useful in food (e.g. baked products, dairy products, beverages) and feed industries, using a continuous fluid bed method.	DSM NV (STAM) BARENDSE R C M (BARE-Individual) MEESTERS G M H (MEES-Individual) HAPPEL A J M (HAPP-Individual)	WO200183727-A; WO200183727-A2; AU200170500-A; EP1278595-A2; <b>BR200110466-A</b> ; US2003124224-A1; CZ200203626-A3; CN1427740-A; JP2003531608-W	EP	2000
Production of flavonoid monoglycosides, used e.g. in food and cosmetics industry, uses enzyme immobilized on carrier for enzymatic hydrolysis of rutinoides.	MERCK PATENT GMBH (MERE) OHREM H L (OHRE-Individual) SCHWAMMLE A (SCHW-Individual)	WO200159143-A; EP1259632-A; DE10006147-A1; WO200159143-A1; AU200131726-A; EP1259632-A1; <b>BR200108273-A</b> ; KR2003013371-A; CN1416470-A; JP2003522532-W; US2003157653-A1	DE	2000
Purifying waste water, e.g. seep water, grey water, black water, industrial waste water and/or waste water from laundries, using bacterial strains Bacillus Sp. DT-1, Pseudomonas azelaica DT-2 and/or Rhizobium sp. DT-5.	JUVEGROUP OY (JUVE-Non-standard) CLEWER LTD OY (CLEW-Non-standard) CLEWER OY (CLEW-Non-standard)	WO200104060-A; EP1204608-A; WO200104060-A2; AU200061626-A; FI106042-B1; <b>BR200012422-A</b> ; EP1204608-A2; HU200202345-A2; CZ200200041-A3; JP2003504185-W; CN1420848-A; US6780317-B1	FI	1999
Recombinant filamentous fungus produced by gene conversion - has DNA integrated into two or more mostly homologous DNA domains of its chromosomes, used in the fermentation industry.	GIST-BROCADES BV (KONN) DSM NV (STAM) SELTEN G C M (SELT-Individual) SWINKELS B W (SWIN-Individual) BOVENBERG R A L (BOVE-Individual)	WO9846772-A; EP979294-A; WO9846772-A2; AU9876422-A; EP979294-A2; <b>BR9808859-A</b> ; CN1257546-A; MX9909238-A1; JP2001518798-W; US6432672-B1	EP	1997
Recovering valuable component from crude liquid in e.g. pharmaceutical, fermentation, sugar or chemical industries - by mixing liquid with washing liquid in successive stages and from each stage recovering component via membrane as permeate.	NITTETSU CHEM ENG LTD (NITA) AJINOMOTO CO INC (AJIN) NITTETSU CHEM MACH KK (NITA) AJINOMOTO KK (AJIN) NITTETSU KAKOKI KK (NITA)	EP838256-A; EP838256-A2; AU9741028-A; ZA9709288-A; JP10211423-A; CN1194178-A; TW343158-A; SK9701403-A3; KR98032908-A; SG65691-A1; <b>BR9705089-A</b> ; MX9708029-A1; US6039879-A; AU725608-B; SK282079-B6; MX207174-B; EP838256-B1; DE69727028-E; PH1199758236-B1	JP	1997
Sample arrays for measuring the interaction between components to	TRANSFORM PHARM INC (TRAN-Non-standard)	WO200109391-A; EP1204766-A; WO200109391-A1; AU200065023-A;	US	2000



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
prepare new compositions for pharmaceutical, industrial, functional or agrochemical use have a component in common and at least one additional component.		EP1204766-A1; SK200200111-A3; CZ200200334-A3; <b>BR200012767-A</b> ; KR2002034168-A; JP2003509657-W; MX2002000890-A1; ZA200200503-A		
Secretion production of foreign proteins by culturing transformant coryneform bacteria, applicable in producing e.g. industrially-useful transglutaminase and human epithelial growth factor.	AJINOMOTO CO INC (AJIN) AJINOMOTO KK (AJIN) KIKUCHI Y (KIKU-Individual) DATE M (DATE-Individual) UMEZAWA Y (UMEZ-Individual) YOKOYAMA K (YOKO-Individual) HEIMA H (HEIM-Individual) MATSUI H (MATS-Individual)	WO200281694-A; WO200281694-A1; EP1375664-A1; <b>BR200208136-A</b> ; KR2003087042-A; AU2002242986-A1; US2004126847-A1; JP2002580057-X; CN1500145-A	JP	2001
Sequences useful for modification of plant lignin content or structure - from Eucalyptus grandis (eucalyptus) and Pinus radiata (pine) are associated with lignin biosynthesis pathway, useful e.g. in paper industry.	GENESIS RES & DEV CORP LTD (GENE-Non-standard) FLETCHER CHALLENGE FORESTS LTD (FLET-Non-standard) GENESIS RES & DEV (GENE-Non-standard) RUBICON FORESTS HOLDINGS LTD (RUBI-Non-standard)	WO9811205-A; EP929682-A; WO9811205-A2; AU9744036-A; US5850020-A; EP929682-A2; <b>BR9711745-A</b> ; NZ334565-A; JP2001500378-W; US6204434-B1; MX9902262-A1; AU733388-B; ZA9710451-A; ZA9810574-A; AU200157975-A; AU756359-B; AU2003203517-A1	US	1996
Sprinkler type rotary reactor for semi-solid culture of microorganisms (e.g. in pharmaceutical production) is easily scaleable from laboratory to pilot to industrial scale.	UNIV FUNDACAO CAXIAS DO SUL (UYCA-Non-standard)	<b>BR200201315-A</b>	BR	2002
Storage-stable enzyme composition in tablet form comprises enzymes, tableting auxiliaries, disintegrating systems, but no detergent components, useful for treatment of textile materials and in paper and pulp industry.	CLARIANT FINANCE BVI LTD (CLRN) CLARIANT INT LTD (CLRN) SIGMUND H (SIGM-Individual)	WO200216540-A; EP1315791-A; WO200216540-A1; EP1315791-A1; <b>BR200113319-A</b> ; US2003171238-A1; CN1447853-A; JP2004507578-W; MX2003001527-A1	GB	2000
Supplying starter culture for food industry comprises using subsets of stock inoculum material comprising concentrate of cells to be propagated for direct inoculation of cultivation medium to obtain starter culture.	CHR HANSEN AS (CHRH-Non-standard) KRINGELUM B (KRIN-Individual) KRINGEL M (KRIN-Individual) NIELSEN K S (NIEL-Individual)	WO200170935-A; EP1268745-A; WO200170935-A2; US2001049132-A1; AU200144083-A; NO200204503-A; <b>BR200109497-A</b> ; EP1268745-A2; JP2003527853-W; NZ521814-A	US	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Termamyl-like alpha-amylase variants with improved properties - e.g. increased stability at low pH and low calcium, useful as detergent additives and in industrial starch processing e.g. liquefaction.	NOVO-NORDISK AS (NOVO) NOVO NORDISK AS (NOVO) NOVOZYMES AS (NOVO)	WO9741213-A; EP904360-A; WO9741213-A1; AU9726928-A; EP904360-A1; CN1217020-A; <b>BR9708887-A</b> ; JP2000508914-W; US6143708-A; US6436888-B1; US2003171236-A1; US6642044-B2; US2004048351-A1	DK	1996
Transforming trees to modify their fiber characteristics, useful in the forestry industry, comprises incorporating a chimeric gene encoding expansins into the plant genome.	ADVANCED TECHNOLOGIES CAMBRIDGE (ADTE-Non-standard) ADVANCED TECHNOLOGIES CAMBRIDGE LTD (ADTE-Non-standard)	WO200012715-A; EP1108030-A; WO200012715-A1; AU9954361-A; <b>BR9913486-A</b> ; EP1108030-A1; CN1325448-A; JP2002523095-W; NZ509810-A	GB	1998

Em relação aos termos referentes ao tema *bioindústria* foram localizadas patentes depositadas no Brasil em apenas um deles (*designing*). Na tabela, abaixo, são listados os títulos das patentes com seus respectivos depositantes, números das patentes, país de prioridade e ano de prioridade.

## a. TERMO: DESIGNING

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New representation of the three-dimensional solution structure of an RGS (regulator of G-protein signaling), useful for identifying, selecting or designing agonists and antagonists of RGS4 activity.	AMERICAN HOME PROD CORP (AMHP) WYETH (AMHP)	EP1290014-A; WO200185769-A2; AU200159705-A; NO200205378-A; <b>BR200110742-A</b> ; EP1290014-A2; KR2003004397-A; US2003186413-A1; JP2003532741-W; CN1440421-A; HU200302548-A2; MX2002011033-A1; ZA200210012-A	US	2000
Designing and constructing a variant of Streptovercillium mobaraense-originated transglutaminase (MTG), for use in food processing, comprises estimating the binding site of MTG based on its stereo-structure.	AJINOMOTO CO INC (AJIN) AJINOMOTO KK (AJIN)	WO200214518-A; WO200214518-A1; AU200178739-A; JP2002253272-A; EP1310560-A1; KR2003027037-A; US2004002144-A1; <b>BR200113304-A</b> ; CN1469929-A	JP	2000
New method of determining a patient's susceptibility to inflammatory disorders - by detecting the presence of an IL-1 (44112332) haplotype, useful in designing treatment strategies that modulate the activity of proteins produced by the IL-1 gene cluster.	DUFF G (DUFF-Individual)	WO9854359-A; EP983385-A; WO9854359-A1; ZA9804490-A; AU9875398-A; NO9905803-A; EP983385-A1; <b>BR9809183-A</b> ; CN1278868-A; US6268142-B1; JP2002500513-W; AU755107-B; US2002146700-A1; US6706478-B2; US2004152124-A1; AU2003200791-A1	GB	1997

#### 4. TEMA: BIORREMEDIAÇÃO

A seguir são listados os títulos das patentes depositadas no Brasil, sobre o tema *biorremediação*, com seus respectivos títulos, depositantes, números da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Coated metal peroxide, used for bioremediation of soil, has siliconate, hydrido-polysiloxane, siloxane, silicone resin emulsion, silane/siloxane emulsion, siloxane/siloxane mixture, silicone microemulsion or silicate ester coating.	SOLVAY INTEROX GMBH (SOLV) DOETSCH W (DOET-Individual) WASEM G (WASE-Individual)	WO200206155-A; EP1174389-A; EP1174389-A1; DE10035287-A1; WO200206155-A1; US2002051744-A1; AU200177535-A; US6547490-B2; <b>BR200112507-A</b>	DE	2000
Method for accelerated bioremediation - esp of material contaminated with hydrocarbons, heavy metals, nuclear fission products, explosives, etc.	GLAZE B S (GLAZ-Individual) WARNER K R (WARN-Individual) HORN T D (HORN-Individual) HORN R D (HORN-Individual) H & H ECO SYSTEMS INC (HHEC-Non-standard)	WO9425628-A; EP695369-A; WO9425628-A1; AU9466283-A; EP695369-A1; <b>BR9405960-A</b> ; CZ9502597-A3; JP8508198-W; US5593888-A; NZ265501-A; AU697852-B; CZ289901-B6; CA2372565-A1; CA2159619-C; EP695369-B1; DE69431245-E; CA2372565-C; MX219832-B	US	1994

#### 5. TEMA: CERTIFICAÇÃO DE QUALIDADE BIOLÓGICA

Não foram localizadas patentes depositadas no Brasil com o tema *certificação de qualidade biológica*.

Em relação aos termos referentes ao tema foram localizadas patentes depositadas no Brasil em apenas um deles (*coleções certificadas*). Na tabela, abaixo, são listados os títulos das patentes com seus respectivos depositantes, números das patentes, país de prioridade e ano de prioridade.

## a. TERMO: COLEÇÕES CERTIFICADAS

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Identifying a region within a genome of organism mediating gene expression, useful for determining mutation, comprises crossing 2 organisms, extracting RNA, quantifying gene expression and identifying quantitative trait loci.	CANADA DEPT AGRIC & AGRI-FOOD CANADA (MIAC) DNA LANDMARKS INC (DNAL-Non-standard) CANADA MIN AGRICULTURE (MIAC) CASTONGUAY Y (CAST-Individual) O'DONOUGHUE L S (ODON-Individual) LABERGE S (LABE-Individual) MONROY A F (MONR-Individual) VEZINA L P (VEZI-Individual)	WO200212551-A; EP1366184-A; WO200212551-A2; AU200176208-A; CZ200300146-A3; US2003180761-A1; HU200302058-A2; EP1366184-A2; <b>BR200112707-A</b> ; CN1474875-A; JP2004512828-W	US	2000

## 6. TEMA: FERTILIDADE E REPRODUÇÃO ANIMAL

Não foram localizadas patentes depositadas no Brasil com o tema *fertilidade e reprodução animal*.

Em relação aos termos referentes ao tema foram localizadas patentes depositadas no Brasil em apenas um deles (*Clonagem*). Na tabela, abaixo, são listados os títulos das patentes com seus respectivos depositantes, números das patentes, país de prioridade e ano de prioridade.

## a. TERMO: CLONAGEM

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
In vitro reconstitution of mammalian embryos, useful e.g. for producing transgenic animals or cloning, including proteolysis and swelling of donor diploid nucleus.	INRA INST NAT RECH AGRONOMIQUE (INRG) INST NAT RECH AGRONOMIQUE (INRG)	WO200124624-A; EP1215960-A; FR2799099-A1; WO200124624-A2; AU200076690-A; EP1215960-A2; <b>BR200014451-A</b> ; CN1377226-A; ZA200202500-A; AU775410-B2; NZ518377-A	FR	1999
Bioassay for determining amount of active myostatin in animal, by amplifying and cloning promoter, transfecting vector, selecting, incubating, and washing myoblasts, preparing protein extracts, and performing gene assay.	AGRESEARCH LTD (AGRE-Non-standard) OVITA LTD (OVIT-Non-standard)	WO2003006686-A; WO2003006686-A1; NZ512869-A; EP1404866-A1; <b>BR200211095-A</b> ; AU2002328046-A1	NZ	2001

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Cloning animals by inserting nucleus from adult somatic cells into enucleated oocyte, particularly for producing transgenic animals.	UNIV HAWAII (UYHA-Non-standard) WAKAYAMA T (WAKA-Individual) YANAGIMACHI R (YANA-Individual)	WO9937143-A; EP1049372-A; WO9937143-A2; AU9922377-A; <b>BR9907193-A</b> ; EP1049372-A2; KR2001040370-A; CN1306390-A; US6331659-B1; JP2002500864-W; US2002019993-A1; NZ505728-A; AU765170-B	US	1998

## 7. TEMA: INTEGRAÇÃO: ALIMENTAÇÃO, NUTRIÇÃO E SAÚDE

Apresenta-se a seguir os títulos das patentes depositadas no Brasil, sobre o tema *Integração: Alimentação, Nutrição e Saúde*, com seus respectivos títulos, depositantes, números das patentes, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Manufacturing method for pet food that is customized to health and nutrition requirements of e.g. an individual dog, involves tailoring food in response to biological analysis of pet sample, e.g. saliva, and pet profile provided by owner.	NESTEC LTD (NEST) NESTLE PURINA PETCARE CO (NEST-Non-standard) SINGH B R (SING-Individual) KALISHMAN D S (KALI-Individual) NIELSEN M (NIEL-Individual) BADGER B W (BADG-Individual) MARTINEAU B (MART-Individual) CARVALHO R (CARV-Individual)	US6493641-B1; WO2002102172-A1; US2003004655-A1; EP1401291-A1; <b>BR200210918-A</b> ; AU2002315123-A1; JP2004529656-W	US	2001
New vegetable protein composition, useful in foods for improving health and nutritional benefits.	PROTEIN TECHNOLOGIES INT INC (PROT-Non-standard)	EP943245-A; EP943245-A1; AU9873072-A; JP11292898-A; CN1228927-A; CA2240795-A1; KR99076483-A; US6132795-A; MX9805417-A1; JP3118451-B2; <b>BR9815832-A</b> ; AU732423-B; CA2240795-C; TW491688-A; EP943245-B1; DE69908219-E; KR375981-B; MX212317-B; ES2199523-T3	US	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIO R.	ANO PRIOR.
Table food and drink container temperature display gauge increases nutritive and health value of meals.	SCUDELER J (SCUD-Individual)	<b>BR9904515-A</b>	BR	1999

Em relação aos termos referentes ao tema *Integração: Alimentação, Nutrição e Saúde* foram localizadas patentes depositadas no Brasil em dois deles (*Nutracêuticos e Produção de Vacina*)

Nas tabelas, abaixo, são listados os títulos das patentes com seus respectivos depositantes, números das patentes, país de prioridade e ano de prioridade.



## a. NUTRACÊUTICOS (ALIMENTOS FUNCIONAIS)

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
A collagen product extracted from the skin of cold water fish in paste form, useful as a fining agent for the brewing and wine industries, or as a foodstuff, medicament, nutraceutical or cosmetic.	NEW ZEALAND INST CROP & FOOD RES LTD (NZCR-Non-standard) MACDONALD G A (MACD-Individual) HOFMAN K (HOFM-Individual)	WO200138396-A; WO200138396-A1; AU200119027-A; <b>BR200016032-A</b> ; EP1233985-A1; NZ501386-A; US2003004315-A1; JP2003514919-W; CN1402736-A; NZ519878-A	NZ	1999
Functional food ingredient as e.g. meat thickener and emulsifier, comprises unrefined plant protein material.	PROTEIN TECHNOLOGIES INT INC (PROT-Non-standard) SOLAE LLC (SOLA-Non-standard)	CA2338525-A1; JP2001346548-A; JP2001346550-A; <b>BR200100398-A</b> ; US6465037-B1; MX2001002250-A1; KR411589-B; KR431977-B; MX2001002251-A1	US	2000
Functional food ingredient used in food applications, comprises flaked soy material having soy protein which is partially denatured such that, when combined with water, has specified gel strength and gel weight.	PROTEIN TECHNOLOGIES INT INC (PROT-Non-standard) SOLAE LLC (SOLA-Non-standard)	EP1129626-A; EP1129626-A2; AU200069671-A; AU200124777-A; AU200124778-A; ZA200100536-A; CA2310296-A1; BR200004240-A; CN1310957-A; ZA200101638-A; ZA200101640-A; JP2001346544-A; <b>BR200102199-A</b> ; <b>BR200102288-A</b> ; CN1318315-A; HU200100922-A2; HU200100923-A2; KR2001085211-A; CN1323547-A; US6355295-B1; HU200005045-A2; ES2165827-T1; NZ510199-A; NZ510203-A; NZ509563-A; AU755396-B; NZ520357-A; NZ520358-A; NZ520359-A; NZ520360-A; KR372936-B; MX2000008003-A1; RU2218815-C2; RU2225695-C2; AU771079-B2; RU2238664-C2	US	2000
Infusion packet for preparing nutraceutical beverage, includes support member which acts as handle for proper placement of packet in liquid and connects at least two packets into functional unit.	STILLMAN S J (STIL-Individual)	WO200170591-A; EP1268305-A; WO200170591-A1; US2002012689-A1; AU200147679-A; BR200109498-A; EP1268305-A1; CN1422230-A; JP2003528011-W; ZA200206909-A; MX2002009231-A1	US	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Compositions comprising bioactive glass, useful as cosmetics, cleaning agents, personal care products, biocidal agents, functional foods and nutritional supplements.	SCHOTT GLAS (ZEIS) US BIOMATERIALS CORP (USBI-Non-standard) LEE S (LEES-Individual) KESSLER S (KESS-Individual) FORBERICH O (FORB-Individual) BUCHWAR C (BUCH-Individual) GREENSPAN D C (GREE-Individual)	WO200172262-A; WO200172262-A2; AU200149510-A; US2002086039-A1; EP1272144-A2; KR2003019333-A; JP2004500404-W; CN1455661-A; <b>BR200109603-A</b>	US	2000
Sugarcane juice spread, e.g. ginger and cumin flavored sugarcane juice spread, comprises concentrated sugarcane juice, xanthan, carrageenan, food preservative, gelling agent and nutraceutical.	COUNCIL SCI & IND RES (COUL)	CA2378890-A1; <b>BR200200949-A</b>	CA	2002
Composition suitable for incorporation into e.g. foods, beverages, pharmaceuticals and nutraceuticals.	FORBES MEDI-TECH INC (FORB-Non-standard)	WO9963841-A; EP1082026-A; WO9963841-A1; AU9940275-A; EP1082026-A1; <b>BR9910950-A</b> ; JP2002517418-W; NZ508645-A; AU771960-B2	US	1998

## b. PRODUÇÃO DE VACINAS

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Producing viruses e.g. reovirus from cell cultures for vaccine production, involves extracting viruses from cell culture infected by the virus by adding a detergent to the culture and incubating, and collecting the virus.	ONCOLYTICS BIOTECH INC (ONCO-Non-standard)	EP1370643-A; WO200274940-A; WO200274940-A1; US2002168764-A1; EP1370643-A1; <b>BR200207527-A</b> ; AU2002242520-A1; JP2004520841-W; US6808916-B2; MX2003007535-A1; ZA200306228-A	US	2001
Sustainable chicken cell line infected with Marek's disease virus - for vaccine production against Marek's disease in poultry.	UNIV MICHIGAN STATE (UNMS)	EP770677-A; EP770677-A2; CA2185406-A; CA2185407-A; JP9173059-A; EP770677-A3; AU9723568-A; JP10004956-A; MX9605139- A1; <b>BR9605244-A</b> ; <b>BR9703544-A</b> ; US5827738-A; US5833980-A; KR98002250-A; AU697814-B; US5866117-A; US5874303-A; MX9702769-A1; CN1170760-A	US	1996
Live attenuated porcine reproductive respiratory syndrome virus - which is non-infectious to macrophages, useful for vaccine production.	AKZO NOBEL NV (ALKU)	EP835930-A; EP835930-A1; JP10117773-A; CA2217882-A; <b>BR9705009-A</b> ; KR98032672- A; US5925359-A; MX9707780-A1; EP835930- B1; DE69704011-E; MX195397-B; ES2157522-T3; PH1199758127-B1	EP	1996
High molecular weight proteins of non-typeable Haemophilus influenzae - useful for vaccine production.	BARENKAMP S J (BARE-Individual) UNIV WASHINGTON (UNIW) UNIV ST LOUIS (UYSL-Non-standard)	WO9736914-A; EP900232-A; WO9736914- A1; AU9725873-A; EP900232-A1; CN1222914-A; US5977336-A; NZ332322-A; AU723159-B; MX9808107-A1; JP2001503602-W; <b>BR9708413-A</b> ; US2002164354-A1; RU2206610-C2	US	1996
Iron-regulated promoter useful in site-specific chromosomal integration - especially of foreign antigen genes into chromosomes of attenuated Salmonella typhimurium strains for live vaccine production.	COMMONWEALTH SCI & IND RES ORG (CSIR) AUSTRALIAN WOOL RES & PROMOTION ORG (AUWO- Non-standard)	WO9810064-A; EP964924-A; WO9810064-A1; AU9736892-A; ZA9707109- A; EP964924-A1; NZ334649-A; <b>BR9711692-A</b> ; AU737981-B	AU	1997

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Microcapsules containing bovine herpes virus immunogen - in spermine-alginate membrane, useful for vaccine production.	PFIZER INC (PFIZ) UNIV TEMPLE (UTEM) CHILDRENS HOSPITAL PHILADELPHIA (CHIL-Non-standard)	EP873752-A; EP873752-A2; NZ330251-A; AU9863511-A; JP10316586-A; CN1196931-A; CA2229430-A; ZA9803327-A; AU713639-B; <b>BR9801435-A</b> ; MX9803277-A1; US6270800-B1; EP873752-B1; DE69822542-E; ES2216242-T3	US	1997
Albumin-free medium for propagating and multiplying viruses in cultured cells, especially for vaccine production.	PASTEUR MERIEUX SERUMS & VACCINS SA (INMR) Merial SAS (MERI-Non-standard) AVENTIS PASTEUR (AVET) AVENTIS PASTEUR SA (AVET) Merial (MERI-Non-standard)	WO9947648-A; EP1062324-A; FR2775983-A1; WO9947648-A2; AU9927352-A; EP1062324-A2; <b>BR9908744-A</b> ; CZ200003327-A3; HU200101081-A2; SK200001288-A3; CN1301297-A; KR2001072556-A; JP2002506636-W; NZ506872-A; AU752577-B; MX2000008511-A1	FR	1998

## **8. TEMA: PROGRAMAS DE DESCOBERTA**

Em relação aos termos referentes ao tema foram localizadas patentes depositadas no Brasil em quatro deles (*Clonagem, Stem Cells, Engenharia Genética e Nanobiotecnologia*). Na tabela, abaixo, são listados os títulos das patentes com seus respectivos resumos, números das patentes, país de prioridade e ano de prioridade.

## a. CLONAGEM

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Equine infectious anaemia virus water soluble fusion protein P26 consists of amino acids and the gag of the virus for cloning of the isolated DNA fragment.	VALLEE SA (VALL-Non-standard) EMBRAPA-EMPRESA BRASILEIRA PESQUISAS AGR (EMBR-Non-standard) UNIV RIO DE JANEIRO (UYRI-Non-standard)	<b>BR200004549-A</b>	BR	2000
DNA cloning and subcloning using bacterial recombinase-mediated homologous recombination for detecting an infection or genetic condition in a patient.	EURO MOLECULAR BIOLOGY LAB (EUMO-Non-standard)	WO200104288-A; EP1204740-A; WO200104288-A1; AU200066911-A; US6355412-B1; EP1204740-A1; <b>BR200012283-A</b> ; KR2002033726-A; HU200201963-A2; CN1373803-A; JP2003504053-W; ZA200200152-A; NZ516722-A; MX2002000233-A1	US	1999
Cloning pigs using differentiated cell as nucleus donor, useful for producing cells and tissues for human transplantation, comprises inserting a differentiated pig cell into a pig oocyte and activating the resultant nuclear transfer unit.	UNIV MASSACHUSETTS (UYMA-Non-standard)	WO200119181-A; WO200119181-A1; AU200073725-A; <b>BR200013959-A</b> ; EP1241931-A1; CN1377225-A; JP2003509031-W; MX2002002653-A1	US	1999
In vitro reconstitution of mammalian embryos, useful e.g. for producing transgenic animals or cloning, including proteolysis and swelling of donor diploid nucleus.	INRA INST NAT RECH AGRONOMIQUE (INRG) INST NAT RECH AGRONOMIQUE (INRG)	WO200124624-A; EP1215960-A; FR2799099-A1; WO200124624-A2; AU200076690-A; EP1215960-A2; <b>BR200014451-A</b> ; CN1377226-A; ZA200202500-A; AU775410-B2; NZ518377-A	FR	1999
Genetic transformation system is for industrial yeasts or for laboratory lineages sensitive to L-canavanine and comprises yeast cloning vector denominated as Y1pC, formed by double circular DNA film.	CNPQ CONSELHO NACIONAL DESENVOLVIMENTO (CNPQ-Non-standard)	<b>BR200014793-A</b>	BR	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Preparing DNA for preparing viral RNA or virions, involves cloning DNA having full length copy of genomic RNA of RNA virus, or its fragment encoding RNA dependent RNA polymerase into bacterial artificial chromosome.	CONSEJO SUPERIOR INVESTIGACIONES CIENTIF (CNSJ) SANCHEZ L E (SANC-Individual)	WO200139797-A; EP1234024-A; WO200139797-A2; AU200130051-A; <b>BR200016145-A</b> ; ES2170622-A1; NO200202419-A; EP1234024-A2; SK200200761-A3; CZ200201882-A3; KR2002060251-A; HU200203305-A2; ZA200203560-A; JP2003515335-W; CN1402780-A; US2003148325-A1; NZ518990-A; US2004086846-A1; EP1234024-B1; ES2170622-B1; DE60010921-E; EP1437400-A2; ES2218276-T3	ES	1999
Identifying antigenic polypeptides expressed by pathogenic organisms e.g., Staphylococcus aureus during infection, by SEREX (serological identification of antigens by recombinant expression cloning) techniques.	UNIV SHEFFIELD (UYSH-Non-standard) BIOSYNEXUS INC (BIOS-Non-standard) FOSTER S (FOST-Individual) MCDOWELL P (MCDO-Individual) BRUMMELL K (BRUM-Individual) CLARKE S (CLAR-Individual)	WO200198499-A; EP1292681-A; WO200198499-A1; AU200174248-A; NO200205838-A; EP1292681-A1; <b>BR200111823-A</b> ; US2003186275-A1; CN1437653-A; JP2004500883-W	GB	2000
Transposon-mediated multiplex sequencing of DNA comprises cloning multiple DNA target sequences into a vector, and randomly inserting selectable transposons with sequencing primers into the DNA target-containing vectors.	AVENTIS PHARM INC (AVET) AUGUST P R (AUGU-Individual) KEAGLE P J (KEAG-Individual) LONG H (LONG-Individual) MONTMAYEUR A W (MONT-Individual) CALL K (CALL-Individual) DRAPER M (DRAP-Individual)	EP1327000-A; WO200204674-A2; AU200173185-A; NO200206206-A; EP1327000-A2; KR2003021244-A; <b>BR200112261-A</b> ; US2003219779-A1; JP2004502467-W; ZA200300035-A; MX2003000038-A1	US	2000
Determining primary structure of mRNA encoding recombinant endooligopeptidase A, by cloning cDNA prepared from mRNA that is extracted from human tissue, identifying and selecting EOPA cDNA, amplifying and isolating target cDNA.	CAMARGO A (CAMA-Individual) MARTINS DE CAMARGO A C (DCAM-Individual)	WO2004053052-A2; <b>BR200205000-A</b> ; AU2003302901-A1	BR	2003
Bioassay for determining amount of active myostatin in animal, by amplifying and cloning promoter, transfecting vector, selecting, incubating, and washing myoblasts, preparing protein extracts, and performing gene assay.	AGRESEARCH LTD (AGRE-Non-standard) OVITA LTD (OVIT-Non-standard)	WO2003006686-A; WO2003006686-A1; NZ512869-A; EP1404866-A1; <b>BR200211095-A</b> ; AU2002328046-A1	NZ	2001

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Methods for efficient nucleic acid sequencing - are suitable for sequencing long nucleic acid mols., including chromosomes and RNA, without cloning or amplification.	ARCH DEV CORP (ARCH-Non-standard)	WO9509248-A; EP723598-A; WO9509248-A1; AU9480727-A; NO9601165-A; EP723598-A1; FI9601283-A; CZ9600905-A3; <b>BR9407712-A</b> ; JP9505729-W; NZ275194-A; CN1136330-A; HU75993-T; AU694146-B; RU2143004-C1; HU218597-B; US2002197621-A1; KR346953-B; EP723598-B1; DE69433487-E; EP1408122-A2	US	1994
Cloning vitamin D3 binding protein or its domain III in baculovirus - to produce macrophage activating factors, useful in cancer, viral infection and osteoporosis treatment.	YAMAMOTO N (YAMA-Individual)	EP837932-A; WO9640903-A; EP1340815-A; WO9640903-A1; AU9662535-A; US5620846-A; NO9705771-A; EP837932-A1; JP11511962-W; <b>BR9609072-A</b> ; US2002055140-A1; US6410269-B1; CN1191567-A; RU2198218-C2; EP1340815-A2; EP1443112-A2; CN1510147-A	US	1996
Human immune deficiency virus recombinant P17 protein production consists of cloning after DNA digestion for bonding, and purification of the protein.	UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	<b>BR9706072-A</b>	BR	1997
Preparation of monoclonal antibodies against cell surface antigens used as diagnostic agents and to treat rheumatoid arthritis - comprises immunising, then enriching, enriching and cloning B cells and then selecting and cloning hybridoma.	AKZO NOBEL NV (ALKU) AKZO NV (ALKU)	EP856520-A; EP856520-A1; AU9746908-A; NO9705714-A; JP10179160-A; CA2221682-A; ZA9710391-A; HU9702359-A2; NZ329314-A; <b>BR9706236-A</b> ; KR98063909-A; MX9709446-A1; US6020170-A; AU733165-B; IL122233-A; US6392020-B1; US2002143150-A1; CN1188115-A; MX205222-B; RU2196178-C2	EP	1997
Isolating genes with site-specific or preferred expression in specific target cells - using repeated immunomagnetic separation of cells then cloning nucleic acid from them, used to identify genes which control metastatic spread, useful e.g. in gene therapy.	FODSTAD O (FODS-Individual) ENGEHAUSEN R (ENGE-Individual)	WO9736004-A; EP894146-A; WO9736004-A1; AU9723116-A; NO9804489-A; EP894146-A1; CZ9802865-A3; AU703262-B; CN1214738-A; HU9901786-A2; <b>BR9708256-A</b> ; NZ331920-A; SK9801416-A3; JP2000509250-W; MX9807590-A1; KR99087833-A; SK282091-B6; RU2180963-C2; EP894146-B1; IL126257-A; DE69725297-E	NO	1996



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Producing satellite artificial chromosomes or mini:chromosomes - useful for, e.g. cloning multiple proteins of a metabolic pathway or multivalent vaccines, etc..	BIOLOGICAL RES CENT HUNGARIAN ACAD SCI (BIOL-Non-standard)	WO9740183-A; EP929689-A; WO9740183-A2; AU9724512-A; EP929689-A2; HU9901482-A2; US6025155-A; <b>BR9708855-A</b> ; NZ331815-A; US6077697-A; JP2000508177-W; MX9808376-A1; US2001008025-A1; NZ503055-A; NZ516885-A; US2003083293-A1; CA2429724-A1; CA2429726-A1; JP2004033209-A; US6743967-B2; US2004143861-A1; AU200138957-A; AU2004201732-A1; AU773728-B2	US	1996
Production of recombinant GP160 protein of human immune deficiency virus consists of DNA amplification and digestion, cloning, bacteria transformation and induction, and purification.	UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	<b>BR9710824-A</b>	BR	1997
Production of recombinant P24 protein of human immune deficiency virus consists of DNA amplification and digestion, cloning, bacteria transformation and induction, and purification.	UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	<b>BR9710825-A</b>	BR	1997
Production of recombinant BEAN 58058 virus growth factor consists of amplification of DNA, cloning, transformation and sequencing.	UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	<b>BR9710830-A</b>	BR	1997
Production of defective recombinant virus using baculovirus for complementation - used for cloning genes and for in vivo or in vitro expression of genes, e.g. as nucleic acid vaccines.	RHONE-POULENC RORER SA (RHON) CNRS CENT NAT RECH SCI (CNRS) INST ROUSSY GUSTAVE (INSR) AVENTIS PHARMA SA (AVET) LEBLOIS-PREHAUD H (LEBL-Individual) PERRICAUDET M (PERR-Individual) VIGNE E (VIGN-Individual) YEH P (YEHP-Individual) GENCELL SA (GENC-Non-standard)	WO9822607-A; FR2756297-A; EP946741-A; WO9822607-A1; FR2756297-A1; ZA9710516-A; AU9852261-A; NO9902464-A; CZ9901822-A3; EP946741-A1; SK9900666-A3; <b>BR9713388-A</b> ; HU200001762-A2; AU731106-B; KR2000057202-A; JP2001503993-W; MX9904449-A1; US6387670-B1; US2003022356-A1; CZ293947-B6	FR	1996

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Cloning of mammals - using activated nuclear transfer unit prepared from differentiated mammalian cell or cell nucleus and enucleated mammalian oocyte.	UNIV MASSACHUSETTS (UYMA-Non-standard) UNIV MASSACHUSETTS AMHERST CAMPUS (UYMA-Non-standard)	WO9830683-A; EP1015572-A; WO9830683-A2; AU9860145-A; US5945577-A; <b>BR9806872-A</b> ; CN1248288-A; EP1015572-A2; US6235970-B1; MX9906464-A1; JP2001512964-W; AU742363-B; US2002010949-A1; NZ336612-A	US	1997
Purification and concentration of nucleic acid solutions by cross-flow filtration - removes endotoxin from plasmid preparations, used e.g. for cloning, transfection, gene therapy etc.	BOEHRINGER MANNHEIM GMBH (BOEF) ROCHE DIAGNOSTICS GMBH (HOFF)	EP853123-A; WO9830685-A; EP853123-A1; WO9830685-A2; AU9862084-A; EP961826-A2; CN1243543-A; <b>BR9807062-A</b> ; AU723817-B; JP2000513580-W; MX9906372-A1; KR2000069943-A; KR322398-B; CA2277165-C	EP	1997
Cloning a mammal using a non-serum starved, differentiated mammalian cells as donor nuclei - useful for producing offspring with organ xenografts, which are useful in cell transplantation therapy in humans, especially against Parkinson's disease.	UNIV MASSACHUSETTS (UYMA-Non-standard) UNIV MASSACHUSETTS AMHERST CAMPUS (UYMA-Non-standard)	WO9901163-A; EP1017422-A; WO9901163-A1; AU9881543-A; EP1017422-A1; <b>BR9811657-A</b> ; CN1265599-A; JP2001509361-W; MX2000000201-A1; AU2002301114-A1	US	1997
Cloning a pig using differentiated pig cells as donor nuclei - useful for producing offspring with agriculturally useful traits, and organ xenografts, which are useful in cell transplantation therapy in humans.	UNIV MASSACHUSETTS (UYMA-Non-standard)	WO9901164-A; EP1017423-A; WO9901164-A1; AU9883745-A; EP1017423-A1; <b>BR9811659-A</b> ; CN1265600-A; US6235969-B1; JP2001509362-W; AU742840-B; US2002035737-A1; MX2000000202-A1; NZ502124-A; US2004194159-A1	US	1997
Cloning animals by inserting nucleus from adult somatic cells into enucleated oocyte, particularly for producing transgenic animals.	UNIV HAWAII (UYHA-Non-standard) WAKAYAMA T (WAKA-Individual) YANAGIMACHI R (YANA-Individual)	WO9937143-A; EP1049372-A; WO9937143-A2; AU9922377-A; <b>BR9907193-A</b> ; EP1049372-A2; KR2001040370-A; CN1306390-A; US6331659-B1; JP2002500864-W; US2002019993-A1; NZ505728-A; AU765170-B	US	1998

## b. STEM CELLS

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Mammalian lipo-derived stem cells free of mature adipocytes and lipo-derived lattices useful to generate differentiated tissues and structures in vivo and in vitro.	UNIV PITTSBURGH (UYPI-Non-standard)	WO200053795-A; EP1165830-A; WO200053795-A1; AU200035223-A; EP1165830-A1; ZA200106886-A; <b>BR200008552-A</b> ; US2002076400-A1; KR2002013510-A; CN1352696-A; JP2002537849-W; US2003082152-A1; MX2001008489-A1; US6777231-B1; US2004171146-A1	US	1999
Reprogramming the life-span of a desired cell for production of embryonic stem cells comprising introduction of cytoplasm from an undifferentiated cell.	ADVANCED CELL TECHNOLOGY INC (ADCE-Non-standard) CHAPMAN K B (CHAP-Individual)	WO200100650-A; EP1196426-A; WO200100650-A1; AU200059028-A; US2002001842-A1; EP1196426-A1; CN1362965-A; JP2003503071-W; <b>BR200012099-A</b> ; MX2001013450-A1; US2004199935-A1	US	1999
Mobilization of stem cells and progenitor cells using a nicotine receptor agonist.	UNIV LELAND STANFORD JUNIOR (STRD)	WO200108683-A; EP1207879-A; WO200108683-A1; AU200065026-A; EP1207879-A1; <b>BR200012787-A</b> ; JP2003505506-W; US6720340-B1	US	2000
Treating central nervous system damage and brain damage resulting from stroke, involves administering cells or stem cells and a neural stimulant.	GEN HOSPITAL CORP (GEHO)	WO200112236-A; EP1210106-A; WO200112236-A2; AU200067903-A; EP1210106-A2; NO200200779-A; <b>BR200013388-A</b> ; JP2003507349-W; US2004105847-A1; US6749850-B1;	US	1999
Novel anti-prostate stem cell antigen (PSCA) antibody that internalizes on binding to PSCA on mammalian cell and inhibits growth of PSCA-expressing cancer cells in vivo, useful for killing PSCA-expressing cancer cells.	GENENTECH INC (GETH)	WO200140309-A; EP1226177-A; WO200140309-A2; AU200132618-A; <b>BR200015224-A</b> ; NO200201992-A; EP1226177-A2; KR2002047303-A; JP2003515330-W; CN1413220-A; NZ518477-A	US	2000
Obtaining human hematopoietic cells, useful for transplanting human cells into human recipient host, involves exposing human embryonic stem cell culture to mammalian hematopoietic stromal cells.	WISCONSIN ALUMNI RES FOUND (WISC) KAUFMAN D S (KAUF-Individual) THOMSON J A (THOM-Individual)	WO200134776-A; EP1228194-A; WO200134776-A1; US6280718-B1; AU200069404-A; US2002015694-A1; NO200202180-A; EP1228194-A1; SE200201328-A; <b>BR200015374-A</b> ; CN1387565-A; JP2003513664-W; KR2003022766-A; US6613568-B2; MX2002004551-A1; NZ518683-A; US2004043484-A1	US	1999

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Producing cloned embryos and adults from cultured cells, especially embryonic stem cells, by microinjecting nucleus of the cell into enucleated oocyte to form a reconstituted cell and allowing the cell to develop.	PERRY A C F (PERR-Individual) MOMBAERTS P (MOMB-Individual) WAKAYAMA T (WAKA-Individual)	WO200145500-A; WO200145500-A1; AU200122793-A; EP1241936-A1; <b>BR20016531-A</b> ; JP2003517317-W; CN1423522-A; US2003213008-A1; NZ519347-A	US	1999
Production of primate embryoid bodies that adhere to a substrate comprises removing the adhering colonies of the embryonic stem cells from the substrate in clumps.	WISCONSIN ALUMNI RES FOUND (WISC) THOMSON J A (THOM-Individual) MARSHALL V S (MARS-Individual) SWIERGIEL J J (SWIE-Individual)	WO200162899-A; EP1257634-A; WO200162899-A2; AU200138491-A; NO200203949-A; EP1257634-A2; <b>BR200108436-A</b> ; CN1404526-A; US6602711-B1; KR2003032921-A; JP2003523766-W; US2004023376-A1; MX2002008054-A1; NZ520700-A	US	2000
Serum-free culturing of primate embryonic stem cells in the presence of fibroblast growth factors.	WISCONSIN ALUMNI RES FOUND (WISC) THOMSON J A (THOM-Individual)	WO200166697-A; EP1261691-A; WO200166697-A2; AU200141973-A; EP1261691-A2; NO200204200-A; <b>BR200108507-A</b> ; CN1416345-A; KR2003032926-A; JP2003525625-W; US2003190748-A1; MX2002008698-A1; NZ520701-A	US	2000
Use of peptide derived from N-terminal part of alpha S1 casein to treat and/or prevent autoimmune or viral disease, viral infection, thrombocytopenia, or to induce hematopoiesis, hematopoietic stem cell proliferation.	CHAY 13 MEDICAL RES GROUP NV (CHAY-Non-standard) SIDELMAN Z (SIDE-Individual)	WO200164234-A; EP1261360-A; WO200164234-A1; AU200135962-A; US2002147144-A1; EP1261360-A1; NO200204157-A; CZ200202915-A3; <b>BR200109027-A</b> ; KR2003025907-A; CN1427725-A; JP2003528827-W; ZA200206842-A; HU200301003-A2; MX2002008569-A1	IL	2000
CXC receptor 4 agonists that reduces hematopoietic cell multiplication and susceptibility to cytotoxic agents, are useful for bone marrow or peripheral blood stem cell transplantation.	UNIV BRITISH COLUMBIA (UYBR-Non-standard) CHEMOKINE THERAPEUTICS CORP (CHEM-Non-standard) TUDAN C R (TUDA-Individual) MERZOUK A (MERZ-Individual) ARAB L (ARAB-Individual) SAXENA G (SAXE-Individual) EAVES C J (EAVE-Individual) CASHMAN J (CASH-Individual) CLARK-LEWIS I (CLAR-Individual) SALARI H (SALA-Individual)	WO200176615-A; WO200176615-A2; CA2305036-A1; CA2335109-A1; AU200152081-A; US2002165123-A1; EP1276493-A2; <b>BR200110049-A</b> ; US2003148940-A1; JP2003530355-W; EP1276493-B1; DE60106002-E	CA	2001

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Removing ras-mediated neoplastic cells from a cellular composition by contacting the composition with reovirus which results in oncolysis of neoplastic cells, useful for increasing efficacy of hematopoietic stem cell transplantation.	ONCOLYTICS BIOTECH INC (ONCO-Non-standard)	WO200183711-A; WO200183711-A2; AU200158086-A; EP1278824-A2; <b>BR200110474-A</b> ; JP2003531606-W; MX2002010744-A1	US	2001
New polynucleotide, useful for identifying such cells or compounds that regulate differentiation and dedifferentiation, comprises avian nucleic acid, specific for Galliform pluripotent stem cells.	CNRS CENT NAT RECH SCI (CNRS) INST NAT RECH AGRONOMIQUE (INRG) INRA INST NAT RECH AGRONOMIQUE (INRG) ECOLE NORMALE SUPERIEURE DE LYON (ECOL-Non-standard) ENS ECOLE NORMALE SUPERIEURE LYON (ENSE-Non-standard) ACLOQUE H (ACLO-Individual) BIROT A (BIRO-Individual) RISSON V (RISS-Individual) PAIN B (PAIN-Individual) SAMARUT J (SAMA-Individual)	EP1280898-A; WO200185938-A1; FR2808803-A1; AU200154885-A; EP1280898-A1; NO200205402-A; <b>BR200110764-A</b> ; US2004072169-A1; JP2004515212-W	FR	2000
Treating T-cell disorder such as viral infection or acquired immunodeficiency syndrome, comprises disrupting sex steroid signaling to the thymus in the subject and introducing into the subject bone marrow or hemopoietic stem cells.	UNIV MONASH (MONU) BOYD R (BOYD-Individual)	WO200230435-A; WO200230435-A1; AU200195270-A; EP1333845-A1; <b>BR200114595-A</b> ; JP2004509979-W; US2004132179-A1; ZA200302931-A; NZ525508-A	AU	2000
Agents containing cofilin promoting proliferation and differentiation of hematopoietic stem cells and their precursors for treatment of hematopoietic deficiency diseases.	DAIICHI SUNTORY PHARMA CO LTD (SUNR)	WO2003057241-A; WO2003057241-A1; AU2002359951-A1; <b>BR200207725-A</b> ; US2004157326-A1; CN1499980-A; EP1459758-A1	JP	2001
New lentivector with human globin gene, useful for treating hemoglobinopathies (e.g. beta-thalassemia or sickle-cell disease) or for transducing hematopoietic progenitor or stem cells for treating hemoglobinopathy in mammals.	SLOAN KETTERING INST CANCER RES (SLOK) SADELAIN M (SADE-Individual) RIVELLA S (RIVE-Individual) MAY C (MAYC-Individual) BERTINO J (BERT-Individual)	WO2003002155-A; WO2003002155-A1; US2003022303-A1; EP1409025-A1; AU2002320246-A1; <b>BR200211307-A</b> ; CN1522160-A	US	2001
Increasing population of progenitor and/or stem cells in subject comprises administering conjugate comprising cyclic amine linked to second amine.	ANORMED INC (ANOR-Non-standard) BRIDGER G J (BRID-Individual) ABRAMS M J (ABRA-Individual) HENSON G W (HENS-Individual) MACFARLAND R T (MACF-Individual) CALANDRA G B (CALA-Individual)	WO2003011277-A2; US2003130250-A1; EP1411918-A2; KR2004020075-A; <b>BR200211570-A</b> ; NO200400407-A; AU2002318927-A1	US	2002

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Isolating inner cell mass for establishing human embryonic stem cell lines able to develop into specialized cells in the human body, e.g. blood, skin, muscle and nerve cells, employing a non-contact diode laser technique.	RELIANCE LIFE SCI PVT LTD (RELI-Non-standard)	WO2003018783-A; WO2003018783-A1; US2003104616-A1; EP1421181-A1; AU2002334378-A1; KR2004030161-A; <b>BR200212098-A</b> ; ZA200304132-A	US	2001
Tailor-made pluripotent stem cells for production of donor organs and tissues which do not induce immune rejection when transplanted.	TRANS-SCI INC (TRAN-Non-standard) NAKATSUJI N (NAKA-Individual) TADA T (TADA-Individual) REPROCELL INC (REPR-Non-standard) NAKATSUJI S (NAKA-Individual) TRANS SCI KK (TRAN-Non-standard)	WO2003027278-A1; EP1437404-A1; KR2004031101-A; <b>BR200212998-A</b> ; JP2004248505-A; AU2002335417-A1	JP	2001
Injectable bone filler for repairing osseous defect comprises calcium salt particles, organic binder having affinity for calcium salt, cells from stem cells, osteogenic cells, osteoprogenitor cells, and buffer.	ISOTIS NV (ISOT-Non-standard)	WO2003028779-A; WO2003028779-A1; EP1432461-A1; AU2002328023-A1; KR2004062946-A; <b>BR200213041-A</b>	EP	2001
Directing differentiation of primate embryonic stem cells into endothelial cells, by culturing stem cells in medium containing growth factors e.g. vascular endothelial cell growth factor, basic fibroblast growth factor.	WISCONSIN ALUMNI RES FOUND (WISC) KAUFMAN D S (KAUF-Individual) LEWIS R (LEWI-Individual) AUERBACH R (AUER-Individual)	WO2003040319-A; WO2003040319-A2; US2003166273-A1; LU91074-A; SE200401132-A; EP1446476-A2; AU2002356896-A1; <b>BR200213815-A</b>	US	2001
Adult, multipotent human stem cells, useful for transplantation for e.g. tissue reconstruction or cosmetic purposes, are isolated from adipose tissue and do not induce rejection.	SAINT LAURENT PARFUMS YVES (SLAU-Non-standard) CENT NAT RECH SCI (CNRS) UNIV NICE-SOPHIA ANTIPOLIS (UYNI-Non-standard) RODRIGUEZ A (RODR-Individual) SAINT LAURENT PARFUMS SA YVES (SLAU-Non-standard) CNRS CENT NAT RECH SCI (CNRS) DANI C (DANI-Individual) AILHAUD G (AILH-Individual)	WO2004013275-A2; FR2843123-A1; AU2003278212-A1; <b>BR200305721-A</b> ; US2004229351-A1	FR	2003
Novel truncated human chemokine Beta-8 poly-peptide(s) - useful for e.g. protecting bone marrow stem cells from chemotherapeutic agents or stimulate wound healing.	SMITHKLINE BEECHAM CORP (SMIK) HUMAN GENOME SCI INC (HUMA-Non-standard) WHITE J (WHIT-Individual) APPELBAUM E (APPE-Individual) O'SHANNESY D (OSHA-Individual) FORNWALD J A (FORN-Individual) O'DONNELL K (ODON-Individual) SMITHKLINE BEECHAM (SMIK)	WO9712041-A; EP859842-A; WO9712041-A1; ZA9608204-A; AU9673790-A; NO9801387-A; CZ9800921-A3; EP859842-A1; CN1198186-A; HU9802699-A2; <b>BR9610671-A</b> ; AU711573-B; JP11512610-W; US6001606-A; MX9802380-A1; NZ320932-A; KR99063834-A; US2002007047-A1; US2002061551-A1; CN1405180-A; US2003138400-A1; KR2003096447-A	US	1995

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Use of specific chemokine(s) for stem cell mobilisation - useful for treating myelo:suppression or any condition involving immuno-suppression or low levels of haematopoietic cells.	SMITHKLINE BEECHAM CORP (SMIK)	WO9715595-A; EP866806-A; WO9715595-A1; ZA9608896-A; AU9675209-A; NO9801818-A; EP866806-A1; CZ9801202-A3; HU9802531-A2; <b>BR9611173-A</b> ; CN1205708-A; AU712235-B; JP11512747-W; MX9803217-A1; NZ321789-A; KR99066997-A	US	1995
Killing specific cells in population of e.g. nucleated peripheral blood cells - by treatment with immuno-toxin, particularly for purging stem cell transplants and for direct treatment of cancers.	FODSTAD O (FODS-Individual)	WO9733611-A; EP954329-A; WO9733611-A1; AU9725229-A; NO9804175-A; SK9801257-A3; HU9901597-A2; CN1218411-A; <b>BR9708049-A</b> ; AU710184-B; EP954329-A1; CZ9802763-A3; NZ331763-A; JP2000507230-W; NZ336576-A; MX9807252-A1; KR99087546-A; RU2182493-C2; EP954329-B1; DE69714775-E; US2002151689-A1	NO	1996
Stem cell factor analogue N10D or N10D/N11D - useful to treat pigmentation disorder, AIDS, nerve damage, infertility, intestinal damage or haematopoietic disorder.	AMGEN INC (AMGE-Non-standard) AMGEN BOULDER INC (AMGE-Non-standard)	WO9738101-A; EP904367-A; WO9738101-A1; AU9726064-A; NO9804491-A; CZ9803015-A3; EP904367-A1; US5885962-A; SK9801310-A3; CN1214734-A; <b>BR9708578-A</b> ; HU9902768-A2; JP2000508170-W; MX9807807-A1; KR2000004951-A; AU726663-B; MX209661-B	US	1996
Culture system for prolonged maintenance of primordial germ cells - includes leukemia inhibitory factor, basic fibroblast growth factor, stem cell factor and insulin-like growth factor.	UNIV MASSACHUSETTS (UYMA-Non-standard)	WO9906533-A; EP1007633-A; WO9906533-A1; AU9887593-A; EP1007633-A1; <b>BR9811830-A</b> ; US6156569-A; CN1273600-A; AU736087-B; MX2000001301-A1; KR2002013461-A; NZ502712-A; JP2003532364-W; US2004226058-A1	US	1998
Production of avian embryonic germ cells by culturing primordial germ cells - in a medium which includes leukemia inhibitory factor, basic fibroblast growth factor, stem cell factor and insulin-like growth factor.	UNIV MASSACHUSETTS (UYMA-Non-standard)	WO9906534-A; EP1019491-A; WO9906534-A1; AU9887594-A; EP1019491-A1; <b>BR9811832-A</b> ; CN1273599-A; MX2000001300-A1; AU738357-B; JP2003517261-W; NZ502713-A	US	1997
An isolated ependymal neural central nervous system stem cell useful for treating, e.g. Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, multiple sclerosis and acute trauma.	NEURONOVA AB (NEUR-Non-standard)	WO9967363-A; EP1090105-A; WO9967363-A1; AU9949459-A; EP1090105-A1; <b>BR9911509-A</b> ; CN1307632-A; KR2001071601-A; JP2002518043-W; US2003092176-A1; AU770501-B2	SE	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Treatment for damaged or scarred myocardial tissue comprises administering a cellular suspension containing mesenchymal stem cells, used to improve cardiac function.	GENZYME CORP (GENZ)	WO200006701-A; WO200006701-A1; AU9955454-A; EP1100870-A1; <b>BR9912662-A</b> ; JP2002521493-W	US	1999
Novel chimeric anti-CD20 antibody treatment for bone marrow transplant and peripheral blood stem cell transplant recipients, useful for purging disease-causing CD20 antigen-expressing cells.	IDEC PHARM CORP (IDEC-Non-standard)	WO200027433-A; EP1131096-A; WO200027433-A1; AU200015970-A; <b>BR9915149-A</b> ; EP1131096-A1; KR2001099788-A; CN1330554-A; JP2002529429-W; ZA200103716-A; MX2001004649-A1; US2004213784-A1	US	1998
Novel use of growth hormone to stimulate the mobilization of hematopoietic stem cells for e.g. for enhancing bone marrow transplantation, and for treating anemia and leukemia.	ARS APPLIED RES SYSTEMS HOLDING NV (ISTF)	EP1016413-A; WO200040260-A; EP1140149-A; EP1016413-A1; WO200040260-A1; AU200021039-A; <b>BR9916726-A</b> ; EP1140149-A1; JP2002534393-W; MX2001006681-A1; AU772222-B2; AU2004203355-A1	EP	1998

### c. ENGENHARIA GENÉTICA

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Genetically engineering the biosynthetic pathways in plants involved in the accumulation of sterol compounds and tocopherol to produce compounds for lowering the level of low density lipoprotein cholesterol in blood serum.	MONSANTO CO (MONS) MONSANTO TECHNOLOGY LLC (MONS)	WO200061771-A; EP1169462-A; WO200061771-A2; AU200042316-A; EP1169462-A2; <b>BR200010597-A</b> ; CN1360637-A; MX2001010304-A1	US	1999
New plant regulatory DNA sequences, useful for selectively controlling gene expression and for modifying plants through genetic engineering to have the desired morphology, physiology, growth or nutritional enhancement.	RENESEN LLC (RENE-Non-standard) MONSANTO TECHNOLOGY LLC (MONS) MONSANTO TECHNOLOGIES CO (MONS)	WO200116307-A; EP1214402-A; WO200116307-A2; AU200069477-A; <b>BR200013728-A</b> ; EP1214402-A2; US6506565-B1; CN1387572-A; US2003131375-A1	US	1999



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Gene over-expression systems obtained by genetic engineering with stable transfer of genes for producing useful gene products or other substances, applicable in modifying and analysis of functions.	TOYOTA JIDOSHA KK (TOYT) TOYOTA CHUO KENKYUSHO KK (TOYW)	WO2003027280-A; WO2003027280-A1; JP2003164294-A; JP2003164295-A; EP1437405-A1; <b>BR200212649-A</b> ; AU2002330401-A1	JP	2002
Coral cobra venom toxin cDNA - and prepn of the venom by genetic engineering or chemical synthesis for prodn. of antiserum to treat snake bites.	FUNDACAO BUTANTAN (BUTA-Non-standard) HO P L (HOPL-Individual)	<b>BR9403020-A</b>	BR	1994
Recombinant protein P24 production - by genetic engineering techniques for use in diagnostics and possibly as anti-HIV vaccine.	UNIV FEDERAL MINAS GERAIS (UYMI-Non-standard)	<b>BR9700860-A</b>	BR	1997
New promoter that is operable in a plant cell - useful in genetic engineering for regulation of gene expression.	COMMONWEALTH SCI & IND RES ORG (CSIR) STATE QUEENSLAND DEPT PRIMARY IND (QUEE-Non-standard) UNIV QUEENSLAND (UYQU) BUREAU SUGAR EXPERIMENT STATIONS (SUGA-Non-standard) UNIV QUEENSLAND TECHNOLOGY (UYQU-Non-standard) UNIV KATHOLIEKE LEUVEN (UYLE-Non-standard)	WO9900492-A; EP1021527-A; WO9900492-A1; AU9880929-A; EP1021527-A1; <b>BR9810448-A</b> ; NZ502334-A; CN1261402-A; AU729274-B; KR2001020526-A; JP2002507888-W; MX9911879-A1; US6391639-B1	AU	1997
Genetically engineering conifers of the genus Pinus comprises particle mediated transformation.	WESTVACO CORP (WEVC) KODRZYCKI R J (KODR-Individual) BECWAR M R (BECW-Individual) CONNETT-PORCEDDU M B (CONN-Individual) SCHWUCHOW S G (SCHW-Individual)	AU9933165-A; ZA9903748-A; CA2274037-A1; <b>BR9901778-A</b> ; NZ336149-A; US2002129405-A1; US6518485-B1	US	1999
Modulating exogenous gene expression useful for inducing or suppressing expression in animal and plant cells for genetic engineering.	ROHM & HAAS CO (ROHM) CARLSON G R (CARL-Individual) CRESS D E (CRES-Individual) DHADIALLA T S (DHAD-Individual) HORMANN R E (HORM-Individual) LE D P (LEDP-Individual) NEW RHEOGENE LLC (NEWR-Non-standard)	EP965644-A; EP965644-A2; JP2000037189-A; AU9933900-A; <b>BR9902283-A</b> ; CN1251389-A; KR2000006256-A; US6258603-B1; MX9905570-A1; US2001044151-A1; AU765306-B	US	1999

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Use of a DNA detection technique for the determination of genetic material of cocoa in e.g. fermented beans, to determine cocoa and/or cocoa varieties modified by common breeding techniques or genetic engineering.	SOC PROD NESTLE SA (NEST) PETIARD V (PETI-Individual) CROUZILLAT D (CROU-Individual)	EP999283-A; WO200028078-A; EP1127158-A; EP999283-A1; WO200028078-A1; AU9964759-A; EP1127158-A1; <b>BR9915050-A</b> ; CN1325457-A; MX2001004242-A1; JP2002529105-W; ZA200104563-A; AU762765-B; US2004161740-A1	EP	1998

## d. NANOBIOLOGIA

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Fabricating micro or nano scale devices, e.g. optical storage media - by exploiting self-assembling, hybridising, properties of nucleic acid with components formed on surface then released and transported to second surface.	NANOTRONICS INC (NANO-Non-standard)	WO9828320-A; EP943158-A; WO9828320-A2; AU9853712-A; EP943158-A2; <b>BR9713995-A</b> ; KR2000057427-A; JP2001506931-W; CN1287689-A; AU742310-B; US6652808-B1; US2004115696-A1; AU200227546-A	US	1996

## 9. TEMA: SEGURANÇA BIOLÓGICA

Apresenta-se a seguir o título da patente que depositada no Brasil, sobre o tema *segurança biológica*, com seu respectivo título, depositante, número da patente, país de prioridade e ano de prioridade.

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Synthetic peptide used in protecting animals against foot and mouth disease virus infections comprises helper T-cell epitope and foot and mouth disease virus epitope conjugate.	UNITED BIOMEDICAL INC (UNBI-Non-standard)	WO9966954-A; WO9966954-A1; AU9948266-A; US6107021-A; EP1089759-A1; <b>BR9912178-A</b> ; KR2001053042-A; JP2002518461-W; CN1354674-A; AU754939-B	US	1998

## 10. TEMA: SUSTENTABILIDADE AMBIENTAL

Não foram localizadas patentes, depositadas no Brasil, com o tema *sustentabilidade ambiental*.

Em relação aos termos referentes à este tema, foram localizadas patentes depositadas no Brasil em dois deles ( Bioinseticida e Biofungicida). São listados nas tabelas abaixo os títulos das patentes com seus respectivos depositantes, números das patentes, país de prioridade e ano de prioridade.

## a. BIOINSETICIDA

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
A new bioinsecticide formulation is based on entomotoxines obtained from <i>Bacillus thuringiensis</i> var <i>israelensis</i> with toxic activity against Dipteran insects.	FIOCRUZ FUNDACAO CRUZ OSWALDO (FIOC-Non-standard)	EP1283676-A; WO200189297-A2; <b>BR200003314-A</b> ; AU200163674-A; EP1283676-A2; ZA200200513-A; US2004022776-A1; MX2002000866-A1	BR	2000
New <i>Bacillus pumilus</i> strain, useful as fungicide for plant protection and a metabolite for increasing insecticidal activity of <i>Bacillus thuringiensis</i> .	AGRAQUEST INC (AGRA-Non-standard)	WO200058442-A; EP1165751-A; WO200058442-A1; AU200037657-A; US6245551-B1; US2001022968-A1; NO200104653-A; EP1165751-A1; <b>BR200009430-A</b> ; CZ200103239-A3; SK200101306-A3; KR2001112933-A; HU200200562-A2; CN1351652-A; JP2002539820-W; ZA200107386-A; US6586231-B2; MX2001009695-A1; NZ514040-A; AU775016-B2	US	1999
New <i>Bacillus thuringiensis</i> polypeptide for use as an insecticide in protecting plants, such as, corn, wheat, oat, tobacco, or potato plants and in controlling insect populations, such as, Colorado potato beetle and southern rootworm.	MONSANTO CO (MONS) MONSANTO TECHNOLOGY LLC (MONS)	WO200066742-A; EP1173578-A; WO200066742-A2; AU200046987-A; EP1173578-A2; <b>BR200010303-A</b> ; CZ200103894-A3; CN1360632-A; ZA200108918-A; US6555655-B1; MX2001011313-A1; US2003232757-A1; AU769939-B2	US	1999
New synthetic gene for CryIC protein, useful for producing transgenic plants resistant to insects, provides high level expression in plants.	INRA INST NAT RECH AGRONOMIQUE (INRG) CIRAD CENT COOP INT EN RECH AGRONOMIQUE (CIRA-Non-standard)	WO200102579-A; FR2795739-A1; WO200102579-A1; AU200062902-A; <b>BR200012045-A</b>	FR	1999
Lepidopteran-active <i>Bacillus thuringiensis</i> delta-endotoxin polypeptides and the polynucleotides that encode them, useful for increasing the insect resistance of plant.	MONSANTO CO (MONS) MONSANTO TECHNOLOGY LLC (MONS) MONSANTO TECHNOLOGY CO (MONS)	WO200119859-A; EP1218513-A; WO200119859-A2; AU200074916-A; EP1218513-A2; <b>BR200014516-A</b> ; CN1390259-A; US6593293-B1; ZA200201610-A; MX2002002955-A1; US2003237111-A1	US	1999

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Synergistic control of insects such as cotton bollworms, involves applying to locus, foliage or stem of transgenic plant, a recombinant insect virus containing vector which is highly virulent to the insect.	BASF AG (BADI)	WO200150865-A; EP1244360-A; WO200150865-A2; AU200137270-A; EP1244360-A2; CZ200202301-A3; <b>BR200016924-A</b> ; KR2002065923-A; SK200200967-A3; HU200203815-A2; CN1420725-A; MX2002006589-A1	US	2000
Indoor and outdoor extermination of termites involves combination of an entomopathogenic nematode and insect-growth regulator a slow-acting insecticide.	SDS BIOTECH CORP (SDSB-Non-standard) MIKAMI K (MIKA-Individual) YAMANAKA S (YAMA-Individual)	WO200165944-A; WO200165944-A2; JP2001253805-A; AU200141069-A; KR2002081415-A; <b>BR200109112-A</b> ; US2003157062-A1; ZA200207070-A	JP	2000
Streptomyces strain useful as an insecticide for preventing or treating a plant, root or fruit from Lepidoptera.	AGRAQUEST INC (AGRA-Non-standard)	WO200179450-A; EP1272611-A; WO200179450-A2; AU200157595-A; EP1272611-A2; <b>BR200110083-A</b> ; US6682925-B1; MX2002010145-A1; JP2004507221-W; ZA200209121-A; NZ522369-A	US	2000
Use of enveloped agrochemical, especially herbicide, safener, growth regulator, insecticide or fungicide, for suppression of antagonistic interactions in agrochemical mixtures.	AVENTIS CROPSCIENCE GMBH (AVET) KRAUSE H (KRAU-Individual) SCHNABEL G (SCHN-Individual) FRISCH G (FRIS-Individual) WURTZ J (WURT-Individual) BICKERS U (BICK-Individual) HACKER E (HACK-Individual) AULER T (AULE-Individual) MELENDEZ A (MELE-Individual) HAASE D (HAAS-Individual) BAYER CROPSCIENCE GMBH (FARB)	WO200184928-A; EP1282353-A; WO200184928-A1; DE10022989-A1; AU200167410-A; US2002055436-A1; EP1282353-A1; <b>BR200110738-A</b> ; CN1431863-A; JP2003532652-W	DE	2000
New bacterial insecticidal proteins, useful for making insecticidal composition to protect plants from damage by insects especially coleopteran insects.	AVENTIS CROPSCIENCE NV (AVET) BAYER BIOSCIENCE NV (FARB) BAYER CROPSCIENCE NV (FARB) BAYER BIOCHEMICAL SCI SA (FARB)	EP1287144-A; WO200187931-A2; AU200170532-A; <b>BR200110867-A</b> ; EP1287144-A2; CN1432065-A; JP2003533214-W	US	2000
Bacillus thuringiensis hybrid toxin H04 for controlling insects, e.g. fall army worm or European cornborer, and for creating insect resistant plants, comprises domains I and II of Cry1Ab and domain III of Cry1C.	SYNGENTA PARTICIPATIONS AG (SYGN)	EP1311162-A; WO200215701-A2; AU200185900-A; EP1311162-A2; KR2003029858-A; <b>BR200113500-A</b> ; CN1449250-A; JP2004506432-W	US	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Synergistic biological pesticide formulation, having biostimulant, pest resistance inducing, fungicidal and insecticidal activity, comprising entomopathogenic nematodes, chitosan and weak acid.	IDEBIO SL (IDEB-Non-standard)	WO200237966-A; EP1332676-A; WO200237966-A1; AU200214060-A; ES2171131-A1; EP1332676-A1; <b>BR200115298-A</b> ; ES2171131-B1; US2004116290-A1; EP1332676-B1; DE60104443-E	ES	2000
Plant invigorator for use as fertilizer and insecticide, comprises preset amount of surfactants, ethanol, demineralized aqueous solution, catalytic enzyme glycosides, colorant and lanolin.	SPENCER M D (SPEN-Individual) BROUARD R W (BROU-Individual) CAREY V P (CARE-Individual)	WO200280673-A; WO200280673-A1; NO200304295-A; EP1379128-A1; SK200301359-A3; KR2003096303-A; AU2001246694-A1; CZ200302701-A3; US2004116292-A1; <b>BR200116963-A</b> ; CN1505477-A; JP2004531509-W; MX2003009145-A1	WOGB	2001
Stable, solid formulation for application to e.g. crops, soil and insects, comprises a chemically modified starch, an agricultural material, a surfactant and/or adjuvant.	NAT STARCH & CHEM INVESTMENT HOLDING COR (NATT) ICI AMERICAS INC (ICIL) HARTMANN F D J (HART-Individual) EDEN J L (EDEN-Individual) SOLAREK D B (SOLA-Individual) ROMMENS J C G (ROMM-Individual) AUDA M I (AUDA-Individual) NAT STARCH & CHEM INVESTMENT HOLDING CO (NATT)	EP1287739-A; EP1287739-A1; JP2003128504-A; CA2399748-A1; US2003109384-A1; <b>BR200204318-A</b> ; CN1408221-A; US6667277-B2; SG105557-A1	US	2001
Controlling pests in genetically modified vegetables that express insecticidal Bacillus thuringiensis toxin, by application of specific, synergistic pesticides.	AVENTIS CROPS SCIENCE GMBH (AVET)	WO200262144-A; DE10104871-A1; WO200262144-A2; EP1367900-A2; KR2003074780-A; <b>BR200206926-A</b> ; AU2002242678-A1; US2004078843-A1; JP2004517945-W; MX2003006934-A1	DE	2001
Novel pesticidal toxin, designated Vip3 toxins from Bacillus thuringiensis, useful for controlling insects, e.g., lepidopteran insect, is highly active against a wide range of insect pests.	SYNGENTA PARTICIPATIONS AG (SYGN) MILES P (MILE-Individual) KRAMER V (KRAM-Individual) SHEN Z (SHEN-Individual) SHOTKOSKI F (SHOT-Individual) WARREN G W (WARR-Individual)	WO200278437-A; EP1377157-A; EP1377157-A4; WO200278437-A2; EP1377157-A2; HU200303738-A2; <b>BR200208589-A</b> ; AU2002307058-A1; US2004133942-A1; ZA200307266-A; CN1527663-A	US	2001
Mixtures of gamma-cyhalothrin and other active ingredients useful for combating or controlling insect, acarine or nematode pests.	SYNGENTA LTD (SYGN)	WO2003011031-A; WO2003011031-A1; EP1414304-A1; KR2004018509-A; AU2002345228-A1; <b>BR200211298-A</b> ; MX2004000661-A1	GB	2001

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New transposon Tn5401 from Bacillus thuringiensis and fragments of it - and related plasmids and transformed B. thuringiensis useful as insecticides.	ECOGEN INC (ECOG-Non-standard)	WO9502058-A; EP707654-A; WO9502058-A2; AU9473616-A; US5441884-A; WO9502058-A3; <b>BR9406881-A</b> ; EP707654-A1; US5650308-A; US5843744-A; JP11507801-W; EP707654-B1; ES2139086-T3; CA2166691-C	US	1994
Dispersible insecticidal powder - contains dried caterpillars with terminal infection for control of lepidoptera larvae.	EMPRESA BRASIL PESQUISA AGROPECUARIA (EMPR-Non-standard)	<b>BR9501189-A</b>	BR	1995
Insecticide mixts based on Bacillus spp. - also contain an agonist or antagonist of nicotinerpic acetylcholine receptors of insects..	BAYER AG (FARB)	EP677247-A; EP677247-A1; DE4412834-A1; JP7285818-A; <b>BR9501569-A</b> ; CA2146822-A; ZA9503065-A; CN1112392-A	DE	1994
Pheromone compsn. to protect crops from insects and mites - comprises thermoplastic elastomer with polyether gps., pheromone, kairomone or allomone and undecylenic acid (deriv.).	ELF ATOCHEM SA (AQOR)	EP680693-A; EP680693-A1; DE19515744-A1; FR2719450-A1; FI9502177-A; CA2148760-A; JP8040813-A; US5504142-A; <b>BR9501933-A</b> ; CN1122651-A; JP2757347-B2; KR145993-B1; CA2148760-C; MX195933-B; CN1058368-C	FR	1994
Synergistic pesticidal compsn esp. for controlling insects and acarids - comprises lufenuron and a second active agent e.g. abamectin.	CIBA GEIGY AG (CIBA)	WO9533380-A; EP765120-A; WO9533380-A1; AU9526166-A; ZA9504683-A; <b>BR9502710-A</b> ; EP765120-A1; JP10502055-W; KR97703706-A; MX9606168-A1; CN1150381-A; IL113957-A	CH	1994
Prodn. of coated pesticidal agent, esp. insecticidal virus - using pH-dependent polymer and ultraviolet protector.	AMERICAN CYANAMID CO (AMCY) UNIV GEORGIA RES FOUND (UYGE-Non-standard) UNIV GEORGIA RES FOUND INC (UYGE-Non-standard) WYETH HOLDINGS CORP (AMHP) BASF AG (BADI)	EP697170-A; EP697170-A1; AU9527219-A; <b>BR9503455-A</b> ; CA2154640-A; CZ9501928-A3; JP8109103-A; SK9500952-A3; ZA9506277-A; US5662897-A; NZ272661-A; HU76656-T; HU214499-B; US5858353-A; IL114740-A; US5965123-A; AU710501-B; TW381003-A; CN1142889-A; RU2152152-C2; CN1164871-A; MX197686-B; SK283015-B6; KR398307-B; EP697170-B1; DE69532983-E; MX196810-B	US	1994

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Synergistic insecticide compsns. contg. hydrazine deriv. - and cytochrome P450 inhibitor, used for controlling Southern armyworm and soybean looper.	ROHM & HAAS CO (ROHM) THIRUGNANAM M (THIR-Individual)	EP712575-A; US5506251-A; EP712575-A1; AU9536671-A; CA2160967-A; JP8225405-A; <b>BR9505187-A</b> ; CN1132026-A; TW321587-A; EP712575-B1; DE69510157-E; AU706558-B; ES2132539-T3	US	1994
Control of insect pests with biological pesticide - specifically Beauveria bassiana No. 447 or B. bassiana SP111.	UNIV FLORIDA (UYFL)	WO9525430-A; WO9525430-A1; AU9521261-A; EP751710-A1; <b>BR9507158-A</b> ; US5683689-A; JP9510713-W; KR97701499-A; NZ283256-A; AU696508-B; AU9896107-A; MX9604228-A1; NZ330232-A; AU727230-B; CN1147754-A; US6254864-B1; CA2185811-C; KR318221-B	US	1994
New insecticidal recombinant baculovirus - comprises a polyhedron gene and a heterologous gene expressing an insecticidal protein with different promoters.	ZENECA LTD (ZENE)	WO9526410-A; WO9526410-A2; AU9519570-A; WO9526410-A3; EP752001-A1; <b>BR9507195-A</b> ; JP9510871-W; AU688011-B; KR97702372-A; NZ282463-A; US5885569-A; MX9604199-A1; CN1147275-A	GB	1994
New DNA encoding new CryIE type Bacillus thuringiensis toxins - which are active against Heliothis spp. also useful as insecticide against Lepidoptera.	CIBA GEIGY AG (CIBA)	WO9534656-A; EP764210-A; WO9534656-A1; AU9524177-A; US5530195-A; EP764210-A1; <b>BR9507973-A</b> ; JP10502525-W; NZ285165-A; MX9606262-A1	US	1994
New compsn. for controlling insects - comprising an aminopeptidase inhibitor or a metallo-peptidase inhibitor and a weakly chelating peptidase.	UNIV LA TROBE (UYLT-Non-standard)	EP765117-A; WO9535031-A; WO9535031-A1; AU9526656-A; ZA9504989-A; EP765117-A1; <b>BR9508041-A</b> ; AU688054-B; NZ287816-A; JP10504278-W; KR97703700-A; MX9606538-A1; US5985273-A; IL114191-A; CN1158551-A; PH1199550734-B1; EP765117-B1; DE69532582-E; ES2214502-T3	AU	1994



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Formulation contg. microorganisms for use in horticulture - for protection of plants against weeds, insects and disease, has high viability and rapid release characteristics.	CIBA GEIGY AG (CIBA) NOVARTIS-ERFINDUNGEN VERWALTUNGS GMBH (NOVS) NOVARTIS AG (NOVS) ENZMANN M (ENZM-Individual) BAETTIG W (BAET-Individual)	WO9602638-A; WO9602638-A1; ZA9505830-A; AU9529804-A; FI9700103-A; NO9700136-A; EP770126-A1; CZ9700092-A3; SK9700031-A3; HU76428-T; <b>BR9508398-A</b> ; KR97704873-A; HU214917-B; NZ289842-A; TW345486-A; JP11505403-W; AU705188-B; IL114573-A; SK280088-B6; MX9700377-A1; RU2160990-C2; CN1152936-A; US2002015988-A1	CH	1994
DNA molecule from Autographa californica nuclear polyhedrosis virus - useful for generating an insect virus with improved killing time for insect pests.	AMERICAN CYANAMID CO (AMCY)	WO9603509-A; EP775208-A; WO9603509-A2; AU9532031-A; WO9603509-A3; ZA9506276-A; EP775208-A1; <b>BR9508441-A</b> ; AU692290-B; MX9600235-A1	US	1994
Synergistic compsn. for control of lepidopteran pests - contains chemical insecticide and genetically modified insect virus, either expressing a toxin or not expressing ecdysteroid UDP-glucosyl transferase.	AMERICAN CYANAMID CO (AMCY)	WO9603048-A; WO9603048-A1; AU9532029-A; ZA9506274-A; EP772399-A1; <b>BR9508445-A</b> ; HU76840-T; MX9700646-A1; JP10503650-W; TW326384-A; KR97704355-A; CZ9700201-A3; NZ291028-A; AU708560-B; HU221352-B1; CN1162906-A; RU2200394-C2	US	1995
Control of insect, acarid or nematode pests with increased speed of kill - using recombinant insect virus expressing foreign protein or toxin and organic insecticide.	UNIV CALIFORNIA (REGC)	EP768824-A; WO9601055-A; WO9601055-A1; AU9526506-A; EP768824-A1; <b>BR9508982-A</b> ; JP10507065-W; KR97704356-A; AU695075-B; NZ287698-A; MX9606624-A1; CN1159143-A; US6344193-B1; TW505506-A; EP768824-B1; MX210646-B; ES2204953-T3; ZA9508847-A; US2002037275-A1; US6596271-B2; PH1199651625-B1	US	1994
Use of yeast for control of moth and other insect pests - esp. cotton bollworm and native budworm; control is more economical and environmentally safer than with pesticides.	STATE NEW SOUTH WALES (NEWS-Non-standard) NEW SOUTH WALES NSW DEPT AGRIC (NEWS-Non-standard) EL ESTADO NUEVA GALES DEPT AGRIC (ELES-Non-standard) NEW SOUTH WALES DEPT AGRIC (NEWS-Non-standard)	EP785720-A; WO9609765-A; WO9609765-A1; AU9535984-A; ZA9508090-A; EP785720-A1; MX9702188-A1; <b>BR9509094-A</b> ; AU708200-B; CN1159144-A; US6274137-B1; US2001024646-A1; US6544513-B2; MX213905-B; EP785720-B1; DE69533553-E	AU	1994

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Bacillus strain producing insecticidal protein during vegetative growth - used in the control of Lepidoptera and Coleoptera pests.	CIBA GEIGY AG (CIBA)	WO9610083-A; EP792363-A; EP1382611-A; WO9610083-A1; AU9537433-A; ZA9508121-A; EP792363-A1; <b>BR9509099-A</b> ; MX9702212-A1; HU77449-T; US5770696-A; AU692934-B; JP10506532-W; KR97706392-A; US5840868-A; US5849870-A; US5866326-A; US5872212-A; US5889174-A; US5888801-A; US5990383-A; CZ9700908-A3; CN1160420-A; CZ290801-B6; RU2196824-C2; TW496896-A; HU222264-B1; EP792363-B1; EP1382611-A2; PH1199551386-B1; DE69532333-E; ES2213162-T3; KR419438-B	US	1995
Bracon hebetor toxins and DNA encoding them - useful in biological control agents to combat insect pests.	ZENECA LTD (ZENE) COMMONWEALTH SCI & IND RES ORG (CSIR)	WO9616171-A; WO9616171-A1; AU9538777-A; ZA9509844-A; EP792361-A1; <b>BR9509744-A</b> ; HU77119-T; MX9703764-A1; KR97707284-A; JP10511543-W; TW342413-A; AU713922-B; US6156536-A; CN1172503-A	GB	1995
Synergistic insecticidal and acaricidal combinations for use in e.g. cotton - contain nitro-methylene, para-pyrethroid, carbamate or phenyl-pyrazole and insect pathogenic fungus.	HOECHST-SCHERING AGREVO GMBH (AGRE) HOECHST AG (FARH)	EP798961-A; WO9619112-A; WO9619112-A1; DE4445732-A1; AU9643435-A; EP798961-A1; <b>BR9510378-A</b> ; HU77792-T; MX9704725-A1; KR98700006-A; US5888989-A; TW350755-A; JP11507010-W; AU715520-B; MX203369-B; CN1171032-A	DE	1994
Photorhabdus sp. insecticidal protein toxins and DNA encoding them - can be genetically engineered into insect larvae food and plants for insect control.	WISCONSIN ALUMNI RES FOUND (WISC) ENSIGN J C (ENSI-Individual) BOWEN D J (BOWE-Individual) PETELL J (PETE-Individual) FATIG R (FATI-Individual) SCHOONOVER S (SCHO-Individual) FFRENCH-CONSTANT R H (FFRE-Individual) ROCHELEAU T A (ROCH-Individual) BLACKBURN M B (BLAC-Individual) HEY T D (HEYT-Individual) MERLO D J (MERL-Individual) ORR G L (ORRG-Individual) ROBERTS J L (ROBE-Individual) STRICKLAND J A (STRI-Individual) GUO L (GUOL-Individual) CICHE T A (CICH-Individual) SUKHAPINDA K (SUKH-Individual)	WO9717432-A; EP797659-A; WO9717432-A1; AU9710509-A; EP797659-A1; <b>BR9606889-A</b> ; SK9700931-A3; KR98701244-A; HU9900768-A2; AU729228-B; JP2002509424-W; US6528484-B1; KR354530-B; US2003207806-A1; JP3482214-B2; RU2216174-C2; JP2004089189-A	US	1996

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Control of insects, acarids and nematodes - using novel scorpion toxins or a combination of 2 or more insect toxins.	UNIV CALIFORNIA (REGC)	WO9636221-A; WO9636221-A2; AU9657887-A; WO9636221-A3; EP838999-A2; NZ308294-A; US5756340-A; JP11501521-W; AU710774-B; MX9708495-A1; <b>BR9608474-A</b> ; KR99008424-A; US6162430-A; KR253766-B1; MX196622-B; CN1185718-A	US	1995
New recombinant baculovirus insecticides - contg. synthetic, baculovirus codon-biased genes encoding insect-selective neurotoxin(s).	DU PONT DE NEMOURS & CO E I (DUPO)	WO9636712-A; EP826047-A; WO9636712-A1; AU9658651-A; EP826047-A1; JP10509596-W; NZ308772-A; <b>BR9608741-A</b> ; MX9708798-A1; US6096304-A; AU723612-B; JP3252854-B2; EP826047-B1; CN1184504-A	US	1995
DNA encoding the Helicoverpa armigera granulo:virus enhancin protein - used to increase infectivity of baculovirus for control of insect pests.	BOYCE THOMPSON INST PLANT RES (BOYC-Non-standard)	WO9708197-A1; AU9671526-A; US5717069-A; EP847401-A1; AU704561-B; <b>BR9610122-A</b> ; CA2227308-C; JP2002504803-W	US	1996
Controlling expression of insecticidal proteins - using recombinant baculovirus containing tetracycline trans:activator protein.	DU PONT DE NEMOURS & CO E I (DUPO) UNIV MARYLAND BALTIMORE (UYMA-Non-standard)	WO9723636-A; WO9723636-A1; AU9716873-A; EP876497-A1; CN1205741-A; <b>BR9612268-A</b> ; MX9804689-A1; JP2000507089-W; KR99076627-A; AU727423-B; US6322781-B1; ZA9705495-A	US	1996
Enhancing activity of agricultural active products - such as growth regulators, herbicides, fungicides or insecticides, using enhancer of spores, cultures or suspensions of Bacillus or soil bacteria.	MICRO FLO CO (MICR-Non-standard)	WO9823157-A; EP944315-A; WO9823157-A1; AU9714610-A; EP944315-A1; CN1244771-A; NZ336424-A; <b>BR9612796-A</b> ; MX9904920-A1; US6232270-B1; AU738993-B; MX210622-B	WOUS	1996
Poison bait for controlling noxious insects - comprises fermented milk product as appetite stimulating factor.	SUMITOMO CHEM CO LTD (SUMO) SUMITOMO KAGAKU KOGYO KK (SUMO)	GB2315217-A; FR2751176-A1; JP10081602-A; GB2315217-B; <b>BR9703971-A</b> ; KR98007988-A; ES2131007-A1; ES2131007-B1; TW368393-A; IT1296317-B; CN1174660-A	JP	1996

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Composition for controlling insects and acarids - comprises one or more perhydro-oxadiazine derivatives and another pesticide, such as pirimicarb, terbufos, diethion, ethofenprox or ivermectin..	NOVARTIS AG (NOVS)	WO9740692-A; EP900024-A; WO9740692-A1; ZA9703630-A; AU9726992-A; EP900024-A1; CN1220578-A; <b>BR9709181-A</b> ; AU718566-B; JP2000509379-W; MX9808969-A1; KR2000065069-A; CN1401234-A; EP900024-B1; DE69722930-E; TW526044-A; ES2202609-T3; US2004176369-A1	CH	1996
Strains of Bacillus thuringiensis with increased production of CryI crystal protein - and normal sporulation properties, useful as insecticide for control of Lepidoptera pests.	ECOGEN INC (ECOG-Non-standard)	WO9802039-A; WO9802039-A1; AU9735994-A; US5804180-A; <b>BR9710320-A</b> ; MX9900653-A1; MX214692-B	US	1996
Orally active insecticidal composition, used for protection of crops or animals - contains pesticidal material from Xenorhabdus species optionally synergised with Bacillus thuringiensis toxin.	UK MIN AGRIC FISHERIES & FOOD (UKAG-Non-standard) UK MIN FISHERIES & FOOD (UKAG-Non-standard) JARRETT P (JARR-Individual) ELLIS D J (ELLI-Individual) MORGAN J A W (MORG-Individual)	WO9808388-A; WO9808388-A1; AU9740249-A; ZA9707373-A; EP923295-A1; <b>BR9711285-A</b> ; CN1233938-A; NZ334847-A; AU732845-B; MX9901878-A1; JP2001508032-W; US2003213012-A1; RU2225114-C2	GB	1996
Bacillus thuringiensis CryET33 and CryET34 proteins - having activity against Coleoptera insects, particularly boll weevil, red flour beetle and Japanese beetle.	ECOGEN INC (ECOG-Non-standard)	WO9813498-A; EP1015592-A; WO9813498-A1; AU9748033-A; CN1241213-A; US6063756-A; EP1015592-A1; <b>BR9713219-A</b> ; KR2000048593-A; US6248536-B1; US6326351-B1; JP2001523944-W; AU741704-B; US6399330-B1; US2002128192-A1; US2003144192-A1	US	1996
New nucleic acid encoding Bacillus thuringiensis hybrid delta toxins - with increased and broader spectrum activity, used to produce transgenic plants with increased resistance to insects.	ECOGEN INC (ECOG-Non-standard)	WO9822595-A; WO9822595-A1; ZA9710429-A; AU9853628-A; EP942985-A1; US6017534-A; US6110464-A; US6156573-A; CN1268180-A; JP2001502555-W; US6221649-B1; US6242241-B1; MX9904675-A1; <b>BR9713373-A</b> ; US6281016-B1; US6326169-B1; AU742971-B; US2002064865-A1; US2003017571-A1; US6521442-B2; US6538109-B2; US2003119158-A1; US2003182682-A1; US6645497-B2; US2004093637-A1; US6746871-B2; US2004171120-A1; EP942985-B1; DE69730730-E	US	1997

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
Plutella xylostella baculovirus for control of insect pests - useful as biological control agent for insects of order Lepidoptera, e.g. diamondback moth, Plutella xylostella, or Spodoptera exigua etc..	US SEC OF AGRIC (USDA) US DEPT OF COMMERCE (USDC)	WO9823148-A1; AU9853696-A; US6042843-A; <b>BR9713413-A</b> ; AU722851-B; KR2000057225-A; MX9904821-A1; JP2002506422-W	US	1996
New Bacillus thuringiensis nucleic acid segments - comprising delta-endotoxin gene fragments, used for the control of insects, particularly Lepidopteran pests.	ECOGEN INC (ECOG-Non-standard)	WO9823641-A; WO9823641-A1; ZA9710431-A; AU9853717-A; US5942664-A; EP942929-A1; <b>BR9713555-A</b> ; CN1245502-A; US6153814-A; US6177615-B1; MX9904903-A1; JP2001506490-W; AU745431-B	US	1996
New transgenic monocotyledonous plants - comprising recombinant DNA encoding a peroxidase, used for protecting plants against insects.	NOVARTIS AG (NOVS) UNIV OHIO STATE (OHIS) US SEC OF AGRIC (USDA) US DEPT OF AGRICULTURE (USDA) UNIV OHIO STATE RES FOUND (OHIS) NOVARTIS FINANCE CORP (NOVS)	WO9827218-A; WO9827218-A2; FR2758045-A1; ZA9711359-A; AU9860901-A; BE1011397-A3; EP946102-A2; US6002068-A; CN1240484-A; <b>BR9714150-A</b> ; HU200000643-A2; MX9905746-A1; KR2000069581-A; AU735312-B; JP2001510337-W; IT1300494-B	US	1996
New Bacillus chitinosporus strain, mutants, culture and isolated toxic metabolite - useful as a nematocide and insecticide.	AGRAQUEST INC (AGRA-Non-standard) UNIV SASKATCHEWAN (UYSA-Non-standard)	WO9821966-A; EP938262-A; US5733544-A; WO9821966-A2; AU9872968-A; EP938262-A2; <b>BR9714356-A</b> ; NZ335582-A; AU724801-B; MX9904395-A1; JP2001505422-W	US	1996
Transgenic insect viruses for insect pest control - containing DNA encoding developmentally regulated insect transcription factor.	CANADA MIN NATURAL RESOURCES (CNDG) CANADIAN GOVERNMENT (CNDG)	EP861901-A; EP861901-A2; AU9852161-A; CA2228195-A; HU9800113-A2; ZA9800475-A; JP10262669-A; US5891431-A; SG60187-A1; KR98070711-A; MX9800646-A1; <b>BR9800445-A</b> ; AU743526-B; MX203299-B; CA2228195-C; CN1190128-A	US	1997
Use of hypersensitive response elicitor polypeptide - for application to plants or seeds or	CORNELL RES FOUND INC (CORR)	WO9837752-A; EP1028616-A; WO9837752-A1; AU9866664-A; US5977060-A; FI9901824-A;	US	1997

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
transgenic plants or seeds for the control of insects..		<b>BR9807632-A</b> ; NZ337461-A; EP1028616-A1; CN1253471-A; KR2000075771-A; AU740564-B; JP2001519778-W; MX9907808-A1		
New VIP3A(c) protein and homologues active against plant pests - used in entomocidal compositions for controlling insects and arachnids, e.g. Lepidoptera and Coleoptera species.	NOVARTIS AG (NOVS)	WO9844137-A; EP972062-A; WO9844137-A2; ZA9802801-A; AU9868325-A; US5877012-A; EP972062-A2; HU200000295-A2; <b>BR9808483-A</b> ; US6107279-A; CN1256712-A; US6137033-A; AU727218-B; MX9909043-A1; KR2001006015-A; US6291156-B1; JP2001524817-W; US6429360-B1; RU2222597-C2; MX219628-B; US2002078473-A1	US	1997
New Bacillus subtilis strain AQ713 and its metabolites - showing bactericidal, fungicidal and insecticidal activity, useful in plant protection.	AGRAQUEST INC (AGRA-Non-standard)	WO9850422-A; EP981540-A; WO9850422-A1; AU9874767-A; NO9905462-A; EP981540-A1; <b>BR9809282-A</b> ; CN1255143-A; SK9901490-A3; CZ9903757-A3; AU732724-B; NZ500506-A; MX9910078-A1; JP2001507237-W; HU200004555-A2; KR2001012392-A; SK283036-B6; JP2003199558-A; JP3471815-B2; MX214455-B	US	1997
Insect repellent composition - comprises ratite oil or its active fraction or fatty acids.	AGRAQUEST INC (AGRA-Non-standard) PE CORP NY (PEKE)	WO9857542-A; EP989804-A; WO9857542-A1; AU9873672-A; US5929113-A; EP989804-A1; <b>BR9810751-A</b> ; CN1283959-A; MX9911677-A1; NZ501679-A; JP2002504141-W; AU756465-B; US6538027-B2; MX215528-B	US	1997
New insecticidal toxin genes - extracted from Xenorhabdus nematophilus A24 and Photorhabdus luminescens.	COMMONWEALTH SCI & IND RES ORG (CSIR)	WO9903328-A; EP1018863-A; WO9903328-A1; AU9883250-A; EP1018863-A1; SK200000050-A3; CN1270497-A; HU200004944-A2; JP2001510022-W; KR2001040231-A; <b>BR9810901-A</b> ; AU744145-B; US6630619-B1; US2004055036-A1; AU744145-B2	AU	1997

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New hypersensitive response eliciting (dspE) gene and protein - useful for providing transgenic plants and seeds with enhanced growth, and insect and disease resistance.	CORNELL RES FOUND INC (CORR)	WO9907207-A; EP1003377-A; US6172184-B2; WO9907207-A1; AU9887585-A; EP1003377-A1; FI200000237-A; <b>BR9811074-A</b> ; US6172184-B1; AU730055-B; CN1274259-A; MX2000001201-A1; KR2001022647-A; JP2001513323-W	US	1997
Controlling homopteran insect pests - using toxins obtained from Bacillus thuringiensis isolates.	MYCOGEN CORP (MYCO)	WO9907864-A1; AU9887625-A; US6051550-A; EP1027446-A1; <b>BR9812275-A</b> ; JP2001512686-W; KR2001022626-A; AU745617-B; MX2000001353-A1; NZ502393-A	US	1997
New recombinant baculovirus, used for the production of insecticides, or medical agents or for use in vaccines.	KANG S K (KANG-Individual) JE Y H (JEYH-Individual) JIN B R (JINB-Individual) KANG S G (KANG-Individual) JEH Y H (JEHY-Individual) PARK H W (PARK-Individual) NOH J Y (NOHJ-Individual) DONGBU HANNONG CHEM CO LTD (DONG-Non-standard) KANG S (KANG-Individual) JE Y (JEYY-Individual) JIN B (JINB-Individual) PARK H (PARK-Individual) ROH J (ROHJ-Individual) CHANG J (CHAN-Individual) CHANG J H (CHAN-Individual)	WO9951721-A; EP1066372-A; WO9951721-A1; AU9897645-A; KR99079361-A; EP1066372-A1; CN1292817-A; <b>BR9815793-A</b> ; US6338846-B1; KR264953-B; AU742821-B; JP2002510483-W; MX2000009707-A1	KR	1998
Controlling insects using Xenorhabdus protein toxins - comprises incorporating the protein toxin into insect's diet.	DOW AGROSCIENCES LLC (DOWC) WISCONSIN ALUMNI RES FOUND (WISC) ENSIGN J C (ENSI-Individual) BOWEN D J (BOWE-Individual) TENOR J L (TENO-Individual) CICHE T A (CICH-Individual) PETELL J K (PETE-Individual) STRICKLAND J A (STRI-Individual) ORR G L (ORRG-Individual) FATIG R O (FATI-Individual) BINTRIM S B (BINT-Individual) FFRENCH-CONSTANT R H (FFRE-Individual)	WO9850427-A; EP915909-A; WO9850427-A1; AU9871758-A; EP915909-A1; CN1229413-A; US6048838-A; MX9901288-A1; US6379946-B1; US2002147148-A1; AU755389-B; <b>BR9900622-A</b>	US	1997
Control of pests in transgenic plant crops using insecticides.	NOVARTIS AG (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH (NOVS) SYNGENTA PARTICIPATIONS AG (SYGN)	WO9935910-A; WO9935910-A2; FR2773673-A1; ZA9900275-A; AU9927168-A; NL1011058-C2;	CH	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
	SYNGENTA CROP PROTECTION INC (SYGN) LEE B (LEEB-Individual)	GB2348606-A; DE19982478-T; <b>BR9907013-A</b> ; CN1291863-A; HU200100555-A2; KR2001024861-A; MX2000006965-A1; IT1306203-B; AU745763-B; JP2002509084-W; US6486157-B1; ES2184590-A1; NZ505601-A; US2003153591-A1; CH693621-A5		
New recombinant baculovirus-based biological insecticides used to protect against the diamondback moth.	AMERICAN CYANAMID CO (AMCY) US SEC OF AGRIC (USDA) BASF AG (BADI)	WO9958705-A; WO9958705-A1; AU9938856-A; EP1076717-A1; CZ200004156-A3; ZA200006301-A; HU200101684-A2; SK200001685-A3; KR2001043627-A; CN1310767-A; JP2002514435-W; NZ507918-A; AU753930-B; <b>BR9910515-A</b> ; MX2000010981-A1	US	1998
Use of compositions containing one or more insecticides.	HOECHST-SCHERING AGREVO GMBH (AGRE) AVENTIS CROPSCIENCE GMBH (AVET)	WO9963829-A; EP1083795-A; DE19825333-A1; WO9963829-A2; AU9943726-A; <b>BR9911616-A</b> ; EP1083795-A2; US6331531-B1; ZA200006870-A; MX2000012008-A1; AU765028-B	DE	1998
New isolated Bacillus laterosporus toxins, useful for controlling pests such as plant coleopteran insect pests including corn rootworm, and for producing pest resistant plants.	MYCOGEN CORP (MYCO) SCHNEPF H E (SCHN-Individual) NARVA K E (NARV-Individual) STOCKHOFF B A (STOC-Individual) LEE S F (LEES-Individual) WALZ M (WALZ-Individual) STURGIS B (STUR-Individual)	WO200009697-A; EP1104471-A; WO200009697-A2; AU9953948-A; <b>BR9912910-A</b> ; EP1104471-A2; US6297369-B1; CN1319138-A; MX2001001547-A1; US2002120114-A1; JP2002522077-W; US6605701-B2; AU767891-B; US2004097721-A1	US	1999
Novel trypsin modulating oostatic factor (TMOF) receptors used to identify new insect pest control agents.	UNIV FLORIDA (UYFL) BOROVSKY D (BORO-Individual)	WO200018920-A; EP1117786-A; WO200018920-A2; AU9964053-A; <b>BR9914111-A</b> ; EP1117786-A2; US2002132302-A1; NZ510339-A; AU769139-B; MX2001003246-A1	US	1998
Treatment or prevention of insect infestation on plants and fruit, using Bacillus subtilis AQ713 or its	AGRAQUEST INC (AGRA-Non-standard)	WO200029426-A; EP1131342-A; WO200029426-A1; US6103228-A; AU200012233-A; NO200102344-A;	US	1998



TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
culture broth or metabolites, e.g. for control of corn rootworm.		EP1131342-A1; CZ200101620-A3; <b>BR9915339-A</b> ; SK200100656-A3; KR2001075707-A; CN1335854-A; HU200104242-A2; US6417163-B1; JP2002530290-W; US2003186852-A1; MX2001004814-A1; US6638910-B2		
Novel delta endotoxin polypeptide of bacillus thuringiensis useful for controlling lepidopteran or coleopteran insect population comprises at least ten contiguous amino acids of a specific sequence.	MONSANTO CO (MONS) MONSANTO TECHNOLOGY LLC (MONS)	WO200026378-A; EP1129198-A; WO200026378-A1; AU200019068-A; EP1129198-A1; <b>BR9915828-A</b> ; US6468523-B1; ZA200103164-A; US2003068335-A1; MX2001004361-A1	US	1998

## b. BIOFUNGICIDA

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
New Bacillus pumilus strain, useful as fungicide for plant protection and a metabolite for increasing insecticidal activity of Bacillus thuringiensis.	AGRAQUEST INC (AGRA-Non-standard)	WO200058442-A; EP1165751-A; WO200058442-A1; AU200037657-A; US6245551-B1; US2001022968-A1; NO200104653-A; EP1165751-A1; <b>BR200009430-A</b> ; CZ200103239-A3; SK200101306-A3; KR2001112933-A; HU200200562-A2; CN1351652-A; JP2002539820-W; ZA200107386-A; US6586231-B2; MX2001009695-A1; NZ514040-A; AU775016-B2	US	1999
Use of enveloped agrochemical, especially herbicide, safener, growth regulator, insecticide or fungicide, for suppression of antagonistic interactions in agrochemical mixtures.	AVENTIS CROPSCIENCE GMBH (AVET) KRAUSE H (KRAU-Individual) SCHNABEL G (SCHN-Individual) FRISCH G (FRIS-Individual) WURTZ J (WURT-Individual) BICKERS U (BICK-Individual) HACKER E (HACK-Individual) AULER T (AULE-	WO200184928-A; EP1282353-A; WO200184928-A1; DE10022989-A1; AU200167410-A; US2002055436-A1; EP1282353-A1; <b>BR200110738-A</b> ; CN1431863-A; JP2003532652-W	DE	2000

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
	Individual) MELENDEZ A (MELE-Individual) HAASE D (HAAS-Individual) BAYER CROPSCIENCE GMBH (FARB)			
Synergistic biological pesticide formulation, having biostimulant, pest resistance inducing, fungicidal and insecticidal activity, comprising entomopathogenic nematodes, chitosan and weak acid.	IDEBIO SL (IDEB-Non-standard)	WO200237966-A; EP1332676-A; WO200237966-A1; AU200214060-A; ES2171131-A1; EP1332676-A1; <b>BR200115298-A</b> ; ES2171131-B1; US2004116290-A1; EP1332676-B1; DE60104443-E	ES	2000
Conc. stable aq. suspensions of polyene fungicides, e g natamycin - by addn of thickener and pH control, used for immersion or coating of food, feed or agricultural prod..	GIST-BROCADES BV (KONN) GIST-BROCADES NV (KONN) DSM NV (STAM)	EP678241-A; EP678241-A1; AU9516355-A; JP7285801-A; <b>BR9501517-A</b> ; CA2146793-A; ZA9502979-A; NZ270906-A; US5552151-A; AU688856-B; EP678241-B1; DE69514403-E; ES2143586-T3; MX204361-B	EP	1994
New strains of Nectria pityrodes for use as bio-fungicides - partic. for control of Fusarium; also new method for selecting fungicidal microorganisms.	KEMIRA AGRO OY (KEMH) VERDERA OY (VERD-Non-standard)	WO9520646-A; EP742816-A; WO9520646-A1; FI9400463-A; AU9515386-A; FI95598-B; NO9603178-A; CZ9602190-A3; EP742816-A1; SK9600973-A3; JP9508274-W; HU74599-T; KR97700761-A; AU686311-B; NZ278907-A; US5811090-A; <b>BR9507052-A</b> ; MX9602967-A1; SK280507-B6; CN1144534-A; RU2154381-C2; MX195114-B; CZ289942-B6; HU220838-B1; EP742816-B1; DE69528753-E; ES2185694-T3; KR361473-B	FI	1994
New Pseudomonas chlororaphis strain - is useful as a fungicide, e.g. against Drechslera teres in barley.	SVENSKA LANTMAENNEN RIKSFOERBUND EK.FOER (SVLA-Non-standard) SVENSKA LANTMAENNEN RIKSFOERBUND (SVLA-Non-standard) SVENSKA LANTMAENNEN (SVLA-Non-standard) SVENSKA LANTMAENNENS (SVLA-Non-standard) BIOAGRI AB (BIOA-Non-standard)	EP756454-A; WO9528085-A; WO9528085-A1; SE9401307-A; SE502660-C2; AU9523547-A; NO9604359-A; EP756454-A1; FI9604162-A; CZ9603025-A3; SK9601310-A3; NZ284874-A; <b>BR9507322-A</b> ; HU75369-T; KR97701995-A; JP10502803-W; AU690683-B; US5900236-A; EP756454-B1; DE69511691-E; ES2139204-T3;	SE	1994

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
		RU2143199-C1; CZ287510-B6; CN1148791-A; SK281576-B6; HU220582-B1; KR358671-B; NO316012-B1; RO118786-B1; JP3536180-B2		
Synergistic fungicidal agent, esp. for control of Botrytis - contains cytochrome complex III inhibitor and fungicidal amide cpd..	BASF AG (BADI)	WO9710716-A; EP859549-A; WO9710716-A1; AU9672129-A; ZA9607964-A; EP859549-A1; CZ9800881-A3; SK9800381-A3; CN1196657-A; HU9802728-A2; <b>BR9610574-A</b> ; JP11511469-W; MX9802157-A1; NZ319577-A; AU721957-B; KR99063657-A; TW384208-A; IL123632-A; US6169056-B1; EP859549-B1; DE59607511-G; ES2162096-T3; SK283107-B6; MX211504-B	DE	1995
Synergistic fungicidal compsns., useful in controlling phytopathogenic fungi in crops or lawns - comprise strobilurin analogue and iprodione, procymidone or vinchlozoline.	RHONE-POULENC AGROCHIMIE (RHON) RHONE-POULENC AGROCHIMIE (RHON) AVENTIS CROPSCIENCE SA (AVET) DUVERT P (DUVE-Individual) BAYER CROPSCIENCE SA (FARB)	WO9712520-A; EP855859-A; WO9712520-A1; FR2739529-A1; AU9672192-A; EP855859-A1; CN1198656-A; <b>BR9611213-A</b> ; JP11514993-W; MX9802657-A1; NZ319631-A; AU716143-B; US6057331-A; KR99064025-A; IL123919-A; US2003027720-A1; EP855859-B1; DE69626657-E; ES2188791-T3; MX210796-B	FR	1995
Enhancing activity of agricultural active products - such as growth regulators, herbicides, fungicides or insecticides, using enhancer of spores, cultures or suspensions of Bacillus or soil bacteria.	MICRO FLO CO (MICR-Non-standard)	WO9823157-A; EP944315-A; WO9823157-A1; AU9714610-A; EP944315-A1; CN1244771-A; NZ336424-A; <b>BR9612796-A</b> ; MX9904920-A1; US6232270-B1; AU738993-B; MX210622-B	WOUS	1996
Synergistic fungicidal compositions - comprising beta-amino-butyric acid or its N-benzoyl-octyl ester, mixed with a fungicide, especially useful against fungi in potato, tomato,	AGROGENE LTD (AGRO-Non-standard) COHEN Y (COHE-Individual) KORAT M (KORA-Individual) ZVI-TOV D (ZVIT-Individual)	WO9846078-A; EP975217-A; WO9846078-A1; ZA9803187-A; AU9868505-A; EP975217-A1; <b>BR9808570-A</b> ; MX9909411-A1; AU735925-B; US6414019-B1; IL123346-A; US2002193251-A1; EP975217-B1;	IL	1998

TÍTULO DA PATENTE	DEPOSITANTE	NÚMERO DA PATENTE	PAÍS PRIOR.	ANO PRIOR.
cucumber, melon, grape or tobacco crops..		DE69810761-E; US2003078290-A1; US2003078301-A1; ES2191295-T3; US6692774-B2		
Production of fungicide-tolerant plants - by expression of exogenous fungicide-binding polypeptide.	BASF AG (BADI)	WO9849329-A; EP979295-A; DE19718251-A1; WO9849329-A1; AU9873356-A; ZA9803594-A; NO9905291-A; EP979295-A1; CZ9903821-A3; SK9901372-A3; <b>BR9808698-A</b> ; CN1254381-A; NZ500181-A; HU200003594-A2; MX9909498-A1; AU737242-B; KR2001020387-A; JP2001523101-W	DE	1997
New Bacillus subtilis strain AQ713 and its metabolites - showing bactericidal, fungicidal and insecticidal activity, useful in plant protection.	AGRAQUEST INC (AGRA-Non-standard)	WO9850422-A; EP981540-A; WO9850422-A1; AU9874767-A; NO9905462-A; EP981540-A1; <b>BR9809282-A</b> ; CN1255143-A; SK9901490-A3; CZ9903757-A3; AU732724-B; NZ500506-A; MX9910078-A1; JP2001507237-W; HU200004555-A2; KR2001012392-A; SK283036-B6; JP2003199558-A; JP3471815-B2; MX214455-B	US	1997
Fungicidal mixture for protecting crops, comprises (R)-metalaxyl and second fungicidal component.	NOVARTIS AG (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH (NOVS) SYNGENTA PARTICIPATIONS AG (SYNG-Non-standard) NUNINGER C (NUNI-Individual) WEISS M (WEIS-Individual) LEADBEATER A J (LEAD-Individual)	WO200013505-A; EP1104990-A; EP1256277-A; EP1402777-A; WO200013505-A2; AU9958587-A; EP1104990-A2; <b>BR9913459-A</b> ; US2001046492-A1; JP2002524396-W; EP1256277-A1; MX2001002307-A1; EP1402777-A1; EP1256277-B1; DE69919762-E; EP1104990-B1	GB	1998