



USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Required Report - Public distribution

Date: 7/13/2007

GAIN Report Number: CI7018

Chile

Biotechnology

2007

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Report Highlights:

Events must be registered with Ministry of Health. The Government is investing royalties from copper mining in research and development (up to 2% of GDP) some of which is going to biotechnology. Moreover, a proposed biotechnology framework is being studied in Congress, and the vote in the Agricultural Committee is expected this year. Currently products that are substantially different from conventional products must be labeled, genetically engineered seeds may be produced for export under field trials applications from SAG and may not be sold domestically

Includes PSD Changes: No
Includes Trade Matrix: No
Annual Report
Santiago [CI1]
[CI]

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Executive Summary

Chile has a long history of field trials with transgenic seeds. However, to date, no product has been approved for domestic commercialization. All transgenic seeds imported for multiplication must be produced under strict field controls and re-exported. Thus, the general farming community does not benefit from this technology, even though Chilean consumers eat genetically engineered products imported from other countries. The reason for this de facto ban is that Chile is concerned it could lose its Asian and European markets (collectively more than 50 percent of exports) if it openly adopts this technology.

Chile's government recognizes that biotechnology is a crucial tool for a competitive and sustainable economy in Chile, offering varied benefits to producers and consumers. Regarding consumers and biotechnology, labeling is required when foods containing the products of agricultural biotechnology differ substantially from their conventional counterparts.

As previously anticipated, the Bachelet administration appears to be moving cautiously forward along similar lines as the Lagos government. However, we do foresee a breakthrough in more involvement from the government sector when some of the biotechnology laws before congress are passed.

Over the past years there has been many attempts to legislate on biotechnology, perhaps former president Lagos who created a national commission to study the issue initiated the biggest one, the framework that resulted from this commission was never introduced in Congress. The most aggressive attempt was the introduction of a bill to label all products containing genetically engineered ingredients. On June 19th 2006 the Chamber of Deputies voted 94-1 in favor of mandatory labeling, the bill moved to the Senate and is now an agenda in the Health Committee. On September 2006 a group of Senators from different sectors introduced a more ambitious bill into the Agricultural Committee as an attempt to regulate not only the labeling issue but also all aspect relating the production, consumption and commercialization of GMO products, this framework is expected to be voted in the Committee this year.

The requirement that all transgenic events used in food must be registered and explicitly approved by the Ministry of Health may prove problematic. For example, Chile does not grow soybeans. Therefore, there is not commercial incentive for the biotech soybean companies to register their events in Chile. However, many domestic and imported foods contain biotech corn and soybean ingredients.

In terms of commercial interests, Chile could be a consumer of transgenic sugar beets, corn, alfalfa, and soybeans (if the salmon industry were to lift its self-imposed ban on the use of biotech feeds), to name a few crops. Although not widely publicized, Chile has begun to do landmark research in "orphan" crops (non-bulk commodities), such as salmon, pine, stone fruit, apples, and grapes. As part of the government's efforts to increase research and development using funds received from copper mining royalties, Conicyt/FIA/Corfo manage the funds and establish consortiums to do biotech research.

As with many developing countries, the majority of research funds come from the public sector. However, Chile's biotech university degree programs are still nascent and the link between the public-private sectors on research remains weak. Although an effort has been made to create oversight panels to review the grants being funded, the tech transfer process remains somewhat haphazard. Several government agencies have requested more

information on how the U.S. fosters research on commercially viable technologies and aid the transfer of government and academic research to the business community.

However, the agricultural export sector also remains concerned about the trade implications of this technology. They view the issue from the perspective of how will the uses of transgenic affect Chile's "natural" image. They argue that currently there are few benefits for the products in which Chile has a competitive advantage (horticultural crops, salmon and forestry). As Chile is an agricultural export based economy, with agricultural exports accounting for 15% of GDP, these reservations have prompted Chile to take a cautionary approach on biotech issues and play a muted role in international fora such as APEC, MERCOSUR, and OAS, as well as UN and WTO organizations such as FAO, CODEX, and the International Plant Protection Convention (IPPC). Chile signed the Cartagena Protocol on Biosafety, but has not ratified it yet. Nor has Chile established an adventitious presence level for imports yet. However, with a strong regulatory system and a greater investment in the technology, Chile could become an important developing country spokesman in the above-mentioned venues.

Section II. Biotechnology Trade and Production

- a) Does Chile commercially produce any biotechnology crops? Chile does not produce any crops for sale domestically. However, Chile has produced transgenic seeds under strict field controls for re-export for more than a decade. See Section VI. Reference Materials, Appendix A. Table of Approved Biotechnology Products.
- b) Are there any biotechnology crops under development in your country that will be on the market in the coming year? Appendix A shows the field trials and seeds being propagated in Chile. Additional research is being conducted on such crops as citrus, stone fruits, grape vines, pine, and salmon. However, none of these crops are scheduled for commercial release domestically within the next year.
- c) Does the country import biotechnology crops/products? Yes. See Appendix A. The main crops are corn, soybeans, canola, tomatoes and sugar beets. Chile also imports processed food products containing transgenic ingredients from many countries including Canada, the US, Brazil, Mexico, Argentina, and the European Union.
- d) Is Chile a food aid recipient or likely to be a food aid recipient in the near future? No
- e) Does Chile produce any biotechnology crops that were developed outside of the United States and have not passed through the US regulatory system? Crops from other countries have been approved for field trials in Chile, however the events have been approved in the United States as well.

Section III

- a) . Responsible Government Ministries and their role.

See the list in Section VI for the contact information for each office:

- The Agricultural Livestock Service (SAG), Ministry of Agriculture is responsible for analyzing applications to conduct field trials or grow and market transgenic. Through both a document review process and consultations with technical experts (CELT-Advisory Council on the Release of Transgenic), SAG performs the environmental risk assessment. The application includes a complete description of the botanical, agro economic, and molecular aspects of

the different components of the new cultivars, including studies evaluating possible environmental interactions and methods of controlling possible gene flow.

- The Ministry of Health sets the rules governing food safety, including labeling requirements and approves ingredients for human consumption. In January 2000, the food law was modified to require a case-by-case analysis to authorize transgenic products for human consumption. Events have to be approved by the Ministry before entering the country, at this moment Monsanto has submitted a number of events following the procedure set by the Ministry, the process of approval considers a fast track when FDA has approved the events. Currently mandatory labeling of transgenic foods/ingredients is required when the product is substantially different from the conventional product.

- The Regional Ministry of Health offices (SEREMIS SALUD) provides import approvals for foods, based on the regulations established by the Ministry of Health. Currently there is no official adventitious presence level. This office is the responsible to enforce the approval of the events or the labeling if/when Congress adopts a new labeling requirement.

- CONAMA (Environmental Commission) represents Chile at the Biosafety Protocol meetings, participates in the National Biotechnology Commission, and is on the National Committee on Biosecurity Matters. However, they are not specifically authorized under the current regulatory structure to do environmental impact assessments for transgenic products.

- The Agricultural Research Institute (INIA), creates, adapts and transfers scientific know-how and technology to the agricultural community via its centers, libraries, and laboratories. Currently, they are the lead government agency in the area of practical research in biotech crops in Chile.

- The National Commission for Technology and Scientific Research (CONICYT) defines science and technology policy; promotes and finances science and technology research programs and projects; promotes international cooperation and increases public awareness and understanding of the benefits that accrue to the country as a result of its investment in scientific and technological research.

- The Foundation for Agricultural Innovation (FIA) is part of the Ministry of Agriculture and finances programs that incorporate innovative production processes or creative industrial or marketing methods in agriculture, livestock, forestry, and aquaculture. They have funded projects and training in the area of biotechnology.

ii. Role and membership of Biosafety Committee (if any).

Chile signed the Cartagena Protocol on Biosafety, but has not ratified it yet. On November 30, 2000, a National Committee for Biosecurity Matters was established. CONAMA is on this committee and has represented Chile at the international Biosafety Committee meetings. In general, though, Chile has not taken any lead positions in international venues pending adoption of its national biotechnology framework law.

iii. Assessment of political factors that may influence regulatory decisions related to agricultural biotechnology.

Chile is an agricultural export based economy, with agricultural exports accounting for 15% of GDP. The agricultural export sector has voiced some concerns about the trade implications of this technology. They view the issue from the perspective of how will the uses of transgenic affect Chile's "natural" image. They argue that currently there are few benefits for the products in which Chile has a competitive advantage (horticultural crops, salmon and

forestry). These reservations have prompted Chile to take a cautionary approach on biotech issues and play a muted role in international fora such as APEC, MERCOSUR, and OAS, as well as UN and WTO organizations such as FAO, CODEX, and the International Plant Protection Convention (IPPC).

In an attempt to address some of the concerns being voiced by special interest groups, President Ricardo Lagos established a National Biotechnology Commission to review all aspects of this technology. The Commission made several recommendations, including proposing that a framework law be developed to govern trade, research, marketing and regulation of biotech products. The Lagos Administration prepared a draft bill for Congress, but it was never submitted because of the Presidential elections in December 2005, it is uncertain whether this bill will be submitted this year under the new Bachelet Administration.

On June 19, 2006 the Chamber of deputies voted almost unanimously to adopt mandatory labeling. The detection threshold for biotech content is 1% and should be label as "Genetically Modified Product". The bill is now with the Senate Health Committee. On September 2006 a new framework was introduced to the Senate, sponsored by Senator from different sector, government and opposition, this bill is now in the Agricultural Committee and it is expected to be voted during this year. What makes it different than other attempts to regulate on the matter is that was drafted by senators of different sectors and that it deals with all aspects related to agricultural biotechnology, commercialization, production, consumption and not only with the labeling issue as the ones introduced before. Finally, select NGOs have called for GMO free zones in the country. This was deemed unconstitutional. However, a few Congressmen in response to these special interest groups are researching how voluntary zones might be created.

- b) List biotechnology crops that have been approved for:
 - i. Food, processing, and feed – none
 - ii. Environment – See Appendix A, which shows crops approved solely for multiplication and re-export.
- c) Does Chile allow field-testing of biotechnology crops? Yes, currently strictly for re-export.
- d) Please note the treatment of stacked events.

If all the genes have been approved individually by SAG they go through an expedited process. They still have to be approved as a new event, but the process is simplified. If the genes have not been approved individually or one of them has not yet been approved, the stacked event is considered to be a whole new event, and it must go through a full review.

- e) What is Chile's policy on coexistence between biotechnology and non-biotechnology crops? Are there rules in place or proposed on coexistence?

There currently are no specific rules on the subject of coexistence, but Resolution 1523 of 2001 introduced a traceability system and documentation requirements for all seeds and the fields where they are planted. As part of the process for every field trial approval, biosafety measures are established, such as physical isolation from sexually compatible species and post harvest management. The draft framework bill is expected to specifically address this issue, but is unclear what modification may be made to this document under the new

Bachelet Administration. She is not opposed to biotechnology, and many of her ministers are openly proponents of the technology, however, she has not taken a public stance on the issue to date. The Ministry of Agriculture has hosted several open forums on this topic, with panelists ranging from agronomists, economists, regulators, activists and trade and legal experts. The question of liability has been openly vetted in these meetings, although the final draft language is not available yet.

f) Does the country require labeling for packaged foods or feeds?

For human consumption, mandatory labeling currently is required for products and/or ingredients that are substantially different from their conventional counterparts. There are no labeling requirements for crops, as currently there are no crops approved for domestic commercialization. The Chilean Chamber of Deputies voted almost unanimously 2006 a project of law to label all food product containing genetically engineer ingredients. The project is now under consideration by the Health Commission of the Senate. The proposal calls for a 1% threshold for biotech content over which products would have to bear the language "Genetically Modified Food" on the label.

g) Has Chile signed or ratified the Biosafety Protocol?

Yes, but they have not ratified it yet. Given this is a presidential election year, and there are many other issues of greater domestic interest to be addressed by the current administration, it is unlikely it will be ratified in the near future.

h) Biotechnology-related trade barriers.

Currently there is a Ministry of Health requirement that all transgenic events be reviewed by the Ministry of Health, registered and explicitly approved prior to allowing their use in domestic and imported foods could result on a trade barrier if the producers of the event have no interest on register or submitting their information in Chile.

In terms of commercial interests, Chile could be a significant consumer of transgenic soybeans, but the salmon industry has chosen to impose a de facto ban on the use of biotech feeds, due to their concerns that European and Japanese consumers might reject the product. While these types of industry imposed constraints clearly adversely affect trade, they are not formal technical barriers to trade.

i) Is there pending legislation with the potential to affect exports?

As previously mentioned, there is a mandatory labeling proposal approved by the Chamber of Deputies is currently being debated by the Senate Health Committee. If adopted with a 1% threshold detection level for biotech ingredients many domestic and international products could be affected.

The new daft of biotechnology framework introduced on the Agricultural Committee of the Senate does not include mandatory labeling, but we do not know the direction it can take when is being discuss by other committees of the Senate or when it goes back to the Chamber of Deputies.

j) Are there 'technology fees' for commercially planted crops? No

Section IV. Marketing Issues

- a) Market acceptance issues for producers, importers, retailers and consumers.

Currently there are no high visibility advocates of this technology. The scientific/academic community and parts of the agricultural community (corn and sugar beet farmers) are proponents of allowing genetically engineered products to be marketed domestically, but have not been very vocal in their support. At the same time, Chile's traditional export sectors (wine, salmon, and fresh fruits) remain concerned about the effect adoption of this technology might have on their markets in Europe and Japan. These sectors are doing research in genome mapping and, in the case of the salmon industry, research in transgenic vaccinations, but they also have distanced themselves from being perceived as in favor of genetically engineered products. Consumer understanding of the issue is uninformed, with exposure mainly being to alarming reports from special interest groups. Neither importers nor retailers have taken a stance on the issue.

- b) Relevant studies on the marketing of biotechnology products.

INIA has a series of relevant publications and books that can be purchase from their library. You can find a list at the following website: <http://www.inia.cl/biotecnologia/>

Bioplanet, contains extensive information on national and international biotech developments.

<http://www.bioplanet.net/index.htm>

Fundación Chile, a non-governmental research organization, conducts biotech studies.

<http://www.fundacionchile.cl>

Explora, disseminates information and S&T developments:

The following web site includes a paper from the 10th National Week of Science and Technology called "Biotechnology, Yesterday, Today and Tomorrow". Information on "Biotechnology, Science and Technology for Humankind"

<http://www.explora.cl>

Under "Saber de", "Tecnología e innovacion", "Biotecnología"

This site has information on "Agricultural Biotechnology Cooperation in Latin America and the Caribbean "

<http://www.redbio.org/>

This site has Biotechnology information for the Chilean industry

<http://www.sofofa.cl/sofofa/index.aspx?channel=3732>

Biotechnology as a tool for development and well-being

<http://www.acti.cl/publicaciones/biotecnologia.htm>

This site provides information to the industry and also to general public

<http://www.chilepotenciaalimentaria.cl/?cat=8>

Section V. Capacity Building and Outreach

- a) U.S. Government or USDA funded capacity building or outreach activities.

Past biotechnology activities in Chile include:

Organized a biotechnology/IPR seminar with the participation of high level government officials and agencies, June 7, that included the participation of Clive James (ISAA) and Karen Hauda (U.S. Patent and Trade Mark Office) as main speakers. Sponsor the participation of the one member of the Chilean delegation to the APEC High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB) held in Canberra, Australia, 2007. Embassy Science Fellowship program with the participation of a USDA/ARS scientist for two months in Chile from May-July 2006. Ministry of Agriculture Official was sent to a training course in the Philippines in June 2006 on Commercializing biotech crops. The U.S. Government participated in the Tenth APEC Research, Development and Extension of Agricultural Biotechnology (RDEAB) hosted by Chile in November 2005, we organized a reverse CODEL to the U.S. to be learn about the U.S. regulatory System for Biotech products in July 2005; We sponsored a Chilean expert to attend the APEC Seminar: "Creating a Positive Investment Environment for Agricultural Biotechnology", in Malaysia in Dec 04; we organized a panel of experts to address the Chilean Agriculture and Health Committees in Oct 04; we sent the President of the Small Farmers Cooperative Confederation to a farmer-to-farmer training program in Honduras in Aug-Sept 04; we sponsored two participants to attend the Michigan State biotechnology short course in August 2004; we hosted a visit to the U.S. of a team of Ministry of Health officials tasked with gathering information about other countries biotech regulations in Mar-Apr 04; we coordinated between the Einstein Institute for Science, Health and the Courts (EINSHAC) and the Chilean Judicial Institute to provide technical training to the judiciary regarding biotechnology in civil, criminal and family cases in Mar 04; we organized the HLPDAB in Chile, in Feb 04 and funded the participation of 22 representatives from APEC emerging markets to attend, as well as nine speakers.

- b) Country specific needs or strategies for Chile.

The objective of the above-mentioned activities was to promote science based regulation for biotech foods, especially in the case of food labeling, and to generate Chilean support in international standard setting bodies for reasonable requirements. The programs also were intended to build long-term regulatory acceptance for future biotech food crops using science bases principals to conduct risk assessments and to foster the adoption of common documentation for trade in bulk commodities under the Biosafety Protocol.

Also an effort was made to facilitate/refine/build mechanisms for enhancing public/private collaboration in biotechnology. Work in this area should continue. By improving the communication between the Chilean agricultural export community and the R&D facilities and by streamlining the tech transfer process within Chile, the development and adoption of biotech crops of economic interest to Chile could be increased and consequently so probably would be Chile's participation in the international dialogue on how biotech crops are handled globally.

Finally, and probably the most important focus should be on educating the public and Congress. Activities targeting journalist, Congress and general public through the schools could help form the debate on labeling and general acceptance of genetically engineered products. Specially, a train the trainer workshop would be helpful to help the regulators educate and inform the public about biotechnology. Finally, the Ministry of Health and the Public Health Institute have requested technical training for their laboratory officials. They received a grant from the European Union to build a lab and need technical information on how the U.S. uses its laboratories to comply with its international commitments.

Section VI. Reference Materials

Contact Information for Government Agencies:

Servicio Agrícola Ganadero - SAG (Agricultural Livestock Service)

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CONICYT (The National Commission for Scientific Research and Technology)

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FIA (Foundation for Agricultural Innovation)

Fundación para La Innovación Agraria – FIA

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List of event approved for field trial 2006

SPECIE	EVENT	GENETICAL MODIFICATION
ALFALFA	OIX 163	ROUNDUP TOLERANCE
RICE	508-73	ALBUMINA DE SUERO HUMANO
BRASSICA JUNCEA	BNWE	MODIFICATION OF THE QUALITY OF THE OIL
CANOLA	IIB78	MODIFICATION OF THE QUALITY OF THE OIL
CANOLA	NAO OLE 4 HIS POLYA	INCREASE LEVEL OF HISTIDINA
CANOLA	PV-BNAP/HT5867	INCREASE YIELD
CANOLA	PV-BNAP/HT5868	INCREASE YIELD
CANOLA	PV-BNAP/HT5869	INCREASE YIELD
CANOLA	RF3	RESISTANCE TO AMINAC GLUFOSINATO
CANOLA	RT73-GT73	ROUNDUP TOLERANCE
CANOLA	TG39	INCREASE YIELD AND RESISTANCE TO FUNGUS
CANOLA	TG51	INCREASE YIELD AND RESISTANCE TO FUNGUS
CANOLA	TG55	INCREASE YIELD AND RESISTANCE TO FUNGUS
CARTAMO	FEP	FISH ENHANCEMENT PROTEIN
CARTAMO	PSBS 4501	INSULINE
CORN	2984	RESISTANCE TO THIRST
CORN	3107	RESISTANCE TO THIRST
CORN	3115	RESISTANCE TO THIRST
CORN	3149	RESISTANCE TO THIRST
CORN	3149	RESISTANCE TO THIRST
CORN	3179	RESISTANCE TO THIRST
CORN	3183	RESISTANCE TO THIRST
CORN	3240	RESISTANCE TO THIRST
CORN	3249	RESISTANCE TO THIRST
CORN	3272	RESISTANCE TO THIRST
CORN	3311	RESISTANCE TO THIRST
CORN	4316	RESISTANCE TO THIRST
CORN	4330	RESISTANCE TO THIRST
CORN	4355	RESISTANCE TO THIRST
CORN	4375	RESISTANCE TO THIRST
CORN	4388	RESISTANCE TO THIRST
CORN	4407	RESISTANCE TO THIRST
CORN	4481	RESISTANCE TO THIRST
CORN	4489	RESISTANCE TO THIRST
CORN	4556	RESISTANCE TO THIRST
CORN	4575	RESISTANCE TO THIRST
CORN	4659	RESISTANCE TO THIRST
CORN	59122-2	RESISTANCE TO INSECTS
CORN	BTII	RESISTANCE TO LEPIDOPTEROUS
CORN	DAS59122-7 (PHP17662)	RESISTANCE TO INSECTS
CORN	DAS59 122-7 (PHP 17662)	RESISTANCE TO INSECTS
CORN	DAS59 122-7 X DAS-01507-1	RESISTANCE TO INSECTS
CORN	DAS59122-7X DA2-01507-1 X MON-00603-6	RESISTANCE TO INSECTS AND TOLERANCE TO HERBICIDE
CORN	DAS59122-7XTC 1507	RESISTANCE TO INSECTS
CORN	GA21	TOLERANCE TO GLIFOSATE
CORN	HT5867	INCREASE YIELD
CORN	HT5868	INCREASE YIELD
CORN	HT5869	INCREASE YIELD
CORN	LYO38	HIGH CONTENT OF LISINE
CORN	MIR604W (MIR-604-5)	RESISTANCE TO COLEOPTEROUS
CORN	MIR604W X BTII	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS
CORN	MIR604W X BTII X GA21	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS AND
CORN	HIR604W X GA21	RESISTANCE TO INSECTS AND TOLERANCE TO HERBICIDE
CORN	MON 810 X MON863	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS
CORN	MON810	RESISTANCE TO LEPIDOPTEROUS
CORN	MON810 X MON863	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS
CORN	MON810 X MON863 X NK603	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS AND
CORN	MON810 X MON863 X NK603	TOLERANCE TO HERBICIDE
CORN	MON810 X MON863 X NK603	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS AND
CORN	MON810 X MON88017	TOLERANCE TO HERBICIDE
CORN	MON810 X NK603	RESISTANCE TO INSECTS
CORN	MON810 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	MON810 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	MON810 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	MON810 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	MON810 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	MON810XMON863	RESISTANCE TO INSECTS
CORN	MON863	RESISTANCE TO COLEOPTEROUS

CORN	MON863	RESISTANCE TO INSECTS
CORN	MON863 X NK603	RESISTANCE TO COLEOPTEROUS AND TOLERANCE TO
CORN	MON88017	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO
CORN	MON88017 X MON810	RESISTANCE TO COLEOPTEROUS AND LEPIDOPTEROUS AND TOLERANCE TO GLIFOSATE
CORN	MONBBO17XDAS59122_7XTCI507	RESISTANCE TO INSECTS
CORN	MON88017XMON89034	RESISTANCE TO INSECTS
CORN	MON88017XMON8934XDAS59122-7	RESISTANCE TO INSECTS
CORN	MON88017XMON89034XDAS59122_7XTCI 507	RESISTANCE TO INSECTS
CORN	MON890234	RESISTANCE TO LEPIDOPTEROUS
CORN	MON89034XMON880 17	RESISTANCE TO LEPIDOPTEROUS
CORN	MON89034XNK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO HERBICIDE
CORN	NK603	TOLERANCE TO GLIFOSATO
CORN	NK603 X TC 1507	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	NK603XTC I507XPHPI7662	TOLERANCE TO HERBICIDE AND RESISTANCE TO INSECTS
CORN	PHPI7662XTCI507	RESISTANCE TO INSECTS
CORN	PHP20597	TOLERANCE TO HERBICIDE AND THIRST
CORN	PHP20598	TOLERANCE TO HERBICIDE AND THIRST
CORN	PHP24279	TOLERANCE TO GLIFOSATO AND SULFONILUEA
CORN	PHP24279X TC1507	RESISTANCE TO INSECTS AND TOLERANCE TO HERBICIDE
CORN	PHP24279X TC1507X PHPI7662	RESISTANCE TO INSECTS AND TOLERANCE TO HERBICIDE
CORN	PHP26349 X TC 1507	TOLERANCE TO HERBICIDE, RESISTANCE TO INSECTS AND HIGH USE OF NITROGEN
CORN	PHP27389XTCI507	TOLERANCE TO HERBICIDE, RESISTANCE TO INSECTS AND HIGH USE OF NITROGEN
CORN	PHP27390 X PHP8999	TOLERANCE TO HERBICIDE, RESISTANCE TO INSECTS AND HIGH USE
CORN	PHP27391 X TC1507	TOLERANCE TO HERBICIDE, RESISTANCE TO INSECTS AND HIGH USE
CORN	PHP27392X TC 1507	TOLERANCE TO HERBICIDE, RESISTANCE TO INSECTS AND HIGH USE
CORN	PV-ZMPQ5220	MODIFICATION OF THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMAP595	YIELD INCREASE
CORN	PV-ZMAP595 X MON89034 X MON88017	INCREASE OF YIELD BY THE RESISTANCE TO LEPIDOPTEROUS AND
CORN	PV-ZMAP595 X MON89034 X NK604	INCREASE OF YIELD BY THE RESISTANCE TO LEPIDOPTEROUS AND
CORN	PV-ZMAPS95 X NK63	INCREASE YIELD AND TOLERANCE TO HERBICIDE
CORN	PV-ZMPQI524	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ2449	CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ2449 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ437I	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ437I XMON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ4519	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ4519	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ4519 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ4529	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ4529	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ4529 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ5220	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ5220 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ5223	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ5223	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ5223 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	PV-ZMPQ5228	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ5228	MODIFICATION ON THE CONTENT OF AMINOACIDS IN THE GRAIN
CORN	PV-ZMPQ5228 X MON810	CONTENT OF AMINOACIDS IN THE GRAIN AND RESISTANCE TO LEPIDOPTEROUS
CORN	T25	TOLERANCE TO GLUFOCINATE
CORN	TCI507	RESISTANCE TO INSECTS
CORN	TCI507 X 59122-2	TOLERANCE TO INSECTS AND HERBICIDE
CORN	TCI507 X DAS59122-7	RESISTANCE TO INSECTS
CORN	TCI507 X MON863	RESISTANCE TO COLEOPTEROUS AND TOLERANCE TO HERBICIDE
CORN	TCI507 X NK603	RESISTANCE TO LEPIDOPTEROUS AND TOLERANCE TO GLIGRLIFOSATE
CORN	TCI507XT25	RESISTANCE TO INSECTS
CORN	TCI507XNK603	TOLERANCE TO INSECTS AND HERBICIDE
SUGAR BEET	H7-1	RESISTANCE TO GLIFOSATE
SOYBEAM	GM_A19788	TOLERANCE TO GLIFOSATE
SOYBEAM	PHP I 7752AXPHP I 9340A	CONTENT OF MODIFIED FAT ACIDS AND TOLERANCE TO HERBICIDE
SOYBEAM	PHP I7752AXPHP I9340AZ 40-3-2	MODIFICATION OF THE CONTENT OF FAT ACIDS AND TOLERANCE TO GLIFOSATE
SOYBEAM	PHP20 I63A	TOLERANCE TO HERBICIDE
SOYBEAM	PHP20163A X 40-3-2	TOLERANCE TO HERBICIDE
SOYBEAM	PV-GMAP I 894	INCREASE OF YIELD
SOYBEAM	PV-GMIR 9	RESISTANCE TO INSECTS
SOYBEAM	PV-GMPQ 154	MODIFICATION OF THE COMPOSITION OF OILS
SOYBEAM	PV-GMPQ/HT4050	MODIFICATION OF THE QUALITY OF THE OIL AND TOLERANCE TO
SOYBEAM	PV-GMPQ/HT4355	TOLERANCE TO DICAMBA
SOYBEAM	PV-GMPQ/HT4404	MODIFICATION OF THE QUALITY OF THE OIL AND TOLERANCE TO
SOYBEAM	PV-GMPQ4598	MODIFICATION OF THE COMPOSITION OF OILS
SOYBEAM	TG GM 6	INCREASE OF YIELD
SOYBEAM	TG GM 7	INCREASE OF YIELDS
SOYBEAM	TG GM a	INCREASE OF YIELDS
TOMATO	5345	RESISTANCE TO INSECTS

GRAPES	VARIOS	RESISTANCE TO BOTRITIS
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SAG 2007