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Report Highlights:

Colombia remains open to the adoption of biotech-derived commodities and other innovative technologies. In 2020, Colombia increased area of GE (genetically engineered) corn grown by 23 percent while the area planted of GE cotton declined by 37 percent from 2019. Ongoing dialogues related to biotechnology regulations, including discussions related to low-level presence (LLP), GE labeling, GE-derived agricultural product imports, and GE-free municipalities need to be finalized to stabilize Colombia's regulatory environment for GE products.

Section I. Executive Summary:

Overall, Colombia is a favorable environment for biotechnology. However, several political developments related to biotechnology regulation have potential to hinder the adoption of new technologies. FAS is monitoring evolving legislation on labeling requirements, a Congressional proposal to establish GE seed-free municipalities, a ban on GE-derived agricultural product imports, approval synchronicity issues, and discussions around key biotechnology.

The implementation of the U.S.-Colombia Trade Promotion Agreement (CTPA) propelled Colombia to become the second-largest market in Latin America for U.S. agricultural exports. In 2020, food and agricultural trade between Colombia and the United States reached $2.9 billion. U.S. exports of GE-derived agricultural products, such as corn, cotton, soybeans, soybean meal, soybean oil, and distillers' grains, were valued at $1.7 billion.

In 2002, Colombia approved the Cartagena Protocol on Biosafety (CPB). In 2005, Colombia published Decree 4525 to implement the CPB. Since then, the Government of Colombia (GOC) has published several other regulatory measures that outline new requirements and procedures for approving and using GE products in Colombia. Some of Colombia's agricultural biotechnology regulatory framework remains under review. Additional review provides opportunities to engage GOC regulatory agencies with technical outreach to facilitate the adoption of science-based regulatory policies, especially on low-level presence (LLP), labeling requirements, and innovative technologies. In 2018, the GOC issued Resolution 29299 for crops obtained using innovative technologies to define if the crop is subject to GE or conventional crop regulations. According to Resolution 29299, two genome-edited products, waxy corn and blight resistant, rice were assessed and determined to fall under regulations for conventional products.

The GOC has created three technical biotechnology committees to analyze biotech-derived products' environmental, biosafety and food safety impacts (See Part B, Policy). The Ministry of Health and Social Protection (MHSP) issued Resolution 4254, establishing the requirements for labeling foods derived from modern biotechnology. The GOC implemented the resolution in June 2012. In addition, the GOC has been working on establishing an LLP threshold policy for seven years, but internal deliberations continue. In the meantime, on September 8, 2015, the Constitutional Court ruled in favor of mandatory labeling of GE products in response to a lawsuit attacking Consumer Law 1480, Article 24, which refers to labeling, but does not address GE labeling. Despite the two-year deadline to develop mandatory labeling regulations, the GOC has not produced final rules, but the issue is currently being revisited. In May 2021, a bill to establish GE seed-free municipalities and ban GE-derived agricultural product imports was submitted before Congress and approved in the first House debate.

In 2002, GE cotton was the first GE plant cultivated on a non-restricted commercial basis in Colombia. The GOC approved the first GE corn traits in 2007. GE corn continued to be more widely planted than GE cotton in 2020. GE cotton area planted decreased by 37 percent, while

GE corn showed a 23.6 percent recovery from 2019. GE cotton represents 56 percent of the total area planted, while GE corn represents 30 percent of total area planted. Also, Colombian producers continued producing GE Dutch blue carnations under greenhouse conditions for export to Europe, and GE blue petal roses for exports to Japan. Regarding domestic GE event development, Colombia approved plantings of the first GE off-patent corn event in 2019.

Colombia continues to import GE vaccines for animal diseases (See appendix C).

d) Imports
e) Trade Barriers

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d) Labeling and Traceability
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PART I: Marketing

a) Public/Private Opinions
b) Market Acceptance/Studies

CHAPTER 1: PLANT BIOTECHNOLOGY

PART A: Production and Trade

a) Product Development

In 2019, the Colombian Agricultural Institute (ICA), authorized the Colombian Grain Producers Association (Fenalce) to begin plantings of their corn genotype containing the TC-1507 off-patent event in the humid Caribbean region, Cauca and Magdalena river valleys, as well as in the Eastern plains and the Coffee region. The variety is pending CTN-Health review for food as additional information is required.

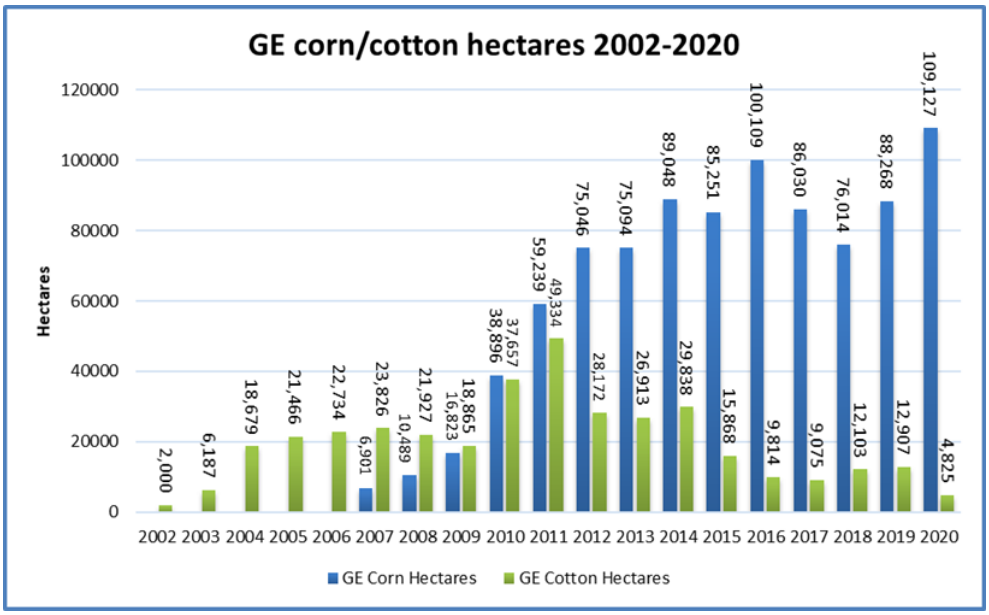
Several other Colombian organizations are also producing valuable research in the GE sector.. The Colombian Sugar Cane Research Center (CENICAÑA) is developing a sugar cane variety resistant to the yellow leaf virus and a sugar cane variety with increased sugar and biomass and salt, aluminum, and water stress tolerance. The International Center for Tropical Agriculture (CIAT) is researching GE rice, cassava, and grass, and EAFIT University is working on the oleic content of castor bean and sacha inchi, a perennial plant that produces fruit with large, edible seeds. The Colombian Coffee Research Center (CENICAFE) is conducting GE research on tobacco (*nicotiana*), the fungus *Beaveria bassiana*, and a coffee variety resistant to coffee borer (*Broca*). The International Corporation for Biological Research (CIB) is investigating potatoes resistant to lepidopterous insects. Colombian universities and research institutes are also collaborating to develop rice and potato biotechnology varieties. All GE products that are developed must go through the regulatory approval process whether intended for ornamentals, for human consumption, or for animal feed.

b) Commercial Production

Prior to 2006, the cotton varieties Bollgard and Roundup-Ready were the only non-restricted GE approvals in Colombia. In 2007, the GOC approved the first stacked event, a cotton variety combining Bollgard and Roundup-Ready and controlled plantings of GE corn. In 2010, GE soybean production was approved for commercial cultivation but only initiated cultivation as an off-patent event in 2020. Biotech blue carnations and blue petal roses are cultivated solely for export markets, and the area planted for both flowers is 12 hectares. Colombian farmers continue to adopt GE technology; Colombian departments Meta, Tolima, Cordoba and Valle del Cauca have the highest GE corn adoption per area planted, while 21 out of 32 departments currently grow GE corn or cotton. In 2020, Colombia planted 109,127 and 4,825 hectares of GE corn and cotton, respectively, representing a 23.6 percent GE corn area growth, the highest in history, and a 37 percent GE cotton area planted decrease compared to 2019. In 2020, total cotton planted decreased by 53 percent, mainly due to reduced consumer demand due to COVID-19. (See Charts 1, 2, and 3).

There are pending applications for several other crops that are in varying phases of approval (See appendices A and B).

Chart 1



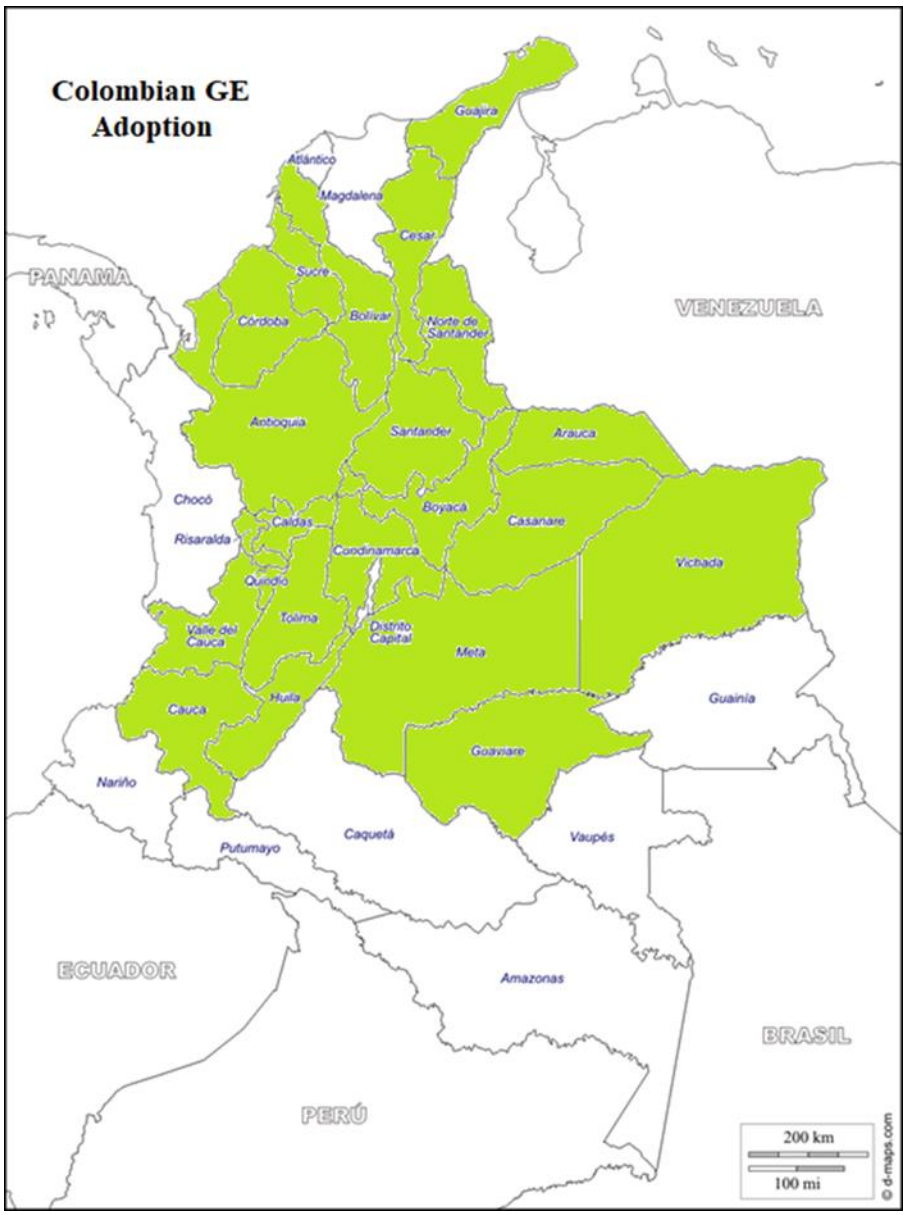
Data provided by ICA-Colombian Agricultural Institute

Chart 2

GE adoption per Department/Hectares			
Corn		Cotton	
Meta	30,245	Cordoba	2,148
Tolima	23,248	Tolima	2,055
Cordoba	19,481	Guajira	249
Valle del Cauca	18,451	Cesar	149
Risaralda	3,914	Valle del Cauca	118
Casanare	3,088	Huila	91
Cesar	2,473	Cundinamarca	15
Huila	2,050		
Caldas	1,532		
Quindio	1,425		
Cauca	1,312		
Cundinamarca	558		
Santander	404		
Antioquia	358		
Sucre	284		
Arauca	91		
Norte de Santander	68		
Bolivar	47		
Guaviare	46		
Vichada	43		
Boyaca	9		

Data provided by ICA-Colombian Agricultural Institute

Chart 3



Data provided by ICA-Colombian Agricultural Institute

c) <u>Exports</u>

Genetically engineered Dutch blue carnations are produced for export to Europe and GE blue petal roses for export to Japan. In 2020, area planted for both Dutch blue carnations and blue petal roses remains unchanged at 12 hectares. On the Japanese retail market, blue petal roses sell for$40-$50 per flower.

d) Imports

Brazil, Honduras, and Mexico export most of the GE corn seeds Colombia grows (2,014 tons). GE cotton seeds are imported from the United States (17 tons), and GE soybeans are imported from Brazil (1,200 tons). In 2020, Colombia imported approximately $1.7 billion worth of GE-derived agricultural products such as corn, cotton, soybeans, soybean meal, soybean oil, and distillers' grains from the United States.

e) Food Aid

Colombia receives limited food aid from the United States. Any food aid containing GE events must have regulatory approval in Colombia for human consumption.

f) Trade Barriers

The lack of an LLP policy and the congressional initiatives to declare GE-free municipalities, ban GE-derived agricultural product imports, and impose mandatory labeling requirements have the potential to undermine Colombia's regulatory environment for GE products and to negate the benefits for consumers and the agricultural sector. In May 2021, Congress approved a draft bill to incentivize GE-free territories. Although the initiative focuses on GE-free municipalities, two new articles propose additional bans on imports and mandatory labeling. Once the law is sanctioned, the GOC will have four years to ban transgenic agricultural product imports and six months to implement transgenic mandatory labeling justified by the "consumer-right-to-know" principle. The bill will have to go through three other debates to become law. Pro-biotechnology stakeholders continue pushing to table the proposed bill.

PART B: Policy

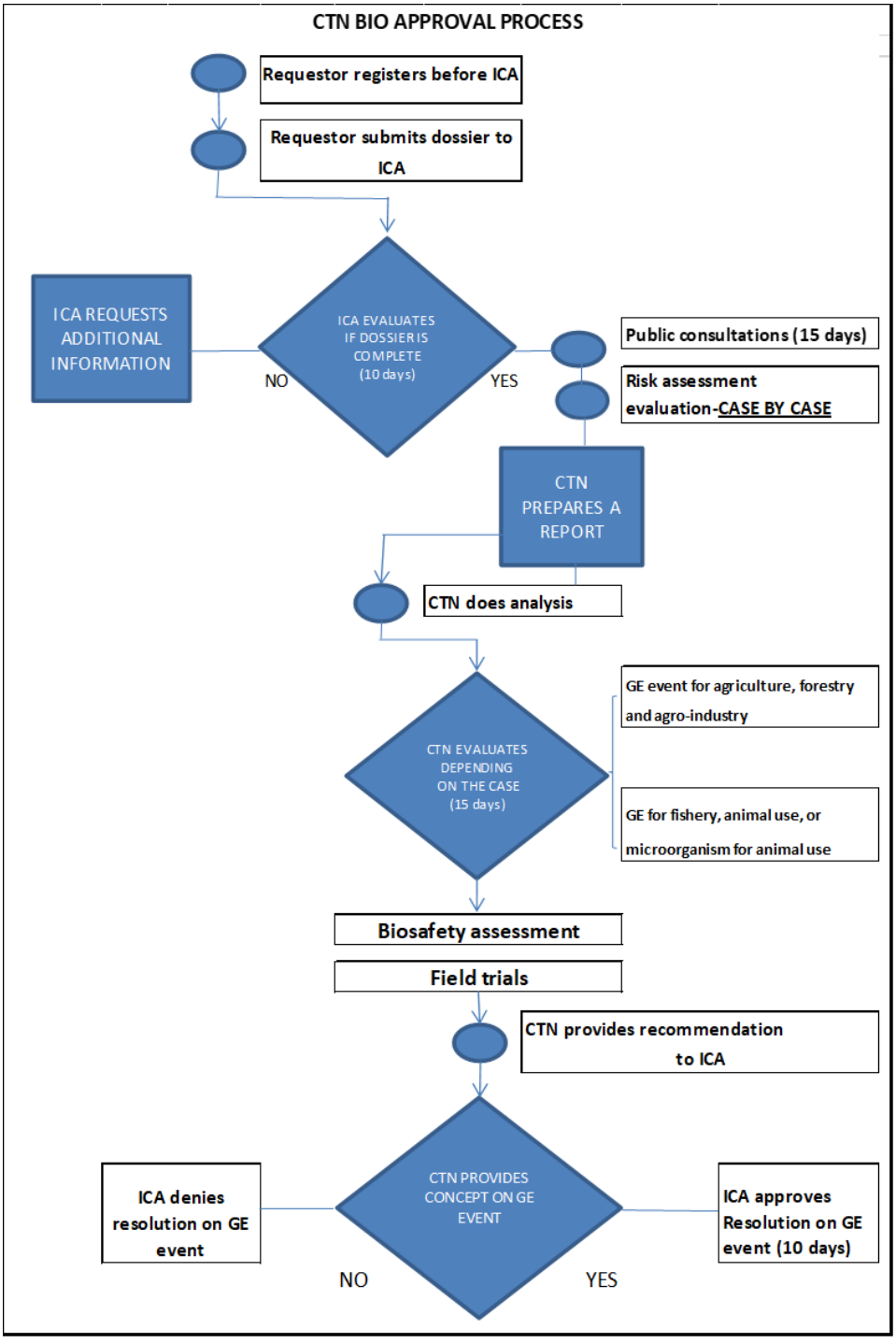
a) Regulatory Framework

The following ministries are involved in the regulation of agricultural biotechnology production and imports:

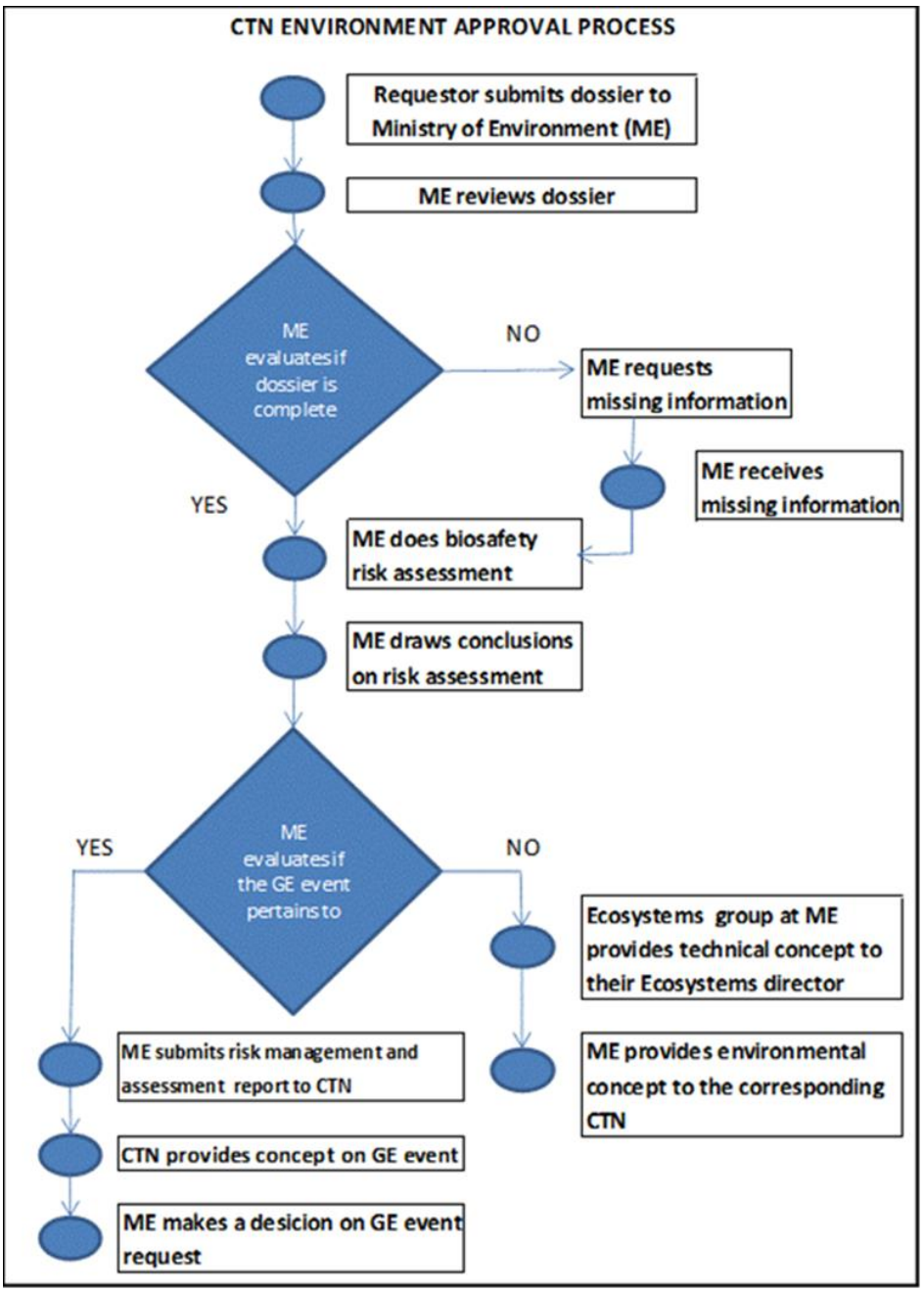
- Ministry of the Environment, Housing and Territorial Development (MEHTD);
- Ministry of Health and Social Protection (MHSP);
- Ministry of Agriculture and Rural Development (MARD), through the Colombian Agricultural Institute (ICA);
- Ministry of Science and Technology (previously Colciencias);
- National Institute for the Surveillance of Food and Medicines (INVIMA).

Decree 4525 from 2005 (available only in Spanish), establishes three interagency committees, consisting of the ministries mentioned above, responsible for biosafety issues as well as the evaluation and approval of biotech products. The committees responsible for biotech regulation are outlined below:

The National Technical Committee for Agriculture, Fishery, Forestry and Agro-industry (CTN-Bio): Resolution 91506 from 2021 (available only in Spanish), establishes the CTN-Bio's internal regulations for assessing GE events for non-food-related GE products. The graph below illustrates the CTN-Bio approval process, which was reviewed and improved in 2021. The improved process allows for more predictable timelines, as per Resolution 91505 from 2021 (available only in Spanish):

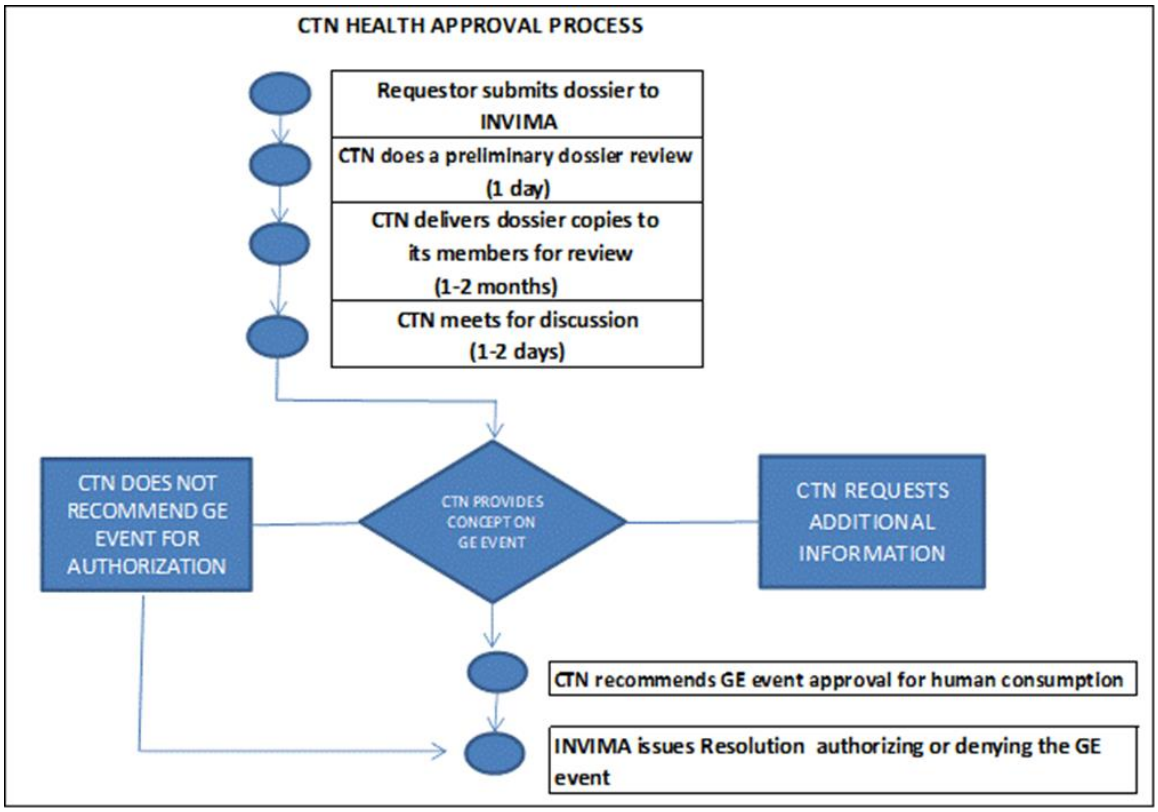


The National Technical Committee for Environment (CTN-Environment): CTN-Environment's function is to assess GE events that may impact the environment. CTN-Environment has yet to receive any requests for review of GE events. However, in May 2010, the MEHTD issued Resolution 957 (available only in Spanish) describing the information that companies must submit for evaluation and the ministry's procedures for assessing GE events. The graph below illustrates the CTN-Environment approval process:



The National Committee for Health and Human Nutrition (CTN-Health): CTN-Health's function is to assess the impact of GE products and by-products on human health. In 2017,

MHSP issued Resolution 2535 (available only in Spanish), transferring the responsibility of approving regulatory resolutions to INVIMA, which has streamlined the approval procedures with more predictable timelines. The graph below illustrates the CTN-Health approval process:



b) Approvals

The GOC must approve all GE events for commercial cultivation, food consumption, and animal feed. CTN-Bio and CTN-Health oversee the approval process for GE-derived feed and food materials, and the committees' decision timelines are not coordinated. These parallel timelines can result in internal asynchronous approvals (see appendix B). GE approvals for food expire after 10 years, at which point they must be re-approved. Under current submission guidelines, INVIMA has not included any additional requirements after the initial expiration renewal.

For a full list of biotechnology products approved for planting in Colombia, see Appendix A.

c) Stacked Events or Pyramided Event Approvals

All stacked GE events must be approved individually, and there is no official process to review stacked events as a whole. However, in 2017, the CTN-Health established an internal procedure to facilitate the approval process for stacked events when their single events have already been approved. This procedure has reduced the current approval timeframe and alleviated asynchronous approvals between exporting and importing countries.

d) Field Testing

Colombia requires field-testing for GE crop cultivation (see appendix A) after a risk assessment is submitted to CTN-Bio for review and subsequent approval. Field testing must be completed in each of Colombia's five agro-ecological regions, which considerably lengthens the review.

e) Innovative Biotechnologies

There are currently three research groups working on genome editing: the CIAT Research Center, Agrosavia, and EAFIT University. The CIAT Research Center focuses on herbicide-tolerant cassava, increased rice yields, virus and bacteria-resistant rice, high-zinc and iron rice, bean nutritional quality, and cacao cadmium absorption. Agrosavia is working on reduced-toxin potatoes and phosphorus altered rice; the rice has decreased levels of phosphorus in the grains, but increased levels in the leaves. EAFIT University is researching castor bean oleic content.

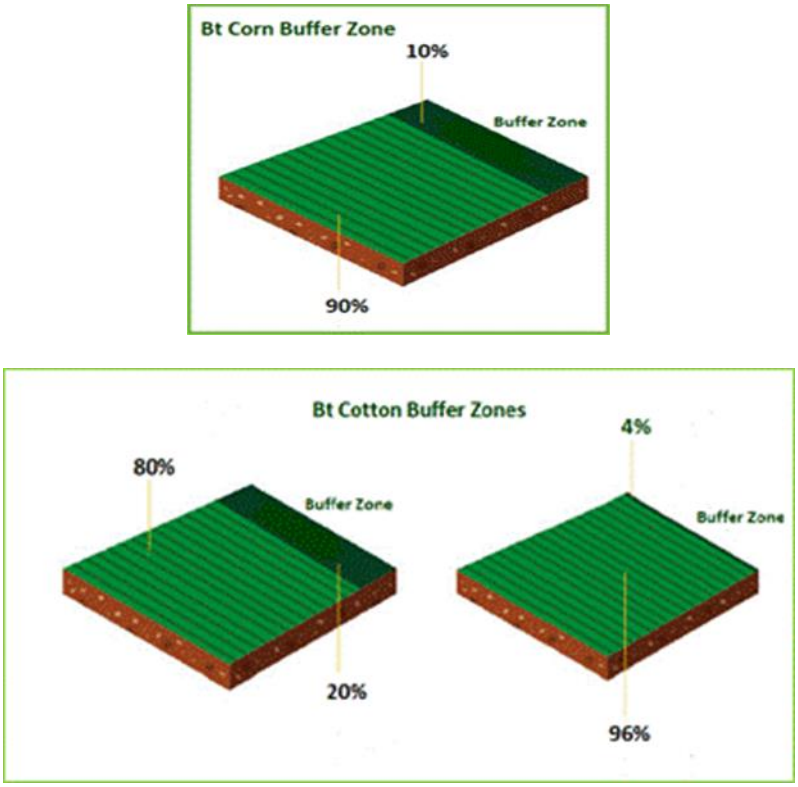
Resolution 29299 from 2018, (available only in Spanish), creates a process to determine if genome-edited cultivars should be considered "living modified organisms" or conventional organisms. The interested party is required to submit an application to ICA for review. Within a period of sixty (60) business days, if no further information is required, ICA will determine if the new cultivar is considered GE or not and, therefore, if it is within the scope of regulation for GE. If deemed to be GE, the cultivar is required to go through the existing regulatory GE framework. Otherwise, it is regulated by existing conventional crop legislation and regulation. ICA has reviewed two genome-edited crop submissions and concluded that neither crop (described below) would be subject to GE regulations.

Crop	New Characteristic	Evaluation Results
Corn	Waxy corn modified for altered starch composition	Not subject to GE regulations
Rice	Resistance to bacterial panicle blight	Not subject to GE regulations

f) Coexistence

In 2006, ICA evaluated cross-pollination and found that GE and non-GE crops coexist without posing risks to non-GE crops. Regardless, cotton and corn farmers actively apply the practice of buffer zones, or a natural barrier of fallow terrain, in compliance with ICA Resolution 72221 from 2020 (available only in Spanish), which establishes a buffer zone following the 80/20 or 96/4 scheme for cotton, and a 90/10 scheme for corn (see Chart 4). The resolution also requires a 300-meter (984 foot) planting distance between GE and non-GE crops. See Part B, section H, for more information.

Chart 4



Source: Program MARI, Insect Resistance Management https://www.programamari.com/

f) Labeling and Traceability

GE labeling requirements may impact the current GE regulatory framework and the use of GE technology in Colombia. In 2012, MHSP issued Resolution 4254, which established labeling requirements for food derived from modern biotechnology. The resolution requires labeling information for product safety and risks such as potential allergenicity. Labeling must also address significant differences with the product's conventional counterpart.

In 2015, the Constitutional Court ruled in favor of mandatory labeling of GE organisms in response to a lawsuit attacking Consumer Law 1480, Article 24, which refers to labeling but does not address GE labeling. As a result of this decision, Congress was required to draft and implement legislation on mandatory labeling of GE organisms within two years of the court's ruling. Despite the two-year deadline, Congress produced no final rules. However, on August 14, 2019, a revised bill was submitted to Congress calling for mandatory labeling. The initiative only reached the first debate of the legislative process, which ended in June 2020. Although no additional debates have been scheduled under the 2020-2021 legislative calendar, this can undermine Colombia's GE labeling regulatory environment, depending on the future approach taken toward mandatory labeling. Currently, Resolution 4254 regulates GE labeling.

Resolution 4254 does not accept the use of statements such as "GMO free" or "does not contain GMO," unless the manufacturer demonstrates and sustains that the claim is truthful and not misleading. On April 22, 2020, INVIMA issued communication IVC-INS-LI15 (available only in Spanish), establishing the frequency that importers must submit laboratory results to certify that products labeled as "non-GMO" do not contain detectable modified genetic material. These guidelines reduce delays at ports of entry as lot-by-lot testing is not always required, preserving product shelf life, and alleviating testing costs. The testing requirement does not apply when the main ingredients are not included in the list of GE foods attached to INVIMA communication 4000-3988-19 (available only in Spanish).

An increased number of imported packaged products entering the Colombian market now bear the "Non-GMO Project Verified" or the "Non-GMO/GE Process Verified" legends, which, as per current regulation, are considered equivalent to "GMO-free" claims. Therefore, manufacturer/importers must provide a supplementary label that clarifies the scope of the legend to be able to commercialize their products as per INVIMA communication 4000-1071-18 (available only in Spanish).

h) Monitoring and Testing

In 2009, the GOC issued Resolution 682, requiring GE seed companies to adopt a "life cycle stewardship" approach to guide producers, targeting GE cotton production. In September 2012, Resolution 2894 was issued to address the handling of GE corn, outlining the regulatory expectations for farmers and GE seed companies. Both resolutions established a production and commercial road map for the two most widely grown GE crops in Colombia, corn and cotton. In 2020, ICA issued Resolution 72221 to combine Resolutions 682 and 2894, to improve and modify stakeholder responsibilities and standardize stewardship reporting. In 2018, the Colombian Association of Agricultural Biotechnology (Agro-Bio) released MARI, an insect resistance management program, to encourage producers to implement good agricultural practices to assist insect resistance mitigation.

Regarding testing, INVIMA is actively conducting port of entry testing to check import shipments for unapproved GE products destined as raw material for food and feed. To date, there have been no detections of unapproved events. INVIMA also monitors products that have "Non-GMO Project Verified," "Non-GMO/GE Process Verified," and "Non-GMO" claims, and requests that importers support their claims with laboratory results before moving forward with commercialization (see Part B, section G for additional information on labeling and testing).

i) Low-Level Presence (LLP) Policy

Industry and commodity exporters have expressed concern that not all commonly traded GE events have been approved in Colombia. This could delay shipments as a result of asynchronous

approvals. Considering that approval times for food, feed and, environmental release are not parallel, the GOC initially considered a 5 percent LLP threshold in 2014. However, in 2019, Colombia's National Planning Office (DNP) started addressing low-level presence in GE products destined for food use under the interagency sanitary and phytosanitary committee. It indicated that existing measures would be sufficient to address low-level presence.

j) Additional Regulatory Requirements

There are no additional requirements.

k) Intellectual Property Rights (IPR)

Colombia is a member, and follows the guidelines, of the following groups: the Convention for the Protection of Industrial Property, the World Trade Organization, the G3 Mexico, the Colombia and Venezuela Agreement, and the Andean Pact. As a member of the Andean Pact, Colombia adopted the following regulatory decisions:

- Decision 351, Common Provisions on the Protection of the Rights of Breeders of New Plant Varieties
- Decision 391, Common Regime on Access to Genetic Resources (Hodson & Carrizosa, 2007).

Colombia's constitutional court declared accession to the International Union for the Protection of New Plant Varieties (UPOV) 91 unconstitutional in December 2012 due to the government's lack of consultation with Afro-Colombian and indigenous communities. In the meantime, Colombia has continued to follow provisions under the Andean Community Decision 345, already in effect.

l) Cartagena Protocol Ratification

As a signatory (and host) to the CPB, Colombia approved the Biosafety Protocol through Law 740 in 2002. To date, the regulations to implement the CPB and supporting laws are outlined in Decree 4525 of December 6, 2005; ICA resolution 1063 of March 22, 2005; ICA resolution 72221 of July, 2020; MHSP resolution 2535 of July, 2017; and MEHTD resolution 957 of May 19, 2010.

m) International Treaties and Forums

Colombia plays an active role in the discussions of the Nagoya-Kuala Lumpur Protocol on redress and liability and the CPB Conference of the Parties. Colombia is also a signatory to the International Treaty on Plant Genetic Resources for Food and Agriculture, the International Plant Protection Convention (IPPC), and attends CODEX meetings to discuss issues on biotechnology. In 2017, Colombia joined the Global Low-Level Presence Initiative to develop international

approaches to manage LLP. In April 2020, Colombia became a member of the Organization for Economic Cooperation and Development (OECD).

n) Related Issues

Over two consecutive legislative years (July 2020-June 2021 and July 2021-June 2022), a bill aimed at establishing "transgenic" free municipalities and protecting farmers' rights to save, reuse, and commercialize their seeds was proposed; this proposal has no clear IPR considerations. Biotechnology supporters have expressed their concerns and continue advocating for a science-based approach.

PART C: Marketing

a) Public/Private Opinions

Overall, Colombia has taken a science-based approach to regulate biotechnology. However, some environmental NGOs are pressuring government officials to reject biotech-derived technologies. The GOC's basic principle is to adopt the technologies that may help rural Colombia's economic and social development.

Anti-biotech activists have pushed for mandatory GE labeling, a GE seed ban, GE free municipalities, and a GE-derived agricultural product import ban. In addition, NGOs have inspired some social science student groups and indigenous communities to oppose the introduction of GE crops for cultivation and environmental release based on biodiversity concerns. As per current regulations, indigenous territories are GE-free zones. See Part B; section G for additional information on labeling. See Part A; section F for additional information on trade barriers.

b) Market Acceptance/Studies

For over 15 years, biotechnology-derived commodities have been used in Colombia. To date, public opinion and media coverage of biotechnology have been favorable, and consumers have not voiced major concerns about products containing GE-derived materials.

An IFPRI study (Zambrano et al. 2011) found that GE cotton cultivation had economic benefits for women farmers, saving them both time and money. The study helped highlight the role of women as practitioners and beneficiaries of biotech cotton production. In 2016, the Colombian Association of Agricultural Biotechnology (Agro-Bio) released a study showing biotechnology as a valuable tool for farmers, with potential benefits to rural development and self-sufficient agriculture.

CHAPTER II: ANIMAL BIOTECHNOLOGY

PART D: Production and Trade

a) Product Development

According to GOC officials, some universities are researching animal biotechnology. However, the high cost associated with the technology is a key factor in discouraging widespread adoption. Aquaculture and GE cattle are possible areas for more animal biotechnology research, but funding will likely be the primary constraint. There are no developments regarding cloning at this time.

b) Commercial Production

None.

c) Exports

None.

d) Imports

Colombia has focused on importing recombinant vaccines and diagnostic kits for animal diseases (see appendix C).

In 2016, overseas companies and local governments expressed interest in accessing GE insect technology to control harmful insect populations, but no progress has been reported. These technologies could control the population of (1) Aedes aegypti mosquito, a vector for dengue, Zika, chikungunya, yellow fever, and other arboviruses and (2) assist with crop protection from the medfly, which negatively impacts Colombian fruit exports. The latter may be introduced first due to streamlined regulatory considerations, as it only requires the CTN Bio´s assessment.

e) Trade Barriers

None.

PART E: Policy

a) Regulatory Framework

The GOC regulatory framework for plant biotechnology also applies to animal biotechnology. Per Decree 4525, CTN-Bio is the interagency committee responsible for evaluating and approving animal products after a risk evaluation by ICA.

b) Approvals

See appendix C.

c) Innovative Biotechnologies

No developments have been identified at this time.

d) Labeling and Traceability

See Part B, Section G.

e) Additional Regulatory Requirements

None.

f) Intellectual Property Rights (IPR)

See Part B, Section K.

g) International Treaties and Forums

Colombia´s experience with biotechnology is mostly related to plants. As a member of CODEX and the World Organization for Animal Health (OIE), the country attends meetings to discuss issues on biotechnology.

h) Related Issues

None.

PART F: Marketing

a) Public/Private Opinions

Public knowledge of biotechnology is mainly related to plants. Animal biotechnology is not well known and receives minimal media attention. Animal biotechnology is mainly related to assisted reproductive technologies.

b) Market Acceptance, Studies

See Part F, Section A.

CHAPTER 3: MICROBIAL BIOTECHNOLOGY

PART G: Production and Trade

a) Commercial Production

There is no information available at this time.

b) Exports

Colombia exports $37.1 million annually of processed products (beer, condiments and sauces, fruit juices, and cheese), which may contain microbial microbial biotech-derived ingredients.

c) Imports

Colombia imports $111 million annually of processed products (prepared foods, wine and beer, condiments and sauces, fruit juices, cheese, infant foods) and enzymes, which may contain microbial biotech-derived ingredients.

d) Trade Barriers

None.

PART H: Policy

a) Regulatory Framework

The Ministry of Health is in charge of regulating food ingredients for human consumption. There is no independent review for microbial biotech-derived components.

b) Approvals

See Part H, Section A.

c) Labeling and Traceability

In 2012, MHSP issued Resolution 4254 establishing the requirements for labeling of food derived from modern biotechnology. According to the resolution, foods containing one microbial biotech-derived ingredient, such as an additive or enzyme, are exempt from GE labeling requirements.

d) Monitoring and Testing

No monitoring or testing is done for GE microorganisms used as food ingredients.

e) Additional Regulatory Requirements

There are no additional requirements at this time.

f) Intellectual Property Rights (IPR)

See Part B, Section K.

g) Related Issues

None.

PART I: Marketing

a) Public/Private Opinions

Public knowledge of biotechnology is mostly related to plants. At this time, there is no public opinion toward microbial biotechnology and its use in food production.

b) Market Acceptance, Studies

See Part I, Section A.

Attachments:

APPENDIX A. COLOMBIA: CURRENT STATUS OF BIOTECHNOLOGY PRODUCTS FOR PLANTING

Crop	**Requesting Company**	**New Characteristics of Biotechnology**	**Authorized Activity**
Carnations ICA resolution 1219	Flores Colombianas Ltda. (Holland)	Blue Carnations	Approved in 2000 for commercial production of carnations for exports only (greenhouse conditions).
Carnations ICA resolution 3932 ICA resolution 3858	Flower Development (Holland)	Blue Carnations	Approved in 2008 for commercial production of cut flowers for exports only (greenhouse conditions).
Carnations ICA resolution 231 ICA resolution 3569	Suntory Holdings Limited	Blue Carnations	Approved for commercial production of cut flowers for exports only (greenhouse conditions).
Roses ICA resolution 3857 ICA resolution 3786	International Flower Development (Holland)	Blue Petal Roses	Approved in 2009 for commercial production of cut flowers for exports only (greenhouse conditions).
Roses ICA resolution 72130			Approved in 2020 for field trials.
Chrysanthemum ICA resolution 3785	International Flower Development	Blue Chrysanthemum	Approved for experimental plantings in 2009 (greenhouse conditions).

Chrysanthemum ICA resolution 3570	Suntory Holdings Limited	Blue Chrysanthemum	Approved in 2012 for commercial production of cut flowers for exports only (greenhouse conditions).
Gypsophila ICA resolution 7169	Imaginature Limited	Blue Gypsophila	Approved in 2016 for commercial production of cut flowers.
LLCotton25 ICA resolution 1037 ICA resolution 1259 ICA resolution 2403 ICA resolution 4137	Bayer CropScience LLC	Tolerant to glufosinate ammonium herbicide.	Approved in 2009 for agronomic field trials in the dry and humid Caribbean regions, upper Magdalena river (Tolima, Huila), Cauca river valley and eastern plains. Approved in 2010 for commercial plantings in the upper Magdalena river (Tolima, Huila) and the humid Caribbean region. Approved in 2014 for commercial plantings in the dry Caribbean region.
Bollgard Cotton-MON 531 ICA resolution 1247 ICA resolution 2202	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects.	Approved for commercial plantings since 2003 in the humid Caribbean region, the upper Magdalena river valley (Tolima and Huila) and Cauca river valley. Approved for commercial plantings in the dry Caribbean region in May, 2004 and eastern plains in 2007.
Roundup Ready Cotton-MON 1445 ICA resolution 1006	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Approved in 2004 for commercial plantings in the dry Caribbean and humid Caribbean regions. Approved in 2007 for commercial plantings in the upper Magdalena river valley(Tolima and Huila) and Cauca river valley.

ICA resolution 366			
Bollgard/Roundup Ready Cotton-MON 531XMON 1445 ICA resolution 358 ICA resolution 3852 ICA resolution 2204	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2005 for biosafety assessments in the dry Caribbean and humid Caribbean regions, the upper Magdalena river valley (Tolima and Huila), Cauca river valley and Meta. Approved in 2007 for commercial plantings in the upper Magdalena river valley (Tolima and Huila), Cauca river valley, the dry Caribbean and humid Caribbean regions and Orinoquia.
Bollgard II and Roundup Ready Flex Cotton- MON 15985XMON 88913 ICA resolution 3851 ICA resolution 2203	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects and completely tolerant to Roundup herbicide.	Approved in 2005 for biosafety assessments in the dry Caribbean and humid Caribbean regions, the upper Magdalena river valley (Tolima and Huila), Cauca river valley and Meta. Approved in 2003 for commercial plantings in the dry Caribbean and humid Caribbean regions and Orinoquia. Approved in 2007 for commercial plantings in the upper Magdalena river valley (Tolima and Huila) and Cauca river valley.
Bollgard x Roundup Ready Flex Cotton- MON 531XMON 88913 ICA resolution 1726	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects and completely tolerant to Roundup herbicide.	Approved in 2007 for commercial plantings.
Bollgard II and Roundup Ready Flex Cotton- MON 15985XMON 88913	Bayer CropScience LLC	Resistant to a wider variety of lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2008 for commercial plantings in the dry Caribbean and humid Caribbean regions, the upper Magdalena river valley (Tolima and Huila), and

ICA resolution 30193			Orinoquia.
Bollgard II and Roundup Ready Flex Cotton- MON 15985XMON 88913	CORPOICA	Resistant to a wider variety of lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2018 for commercial plantings in the dry and humid Caribbean regions, Cauca river valley, upper Magdalena river valley and Orinoquia
Roundup Ready Flex MON 88913 cotton ICA resolution 880 ICA resolution 1258	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Approved for biosafety assessment in 2008 in dry and humid Caribbean regions, Cauca river valley, upper Magdalena river valley and Orinoquia. Approved on 04/09/10 for commercial plantings for dry and humid Caribbean regions, Cauca river valley, upper Magdalena river valley and Orinoquia.
Glytol and Liberty Link cotton ICA resolution 226 ICA resolution 4133 ICA resolution 3053	Bayer CropScience LLC	Tolerant to Roundup and ammonium herbicide.	Approved in 2012 for field trials in dry and humid Caribbean regions, Cauca river valley, upper Magdalena river valley and Orinoquia. Approved in 2014 for commercial plantings in the dry and humid Caribbean regions.
Glytol and Twilink cotton ICA resolution 4304 ICA resolution 18599 ICA resolution 30336 ICA resolution 82364	Bayer CropScience LLC		Approved in 2014, 2016, and 2018 and 2020 for commercial plantings.
Glytol x Twinlink x COT102 cotton ICA resolution 3924	Bayer CropScience LLC		Approved in 2016 for biosafety field trials.

COT102 cotton ICA resolution 369 ICA resolution 82365	Bayer CropScience LLC		Approved in 2015 for biosafety field trials. Approved for planting in 2020.
Rice ICA resolution 4041	CIAT (Colombia)	Tolerant to drought.	Approved in 2010 for field trials in Villavicencio, Meta
Rice	CIAT (Colombia)	Resistant to White Leaf virus.	Approved in 2000 for restricted research and small-scale plantings in open fields, in accordance with risk assessment.
Rice	CIAT (Colombia)	Resistant to White Leaf virus.	Approved in 2008 for restricted research.
Cassava	CIAT (Colombia)	Resistant to the borer of stem/stalk.	Approved in 2000 for small-scale plantings in open fields per risk assessment.
Cassava	CIAT (Colombia)	Modification of cytokine production.	Approved in 2000 for restricted research per risk assessment.
Cassava	CIAT (Colombia)	Modification of amilopectin production.	Approved in 2000 for restricted research per risk assessment.
Cassava	CIAT (Colombia)	Modification of cyanide content.	Approved in 2000 for restricted research per risk assessment.
Cassava ICA resolution 3854	CIAT (Colombia)		Approved in 2005 for restricted research per risk assessment.
Cassava ICA resolution 858	CIAT (Colombia)		Approved in 2008 for restricted research per risk assessment.

Brachiaria (grass)	CIAT (Colombia)	"frog hopper" resistant.	Approved in 2000 for restricted research per risk assessment.
Coffee	CENICAFE (Colombia)	Borer resistant.	Approved in 2000 for restricted research per risk assessment.
Potatoes ICA resolution 4469 ICA resolution 1628 ICA resolution 4040	Corporacion de Investigaciones Biologicas (CIB) (Colombia)	Resistant to Tecia solanivora).	Approved for field trials in Rio Negro, Antioquia in 2010.
Tobacco ICA Resolution 2492	CENICAFE (Colombia)		Approved in 2010 for confined research.
Fungus ICA Resolution 2492	CENICAFE (Colombia)		Approved in 2010 for confined research.
Coffee plants "coffee Arabica" ICA Resolution 2492	CENICAFE (Colombia)		Approved in 2010 for confined research.
Sugar cane ICA Resolution 3995	CENICAÑA (Colombia)	Resistant to the yellow leaf syndrome.	Approved in 2005 for restricted research and small-scale plantings in open fields per risk assessment.
Yieldgard Corn Mon 810 ICA resolution 3850	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects.	Approved in 2005 for biosafety assessments in the humid Caribbean region, upper Magdalena river (Tolima, Huila), Cauca river. Approved in 2007 for controlled plantings in the humid Caribbean region, upper Magdalena river (Tolima, Huila), Cauca river

ICA resolution 3743 ICA resolution 465 ICA resolution 1727			valley and eastern plains. Approved in 2008 for controlled plantings in the dry Caribbean, upper Magdalena river (Tolima, Huila), Cauca river, eastern plains and the Coffee region.
Yieldgard Corn ICA resolution 3742 ICA resolution 646	Dupont (United States)	Resistant to some lepidopterous insects.	Approved in 2008 for controlled plantings in the dry and humid, Caribbean and the Coffee region.
Yieldgard 2 Corn	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Risk assessment since 2005.
Yieldgard VTPro Corn MON 89034 ICA resolution 881	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects.	Approved in 2007 for biosafety field trials in the dry and humid Caribbean regions, the Coffee region, upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains.
Yieldgard VT3Pro Corn 4008 ICA resolution 881	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects.	Approved in 2016 for controlled plantings in the dry and humid Caribbean regions, the Coffee region, upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains.
Roundup Ready Corn (RR 2 corn) ICA resolution 1728 ICA resolution 3849 ICA resolution 3740	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Approved in 2005 for biosafety assessments the humid Caribbean region (Cordoba), upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains. Approved in 2007 for controlled plantings in the humid Caribbean region (Cordoba), upper Magdalena river valley (Tolima, Huila), Cauca river valley and

			eastern plains. Approved in 2008 for controlled plantings in the dry Caribbean and the coffee region.
Roundup Ready Corn ICA resolution 3739 ICA resolution 1680	Dupont (United States)	Tolerant to Roundup herbicide.	Approved in 2008 for controlled plantings in the dry Caribbean and the coffee region. Approved in 2007 for controlled plantings in the humid Caribbean region, upper Magdalena river, Cauca river valley and eastern plains.
Yieldgard VTPro X Roundup Ready 2 corn- MON 89034 X NK 603 ICA resolution 3784 ICA resolution 1851 ICA resolution 225 ICA resolution 233	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2009 for controlled plantings in the coffee region. Approved in 2011 for controlled plantings in the dry and humid Caribbean regions, upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains. Approved in 2012 for controlled plantings in the coffee region.
Bt11 X MIR 162 x MON 89034 X GA21 ICA resolution 19507	Syngenta(Switzerland)	Resistant to multiple insects and tolerant to Roundup and glufosinate herbicides.	Approved in 2018 for controlled plantings in the humid Caribbean region, upper Magdalena river, Cauca river valley and eastern plains.
Yieldgard X Roundup Ready Corn ICA resolution 2201 ICA resolution 3744	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2007 for controlled plantings in the humid Caribbean region (Cordoba), upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains. Approved for biosafety assessments in 2007 in the dry Caribbean region and the coffee region. Approved in 2008 for controlled plantings in the dry Caribbean and the Coffee

			region.
Herculex I Corn ICA resolution 1729 ICA resolution 3853 ICA resolution 3741 ICA resolution 3575 ICA resolution 464 ICA resolution 3351	Dupont (United States)	Resistant to some lepidopterous insects.	Approved for biosafety assessments in 2005 in the humid Caribbean region (Cordoba), upper Magdalena river valley (Tolima, Huila), and Cauca river valley. Approved for biosafety assessments in 2007 in the dry Caribbean region and the coffee region. Approved in 2007 for controlled plantings in the humid Caribbean region (Cordoba), upper Magdalena river valley (Tolima, Huila), Cauca river valley and eastern plains. Approved in 2008 for controlled plantings in the coffee region and the upper Magdalena river. Approved in 2012 for controlled plantings in the Dry Caribbean.
Herculex I ICA resolution 859	Dow AgroSciences		Approved for biosafety assessments in 2008 in the dry and humid Caribbean region, Cauca river valley, the coffee region, the upper Magdalena river, and eastern plains.
Herculex I X Roundup Ready corn ICA resolution 3745 ICA resolution 878 ICA resolution 1677	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Approved for controlled plantings in the humid Caribbean region, Cauca river valley and eastern plains. Approved in 2008 for controlled plantings in the coffee region, the Upper Magdalena river, Cauca river valley and eastern plains.
Herculex RW corn ICA resolution 4469	Dupont (United States)	Tolerant to glufosinate.	Approved in 2010 for biosafety and agronomic trials in the humid and dry Caribbean region, Upper Magdalena river valley, Cauca river valley, Orinoquia and the coffee region, Cauca river valley and eastern plains.
Herculex I X Roundup	Dow AgroSciences de	Resistant to some	Approved in 2008 for controlled

Ready corn ICA resolution 3738	Colombia S.A.	lepidopterous insects and tolerant to Roundup herbicide.	plantings in the coffee region, the humid Caribbean region, the upper Magdalena river.
Bt 11 corn ICA resolution 3848 ICA resolution 1679 ICA resolution 3787	Syngenta (Switzerland)	Resistant to some lepidopterous insects.	Approved for biosafety assessments in 2005 in the humid Caribbean region, Upper Magdalena river valley, Cauca river valley and Orinoquia. Approved in 2008 for controlled plantings in the humid Caribbean region and Cauca river valley. Approved in 2009 for controlled plantings in Magdalena river valley and eastern plains.
CCR corn-MON 88017	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide and resistant to rootworm.	Approved for biosafety trials.
GA 21 corn ICA resolution 2936 ICA resolution 877	Syngenta (Switzerland)	Tolerant to Roundup gene epsps.	Approved for biosafety trials in the dry and humid Caribbean region, Cauca river valley, upper Magdalena river, coffee region and Orinoquia. Approved in 2010 for controlled plantings in the humid and dry Caribbean region, Upper Magdalena river valley, Cauca river valley and Orinoquia.
Bt 11 X GA 21 corn ICA resolution 3915	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Approved in 2010 for controlled plantings in the humid Caribbean region, Upper Magdalena river valley, Cauca river valley and Orinoquia.
MON 89034-3 x MON 00603-6 corn ICA resolution 1036 ICA resolution 10492	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide, resistant to some lepidopterous insects.	Approved on 03/16/09 for biosafety field trials in the humid and dry Caribbean region, Upper Magdalena river valley, Cauca river valley and Orinoquia.

MON 89034-3 x MON 00603-6 corn ICA resolution 10492	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide, resistant to some lepidopterous insects.	Approved on 08/23/2016 for controlled plantings in the dry Caribbean region.
MIR162 (SYN-IR162-4) Corn ICA resolution 1257 ICA resolution 3574 ICA resolution 425 ICA resolution 426	Syngenta (Switzerland)	Resistant to some lepidopterous insects.	Approved on 09/04/2010 for biosafety trials and agronomic assessment in the dry and humid Caribbean regions, upper Magdalena river valley (Tolima, Huila), Cauca river valley, Orinoquia Approved on 09/28/12 for controlled plantings for humid Caribbean regions, and Orinoquia. Approved in 2014 for controlled plantings in the Cauca river valley, upper Magdalena river and dry Caribbean.
MON VT Triple PRO (VT3P) (MON 89034 X MON 88017) corn ICA resolution 1260	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide, resistant to rootworm.	Approved on 03/16/09 for biosafety field trials in the humid and dry Caribbean region, Magdalena river valley, Cauca river valley and Orinoquia.
Bt11x MIR162 x MIR604 x GA21 corn ICA resolution 3572	Syngenta (Switzerland)	Tolerant to herbicide and resistant to insects.	Approved on 09/28/2012 for biosafety trials and agronomic assessment in the dry and humid Caribbean regions, upper Magdalena river valley (Tolima, Huila), Cauca river valley, Orinoquia and coffee region.
DAS 59122-7xTC1507xNK603 corn	Dupont (United States)	Resistance to coleopteran and lepidopteran pests,	Approved on 03/18/2011 for biosafety trials and agronomic assessment in the dry and humid Caribbean regions, upper

ICA resolution 1419 ICA resolution 3664		and glyphosate and glufosinate-ammonium tolerance.	Magdalena river valley (Tolima, Huila), Cauca river valley, Orinoquia and coffee region.
MON 89034x TC 1507xNK603 corn ICA resolution 3049	Dow AgroSciences de Colombia S.A.		Approved for controlled planting in 2013.
MON 810 x TC 1507x MIR 162 x NK 603 corn ICA resolution 4005	Dupont (United States)		Approved for commercial plantings in 2016.
BT11 X MIR 162 X MIR 604 X TC 1507 X SYN 5307 X GA 21 corn ICA resolution 4134			Approved for biosafety trials.
MZHG0JG corn ICA resolution 19220	Syngenta		Approved in 2018 for controlled plantings in the dry and humid Caribbean regions, Magdalena river valley, and Orinoquia.
TC 1507 corn ICA resolution 13025	FENALCE		Approved in 2019 for commercial plantings in the dry and humid Caribbean regions, Magdalena and Cauca river valleys, Orinoquia, and the coffee region.
MON 89034 x TC1507 x MIR162 x NK603 corn ICA resolution 61761 ICA resolution 61762	Dupont		Approved in 2020 for commercial plantings in the humid Caribbean region, Magdalena and Cauca river valleys and Orinoquia,
MON 87427 x MON 89034 x MIR162 x	COACOL-Monsanto	Resistant to insects	Approved in 2020 for commercial

MON 87411 corn ICA resolution 82356	(United States)	Tolerant to herbicide	plantings.
Roundup Ready soybean ICA resolution 1035 ICA resolution 2404 ICA resolution 227	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Approved in 2009 for biosafety field trials in the dry and humid Caribbean regions, upper Magdalena river valley (Tolima, Huila), and Cauca river valley. Approved for commercial plantings on 07/19/2010 in Orinoquia and on 02/02/2012 in Cauca river valley.
Round Up ready 2 Yield soybean ICA resolution3669 ICA resolution 3660	COACOL-Monsanto (United States)		Approved in 2011 for biosafety assessment in the dry and humid Caribbean regions, upper Magdalena river valley (Tolima, Huila), Cauca river valley and Orinoquia.
Liberty link soybean A5547-127 ICA resolution 4136			Approved in 2014 for biosafety field trials.
FG 72 X A5547 soybean ICA resolution 18601	Bayer CropScience LLC		Approved in 2016 for biosafety field trials.
FG 72 soybean ICA resolution 3999	Bayer CropScience LLC		Approved in 2016 for biosafety field trials.
GTS 4032 soybeans ICA resolution 72113	COACOL-Monsanto (United States)	Herbicide-tolerant	Approved in 2020 for biosafety field trials. OFF-PATENT
GTS 4032 soybeans ICA resolution 82351,	COACOL-Monsanto (United States)	Herbicide-tolerant	Approved for planting

82352, 94973, and 102580,			OFF-PATENT

APPENDIX B. COLOMBIA: CURRENT STATUS OF BIOTECHNOLOGY PRODUCT APPLICATIONS FOR FOOD, FEED and HEALTH

Crop	**Requesting Company**	**New Characteristics of Biotechnology**	**Approved Applications**	**Approval Date**
Bollgard cotton-MON 531 SEABA ACT III ICA resolution 2708	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects,	Raw material for food and feed.	Approved for food and feed in 2003.
Roundup Ready cotton-MON 1445 SEABA ACT V ICA resolution 1063	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2003. Approved for feed in 2004.
Bollgard II cotton-MON 15985 MSP resolution 4587 INVIMA resolution 2020023676 ICA resolution 310	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects.	Raw material for feed and food.	Approved for food in 2009 and 2020. Approved for feed in 2008.
Roundup Ready Flex cotton-MON 88913 MSP resolution 4582 INVIMA resolution 2020023675 ICA resolution 311	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide and to a wider spectrum of weeds.	Raw material for feed and food.	Approved for food in 2009 and 2020. Approved for feed in 2008.
LL Cotton 25	Bayer CropScience LLC	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2008. Approved

ICA resolution 307 MSP resolution 1731				for food in 2016.
Bollgard II+Roundup Ready Flex cotton-MON 15985XMON 88913 MSP resolution 2390 ICA resolution 2944	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects, tolerant to Roundup herbicide and to a wider spectrum of weeds.	Raw material for feed and food.	Approved for food in 2010. Approved for feed in 2007.
MON 88701 X MON 88913 MSP resolution 3005 ICA resolution 18590	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food and feed in 2016.
GHB 614 Glytol cotton ICA resolution 3567 MSP resolution 506 INVIMA resolution 2021023287	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2016 and 2021.
GHB 614 Glytol X Liberty Link cotton ICA resolution 3568 MSP resolution 1454	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2017.
GHB 614 Glytol x T304 X GHB119 X COT 102 MSP resolution 1453	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for food.	Approved for food in 2017.
Bollgard+Roundup Ready cotton-MON 531XMON 1445 MSP resolution 2179 ICA resolution 2943	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2008. Approved for feed in 2007.

COT 102 cotton ICA resolution 4131 MSP resolution 128 INVIMA resolution 2021023292	Syngenta	Resistant to some lepidopterous insects.	Raw material for feed and food.	Approved for feed in 2014. Approved for food in 2016 and 2021.
DAS 24236-5 cotton ICA resolution 2660 MSP resolution 4007	Dow Agrosciences		Raw material for feed and food.	Approved for feed in 2015. Approved for food in 2016.
DAS 21023-5 cotton ICA resolution 2664 MSP resolution 5853	Dow Agrosciences		Raw material for feed and food.	Approved for feed in 2015. Approved for food in 2016.
DAS 21023-5XDAS 24236 X SYN 102 X MON 88913 X DAS 81910 cotton ICA resolution 11243 INVIMA resolution 2018027771	Dow Agrosciences		Raw material for feed and food.	Approved for feed in 2017. Approved for food in 2018.
MON 88913 X MON 15985 cotton INVIMA resolution 2021005564 ICA resolution 102583	COACOL-Monsanto (United States)		Raw material for food.	Approved for food in 2020. Approved for feed in 2021.
DAS 81910 cotton ICA resolution 20952	Dow Agrosciences		Raw material for feed.	Approved for feed in 2016.
Glytol x Twinlink x COT102 cotton	Bayer CropScience LLC		Raw material for feed.	Approved for feed in 2015.

ICA resolution 3922				
Glytol x Twinlink MSP resolution 1452	Bayer CropScience LLC		Raw material for food.	Approved for food in 2017.
T 304-40 cotton MSP resolution 505 INVIMA resolution 2021023286 ICA resolution 5400	Bayer CropScience LLC		Raw material for food and feed.	Approved for food in 2016 and 2021. Approved for feed in 2017.
MON 88701 cotton MSP resolution 132 INVIMA resolution 2021023288 ICA resolution 4009	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food in 2016 and 2021. Approved for feed in 2016.
LL cotton25 MSP resolution 1731	Bayer CropScience LLC		Raw material for food.	Approved for food in 2016.
DAS 80910 MSP resolution 5852	Dow Agrosciences		Raw material for food.	Approved for food in 2016.
GHB 119 cotton MSP resolution 3298 INVIMA resolution 2021023285 ICA resolution 19228	Bayer CropScience LLC		Raw material for food and feed.	Approved for food in 2016 and 2021. Approved for feed in 2018.
GHB 119 X GHB 614 cotton	Bayer CropScience LLC		Raw material for feed.	Approved for food in 2017.

ICA resolution 11236				
T-304-40 x GHB119 x COT102 cotton ICA resolution 82363	Bayer CropScience LLC		Raw material for feed.	Approved for feed in 2020.
COT 102 x MON15985 X MON88701X MON 88913 MSP resolution 4905	COACOL-Monsanto (United States)		Raw material for food.	Approved for food in 2016.
COT 102 x MON15985 X MON88701 X MON88913 ICA resolution 18593	COACOL-Monsanto (United States)		Raw material for feed.	Approved for feed in 2016.
GHB 811 cotton INVIMA resolution 2020014751 ICA resolution 72112	BASF		Raw material for food and feed.	Approved for food and feed in 2020.
MON88702 cotton INVIMA resolution 2020027966 ICA resolution 82362	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food and feed in 2020.
Yieldgard+Roundup Ready corn-MON 810XNK 603 MSP resolution 4583 ICA resolution 1365 INVIMA resolution 2020016747	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2007. Approved for food in 2009 and 2020
Bt Herculex I corn-DAS 01507-1 SEABA ACT V ICA resolution 3745 and 82354	Dupont (United States)	Resistant to some lepidopterous insects.	Raw material for food and feed.	Approved for food and feed in 2006 and 2020
Yieldgard corn-MON 810	COACOL-	Resistant to	Raw material for	Approved

SEABA ACT V ICA resolution 3746	Monsanto (United States)	some lepidopterous insects.	food and feed.	for food in 2003. Approved for feed in 2006
Herculex I X Roundup Ready corn-TC 1507XNK 603 ICA resolution 3083 MSP resolution 506	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2009. Approved for food in 2010.
Herculex RW corn-DAS 59122 ICA resolution 4473 MSP resolution 1708	Dupont (United States	Resistant to some lepidopterous insects.	Raw material for feed and food.	Approved for feed in 2010. Approved for food in 2011.
Yieldgard+Lysine corn-MON 810X LY 038	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects. High lysine content.	Raw material for feed.	Pending for food approval as the request was withdrawn.
Yieldgard VTPro -MON 89034 corn MSP resolution 2394 INVIMA resolution 2021005567 ICA resolution 2367	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects.	Raw material for feed and food.	Approved for food in 2010 and 2020. Approved for feed in 2007.
MON VT Triple PRO (VT3P) (MON 89034 X MON 88017) corn MSP resolution 1710	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects.	Raw material for food and feed.	Approved for food and feed in 2011.

ICA resolution 3661				
Yieldgard VTPro Corn X Roundup Ready 2-MON 89034 X NK 603 ICA resolution 3659 MSP resolution 2395	COACOL-Monsanto (United States)	Resistant to a wider variety of lepidopterous insects and tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2011. Approved for food in 2010.
CCR corn-MON 88017 MSP resolution 1712 ICA resolution 1254	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2011. Approved for feed in 2010.
Yieldgard+CCR corn-MON 810X MON 88017 MSP resolution 1904 ICA resolution 3667	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects, rootworm and tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food and feed in 2011.
Lysine corn-LY p38 MSP resolution 4585 ICA resolution 2405	COACOL-Monsanto (United States)	High lysine content.	Raw material for food and feed.	Approved for food in 2009. Approved for feed in 2010.
Bt 11 corn MSP resolution 1078 ICA resolution 309 INVIMA resolution 2019040929	Syngenta (Switzerland)	Resistant to some lepidopterous insects.	Raw material for food and feed.	Approved for food in 2009 and 2019. Approved for feed in 2008.
GA 21 corn ICA resolution 2402	Syngenta (Switzerland)	Tolerant to Roundup herbicide	Raw material for feed and food.	Approved for food in 2012. Approved for feed in

MSP resolution 1692				2010.
Bt 11 X GA 21 corn ICA resolution 4474 MSP resolution 1695	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2010. Approved for food in 2012.
Bt 11 X TC 1507 X GA 21 corn ICA resolution 19222 INVIMA resolution 2018027787	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for food and feed in 2018.
Smartstax corn -Mon 89034 X TC1507 X MON 88017 X DAS59122-7 MSP resolution 2393 ICA resolution 3662	COACOL-Monsanto (United States) and Dow Agrosciences	Resistant to some lepidopterous insects, to rootworm and tolerant to Roundup herbicide and to glufosinate.	Raw material for food and feed.	Approved for food in 2010. Approved for feed in 2011.
MIR 162 corn ICA resolution 4471 MSP resolution 1693	Syngenta (Switzerland)	Resistant to some lepidopterous insects.	Raw material for feed and food.	Approved for food in 2012. Approved for feed in 2010.
BT 11xMIR 162xGA21 corn ICA resolution 2407 MSP resolution 1694 INVIMA resolution 2019040928	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for feed and food.	Approved for feed in 2010. Approved for food in 2012 and 2020.
MON 87460 corn	COACOL-Monsanto (United States)	Tolerant to drought.	Raw material for food and feed.	Approved for food in 2011. Approved

MSP resolution 1709 ICA resolution 224				for feed in 2012
MON 87460 X NK 603 corn ICA resolution 422 MSP resolution 777 INVIMA resolution 2019031454	COACOL-Monsanto (United States)	Tolerant to drought and herbicides.	Raw material for feed and food.	Approved for feed and food in 2014 and 2019.
MON 87460 X MON 89034 X MON 88017 corn ICA resolution 423 MSP resolution 778 INVIMA resolution 2019031455	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects, tolerant to herbicides and drought.	Raw material for feed and food.	Approved for feed and food in 2014 and 2019
MON 863-5 corn ICA resolution 4475 MSP resolution 1711	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects.	Raw material for feed and food.	Approved for feed in 2010. Approved for food in 2011.
BT 11 X MIR 162X MIR 604X GA 21 corn MSP resolution 119 ICA resolution 232	Syngenta (Switzerland)	Rootworm resistant and tolerant to herbicides.	Raw material for food and feed.	Approved for feed and food in 2012.
MIR 604 corn MSP resolution 118 ICA resolution 229	Syngenta (Switzerland)	Rootworm resistant.	Raw material for food and feed.	Approved for feed and food in 2012.
MIR 604 X GA 21 corn ICA resolution 230	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to	Raw material for feed and feed.	Approved for feed in 2012. Approved for food in

MSP resolution 769 INVIMA resolution 2020018737		herbicide.		2014.
BT 11XMIR 604X GA 21 corn ICA resolution 3046 MSP resolution 775 INVIMA resolution 2019040928	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2014 and 2019.
BT11XMIR 604X TC1507X5307XGA 21 corn ICA resolution 18583	Syngenta (Switzerland)	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for feed.	Approved for feed in 2016.
Liberty Link corn-T25 MSP resolution 121 ICA resolution 3666	Bayer CropScience LLC (United States)	Tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2012. Approved for feed in 2011.
T25 XMON 810 corn	Bayer CropScience LLC (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide.	Raw material for food.	Approved for food in 2012.
T25 X NK 603 corn MSP resolution 115 ICA resolution 228	COACOL-Monsanto (United States)	Tolerant to herbicide.	Raw material for food and feed.	Approved for feed and food in 2012.
T25 X NK 603 corn X DAS40278 INVIMA resolution 2021012389	COACOL-Monsanto (United States)	Tolerant to herbicide.	Raw material for food and feed.	Approved for feed and food in 2012.
DAS 1507XMON 810 corn	DUPONT	Resistant to some	Raw material for	Approved for feed

MSP resolution 1487 ICA resolution 3573		lepidopterous insects.	food and feed.	and food in 2012.
DAS 1507XMON 810X MON 603 corn MSP resolution 1488 ICA resolution 3571	DUPONT	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for feed and food in 2012.
DAS 1507X DAS 59122X MON 603 corn MSP resolution 1486 ICA resolution 3578	DUPONT	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for feed and food in 2012.
TC 1507X MON 810 X MIR 604 X NK 603 corn MSP resolution 5856 ICA resolution 11244	Dupont	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for food in 2016. Approved for feed in 2018.
TC 1507X MIR 604 X NK 603 corn ICA resolution 19227 INVIMA resolution 2018027808	Dupont	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for feed and food.	Approved for feed and food in 2018.
TC 1507 X MON 810 X MIR 162X NK 603 corn MSP resolution 3118 INVIMA resolution 2020027961	Dupont	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food.	Approved for food in 2015 and 2020.
MON 89034 X TC 1507X NK 603 corn	COACOL-Monsanto (United	Resistant to some lepidopterous insects and	Raw material for feed and food.	Approved for feed in 2013.

ICA resolution 3050 MSP resolution 1861 INVIMA resolution 2020023046	States)	tolerant to herbicide.		Approved for food in 2014 and 2020.
BT11 X MIR604 corn MSP resolution 120 ICA resolution 3048	Syngenta	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2013. Approved for food in 2012.
BT11 X MIR162 corn MSP resolution 249 ICA resolution 18585	Syngenta	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2016.
SYN E3272-5 corn ICA resolution 3043 MSP resolution 127	Syngenta	Modified amylase for ethanol production.	Raw material for feed and food.	Approved for feed in 2013. Approved for food in 2016.
SYN E5307-1 corn MSP resolution 5632	Syngenta		Raw material for feed and food.	Approved for feed in 2013. Approved for food in 2014.
DAS 40278-9 corn ICA resolution 3052 MSP resolution 774 INVIMA resolution 2019040915	Dow Agroscience	Herbicide-tolerant.	Raw material for feed and food.	Approved for feed in 2013. Approved for food in 2014 and 2019.
MON 87427 X MON 89034 X MON 88017 corn MSP resolution 3488	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and	Raw material for food and feed.	Approved for food and feed in 2014 and 2020.

ICA resolution 3047 INVIMA resolution 2020018725		tolerant to herbicide.		
MON 87427 X MON 89034 X NK 603 corn MSP resolution 3705 ICA resolution 3048 INVIMA resolution 2020018736	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2014. Approved for food in 2020.
MON 87427 X MON 89034 X TC 1507 X MON 88017 X DAS 59122 corn MSP resolution 3489 ICA resolution 3043	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2014.
DAS 40278 X NK 603 corn MSP resolution 3487 INVIMA resolution 2020023674 ICA resolution 3044	Dow Agrosciences	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for food and feed.	Approved for food in 2014 and 2020. Approved for feed in 2014.
DAS 40278 X NK 603 corn X T25 ICA resolution 82355	Dow Agrosciences	Resistant to some lepidopterous insects and tolerant to herbicide.	Raw material for feed.	Approved for feed in 2020.
MON 87427 corn ICA resolution 424 MSP resolution 1862 INVIMA resolution 2019040926	COACOL-Monsanto (United States)	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed and food in 2014 and 2019.
MON 87460 X MON 89034 X NK 603 corn ICA resolution 427	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to	Raw material for feed and food.	Approved for food and feed in 2014. Approved

MSP resolution 776 INVIMA resolution 2019043839		herbicides.		for food in 2019.
MON 89034 X NK 603 corn INVIMA resolution 2021005565	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for food.	Approved for food in 2020.
MON 89034 X TC 1507 X NK 603 X DAS 40278-9 corn ICA resolution 4135 MSP resolution 4904	Dow Agrosciences	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2014. Approved for food in 2016.
MON 89034 X TC 1507 X NK 603 X MIR 162 corn INVIMA resolution 2018027772 ICA resolution	Dow Agrosciences	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2018.
TC 1507 X MON 810 X MIR 162 X NK 603 corn ICA resolution 002	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for feed.	Approved for feed in 2015.
MON 89034 X TC 1507 X MIR 162 X NK 603 X DAS40278 corn ICA resolution 30339 INVIMA resolution 2018027773	Dow Agrosciences	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for feed and food.	Approved for feed and food in 2018.

TC 1507 X MON 810 X MIR 162 corn ICA resolution 4006 INVIMA resolution 2020027962	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for feed and food.	Approved for feed in 2016. Approved for food in 2020.
TC 1507 X MON 810 INVIMA resolution 2020027965	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for food.	Approved for food in 2020.
TC 1507 X MON 810 X NK 603 INVIMA resolution 2020027963	Dupont (United States)	Resistant to some lepidopterous insects and tolerant to herbicides.	Raw material for food.	Approved for food in 2020.
DP 4114 corn MSP resolution 123 ICA resolution 4004 INVIMA resolution 2021023289	Dupont (United States)		Raw material for food and feed.	Approved for food in 2016 and 2021. Approved for feed in 2016.
DP DP202216corn ICA resolution 82359	Dupont (United States)		Raw material for feed.	Approved for feed in 2020.
DP 4114 x MON 810 x MIR 604 X NK 603 corn MSP resolution 3297 ICA resolution 4936	Dupont (United States)		Raw material for food and feed.	Approved for food in 2016.

DP 4114 X MON 89034 X MON 87411 X DAS 40278 corn INVIMA resolution 2021023291 ICA resolution 102582	Dupont (United States)		Raw material for food and feed.	Approved for food and feed in 2021.
TC 1507 x 59122 X MON 810 x MIR 604 X NK 603 corn MSP resolution 5857 ICA resolution 11242	Dupont (United States)		Raw material for food and feed.	Approved for food in 2016. Approved for feed in 2018.
TC 1507 x 59122 X MON 810 X NK 603 corn ICA resolution 19226 INVIMA resolution 2018027809	Dupont (United States)		Raw material for feed and food.	Approved for feed and food in 2018.
BT11xMIR162xTC1507xGA21 corn MSP resolution 124 ICA resolution 4003	Syngenta		Raw material for food and feed.	Approved for food and feed in 2016.
BT11XDAS59122XMIR604XTC1507xGA21 corn MSP resolution 126 ICA resolution 4002	Syngenta		Raw material for food and feed.	Approved for food and feed in 2016.
TC1507XDAS59122 corn ICA resolution 19225 INVIMA resolution 2018027807	Dupont		Raw material for feed and food.	Approved for feed and food in 2018.
DAS59122 x NK603 corn	Dupont		Raw material for food.	Approved for food in 2018.

INVIMA resolution 2018027810				
TC1507 X NK603 corn ICA resolution 19224 INVIMA resolution 2020027964	Dupont		Raw material for feed and food.	Approved for feed in 2018. Approved for food in 2020.
BT11xMIR162XMIR604XTC1507XSYN5307x GA21 corn MSP resolution 129	Syngenta		Raw material for food.	Approved for food in 2016.
BT11xMIR162XMIR604XMON89034XSYN5307X GA21 corn ICA resolution 25845 INVIMA resolution 2018027803	Syngenta		Raw material for feed and food.	Approved for feed and food in 2018.
BT11xMIR162XMON89034XGA21 corn ICA resolution 19223 INVIMA resolution 2018027795	Syngenta		Raw material for feed and food.	Approved for feed and food in 2018.
MIR604XTC1507XMON810 corn MSP resolution 130	Dupont		Raw material for food.	Approved for food in 2016.
SYN3272XBT11XMIR604XGA21 corn MSP resolution 2463	Syngenta		Raw material for food.	Approved for food in 2016.
SYN3272XBT11XMIR604XTC1507X5307XGA21 corn MSP resolution 3700 289	Syngenta		Raw material for feed.	Approved for feed in 2017.

BT11XMIR162XMON89034 Corn ICA resolution 25844 INVIMA resolution 2018027798	Syngenta		Raw material for feed and food.	Approved for feed and food in 2018.
MON 87419 corn INVIMA resolution 2018040210 ICA resolution 30337	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food and feed in 2018.
MON 87411 corn MSP resolution 5850 ICA resolution 18592	Syngenta		Raw material for food and feed.	Approved for food and feed in 2016.
MIR162XMON89034 Corn ICA resolution 25840 INVIMA resolution 2018027786	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for feed and food in 2018.
MON 87427 X MON 89034 X MIR 162 X NK 603 corn MSP resolution 250 ICA resolution 3701	Syngenta		Raw material for food and feed.	Approved for food and feed in 2017.
MON 87427 X MON 89034 X MIR 162 X MON 87419 X NK 603 corn INVIMA resolution 2021005561 ICA resolution 82357	COACOL-Monsanto (United States)		Raw material for food.	Approved for food and feed in 2020.
MON 87427 X MON 89034 X TC 1507 X MON87411 X DAS 59122 corn ICA resolution 25841 INVIMA resolution 2018027783	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for feed and food in 2018.
MON 87427 X MON 89034 X TC 1507 X MON87411 X DAS 59122 X MON 87419 corn ICA resolution 13024 INVIMA resolution 2019040927	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for feed and food in 2019.

MON 87427 X MON 89034 X MON87419 X NK 603 corn INVIMA resolution 2019040930 ICA resolution 61761	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for food in 2019. Approved for feed in 2020.
MON 87427 x MON87419 x NK 603 corn INVIMA resolution 2020023047 ICA resolution 82358	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food and feed in 2020.
MON 89034 X TC 1507 X MON87411 X DAS 59122 X DAS 40278 corn INVIMA resolution 2018027774	Dow Agrosciences		Raw material for food.	Approved for food in 2018.
MON 87427 X MON 89034 X DAS 1507 X MON87411 X DAS 59122 X DAS 40278 corn INVIMA resolution 2018027775	Dow Agrosciences		Raw material for food.	Approved for food in 2018.
MON 87427 X MON 89034 X MIR162 X MON87411 corn ICA resolution 19218 INVIMA resolution 2018027780	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for feed and food in 2018.
MON87427 x MON89034 x MON810 x MIR162 x MON87411 x MON87419 corn ICA resolution 94974	COACOL-Monsanto (United States)	Resistant to insects and tolerant to herbicides.	Raw material for feed.	Approved for feed in 2021.
MON 87427 X MON 87460 X MON 89034 X TC 1507 X MON 87411 X DAS 59122 corn ICA resolution 25843 INVIMA resolution 20185027785	COACOL-Monsanto (United States)		Raw material for feed and food.	Approved for feed and food in 2018.
MZHG0JG corn ICA resolution 19221 INVIMA resolution 2018027790	Syngenta		Raw material for feed and food.	Approved for feed and food in 2018.
MZIR098 corn ICA resolution 30332	Syngenta		Raw material for feed and food.	Approved for feed in 2018. Approved

INVIMA resolution 2019015592				for food in 2019.
MON 89034 X TC 1507 X MON 88017 X DAS 59122 X DAS 40278 corn MSP resolution 4903	Dow Agroscience		Raw material for food.	Approved for food in 2016.
GA21 X T25 corn MSP resolution 5849 ICA resolution18582	Syngenta		Raw material for food and feed.	Approved for food and feed in 2016.
MON87427 x MON89034 x TC1507 x MON87411 x DAS59122 x DAS40278 corn	Dow Agroscience		Raw material for feed.	Approved for feed in 2019.
MON 810 X NK 603 corn INVIMA resolution 2020015747	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide and resistant to insects.	Raw material for food.	Approved for food in 2020.
5307 corn INVIMA resolution 2020032881	Syngenta	Resistant to insects.	Raw material for food.	Approved for food in 2020.
Roundup Ready wheat *1-MON 71800 SEABA ACT II	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for food.	Approved for food in 2004.
Wheat IND-ØØ412-7 ICA resolution 82350	INDEAR	Tolerance to abiotic stress. Herbicide tolerance.	Raw material for feed.	Approved for feed in 2020.
Roundup Ready soybeans-MON 04032-6/GTS 40302 SEABA ACT VII ICA resolution 2942	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2005. Approved for feed in 2007 and 2020 (Off-

ICA resolution 82353 and 95614				patent).
Roundup Ready 2Yield soybeans-MON 89788 ICA resolution 1256 MSP resolution 2391 INVIMA resolution 2021005568	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for food in 2010 and 2021. Approved for feed in 2010.
GAT Soybeans- DP 356043 MSP resolution 2392 ICA resolution 2406	Dupont (United States	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2010.
DP202216 soybeans INVIMA resolution 2021012391	Dupont (United States	Tolerant to herbicide.	Raw material for food and feed.	Approved for food in 2021.
MON 87701X MON 89788 soybeans MSP resolution 116 ICA resolution 3663	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects and tolerant to Roundup herbicide	Raw material for food and feed.	Approved for food in 2012. Approved for feed in 2011.
Glycine Max soybean-CV 127 MSP resolution 117 ICA resolution 3668	BASF	Tolerant to Roundup herbicide.	Raw material for food and feed.	Approved for food in 2012. Approved for feed in 2011.
A 270412 soybean INVIMA resolution 2020023048	BASF	Tolerant to Roundup herbicide.	Raw material for food.	Approved for food in 2020.
MON 87705 soybean	COACOL-Monsanto (United	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2012.

ICA resolution 3566 MSP resolution 338 INVIMA resolution 2019031452	States)			Approved for food in 2014 and 2019.
MON 87701 soybean INVIMA resolution 2019030764	COACOL-Monsanto (United States)	Resistant to some lepidopterous insects	Raw material for food.	Approved for food in 2019.
MON 87769 soybean ICA resolution 3565 MSP resolution 339 INVIMA resolution 2019031453	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2014 and 2019.
A5547 soybean ICA resolution 3564 MSP resolution 3486 INVIMA resolution 2020018738	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2014 and 2020.
A2704 soybean ICA resolution 3579 MSP resolution 4083	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2012. Approved for food in 2014.
DAS68416-4 soybean ICA resolution 3051 MSP resolution 131	Dow Agroscience	Tolernant to herbicide.	Raw material for feed and food.	Approved for feed in 2013. Approved for food in 2016.
MON 87708 X MON 89788 soybean	Monsanto	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2014. Approved for food in

ICA resolution 420 MSP resolution 1257 INVIMA resolution 2021005562				2015.
MON 87708 X MON 89788 X A5547 soybean ICA resolution 30333 INVIMA resolution 2018027784	Monsanto	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2018.
MON 87708 soybean MSP resolution 1259	COACOL-Monsanto (United States)	Tolerant to herbicide.	Raw material for food.	Approved for food in 2015.
MON 87705 X MON 89788 soybean ICA resolution 131 MSP resolution 1258 INVIMA resolution 2021005632	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed and food in 2015 and 2020.
MON 87705 X MON 89788 X MON 87708 soybean ICA resolution 19219 INVIMA resolution 2018027782	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed and food in 2018.
MON 87751 X MON 87708 X MON 87701 X MON89788 soybean ICA resolution 30333 INVIMA resolution 2019030763	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed in 2018. Approved for food in 2019.
MON 87769 X MON 89788 soybean ICA resolution 132	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for feed and food.	Approved for feed and food in 2015 and 2020.

MSP resolution 1256 INVIMA resolution 2021005563				
DAS 44406 soybean ICA resolution 134 MSP resolution 125	Dow Agroscience	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2015. Approved for food in 2016.
DAS 68416-4 x MON 89788-1 soybean ICA resolution 2665 MSP resolution 3006	Dow Agroscience	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2015. Approved for food in 2016.
ACS-GM006-4 soybean MSP resolution 3486	Bayer CropScience LLC (United States)	Tolerant to herbicide.	Raw material for food.	Approved for food in 2014.
ACS-GM005-3 soybean MSP resolution 4083	Bayer CropScience LLC (United States)	Tolerant to herbicide.	Raw material for food.	Approved for food in 2014.
SYHT0H2 soybean ICA resolution 2661 MSP resolution 307	Syngenta and Bayer CropScience LLC		Raw material for feed and food.	Approved for feed in 2015. Approved for food in 2017.
FG72(MST-FG072-2) soybean ICA resolution 4001 MHS resolution 2464	Bayer CropScience LLC		Raw material for food and feed.	Approved for food and feed in 2016.
DAS-68416XMON89788 soybean	Dow Agroscience		Raw material for feed and food.	Approved for feed and food in 2016.

MSP resolution 5851				
FG72 x A5547-27 soybean ICA resolution 18597 MSP resolution 5854	Bayer CropScience LLC		Raw material for food and feed.	Approved for food and feed in 2016.
DP 305423 soybean MSP resolution 5855 ICA resolution 18588	Dupont		Raw material for food and feed.	Approved for food and feed in 2016.
DP 305423 X MON 040326 soybean MSP resolution 702 ICA resolution 18586	Dupont		Raw material for food and feed.	Approved for food in 2017. Approved for feed in 2016.
DAS 81419 X DAS 44406 soybean ICA resolution 18595 INVIMA resolution 2018027770	Dupont		Raw material for feed and food.	Approved for feed in 2017. Approved for food in 2018.
DAS 81419 soybean ICA resolution 3998	Dow Agrosciences		Raw material for feed.	Approved for feed in 2016.
MON 87751 soybean MSP resolution 251 ICA resolution25838	COACOL-Monsanto (United States)		Raw material for food and feed.	Approved for food in 2017. Approved for feed in 2018.
GMB 151 soybeans INVIMA resolution 2021023145 ICA resolution 102581	BASF	Tolerant to herbicides and resistant to nematodes.	Raw material for food and feed.	Approved for food and feed in 2021.

Roundup Ready sugar beet-H7-1/KM 0071 ICA resolution 1255 SEABA ACT VII	COACOL-Monsanto (United States)	Tolerant to Roundup herbicide.	Raw material for food and feed.	Approved on for food in 2005. Approved for feed in 2010.
Liberty-link rice LLRice62 MSP resolution 5333 ICA resolution 308	Bayer CropScience LLC (United States)	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2008.
LLRice601 MSP resolution 3674	Bayer CropScience LLC (United States)	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2008.
MON 88302-9 canola ICA resolution 421 MSP resolution 5806 INVIMA resolution 2020016745	COACOL-Monsanto (United States)	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed and food in 2014 and 2020.
RF3 canola MSP resolution 1607 ICA resolution 11239	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for food and feed.	Approved for food and feed in 2017.
MS8 canola ICA resolution 11294 INVIMA resolution 2018027776	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2017. Approved for food in 2018.
MON88302XRF3 canola	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2017.

ICA resolution 11240 INVIMA resolution 2018027779				Approved for food in 2018.
MS8XMON88302XRF3 canola ICA resolution 11246 INVIMA resolution 2018027777	Bayer CropScience LLC	Tolerant to herbicide.	Raw material for feed and food.	Approved for feed in 2017. Approved for food in 2018.
Mice 3XTg AD MSP resolution 2836	Universidad de Antioquia		Controlled health research.	Approved in 2008.
Mice ApoE-/- 6 Apoe "knock out" MSP resolution 2835	Universidad de Antioquia		Controlled health research.	Approved in 2008.
Mice INVIMA resolution 2019030765	Science, Biotechnology and Health Innovation Institute		Immunosuppressed mice.	Approved in 2019

APPENDIX C. COLOMBIA: CURRENT STATUS OF BIOTECHNOLOGY PRODUCT APPLICATIONS FOR ANIMAL USE

Description	**Requesting Company**	**Species**	**Approved Applications**	**Approval Date**
Smallpox vaccine-Vectomune FP-LT ICA resolution 3739	Vetiplus Ltda	Poultry	Smallpox	2006
Smallpox vaccine-Vectomune FP-MG ICA resolution 561	Vetiplus Ltda	Poultry	Smallpox	2007
Vaxxitek HVT+IBD	Carval de Colombia	Poultry	Marek and bursal disease.	2007

ICA resolution 2946				
Newxxitek HVT+ND vaccine ICA resolution 11238	Carval de Colombia	Poultry	Marek disease and Newcastle disease.	2017
Innovax ND-SB Virus Serotypes 2 and 3. Poultry recombinant vaccine ICA resolution 1250	Intervet Colombia Ltda	Poultry	Marek disease and Newcastle disease.	2010
Poultry Anigen AIV Ab Elisa Kit ICA Resolution 1251	Annar DiagnostICA Import S.A.S	Poultry	Avian Influenza	2010
Poulvac E. Coli poultry inactivated subunit vaccine ICA resolution 1252	Wyeth Inc	Poultry	Avian Colibacillosis	2010
Innovax ILT poultry recombinant vaccine ICA resolution 1253	Intervet Colombia Ltda	Poultry	Marek’s disease and Laryngotracheitis.	2010
Poultry recombinant vaccine ICA resolution 2399	Vetiplus S.A.	Poultry	Marek and Gumboro disease.	2010
Poultry recombinant vaccine	Vetiplus S.A.	Poultry	Marek and Newcastle disease.	2010

ICA resolution 2400				
Innofusion ND ICA resolution 5990	Intervet Colombia Ltda	Poultry	Marek and Newcastle disease.	2012
Vectormune FP-LT-EC Vaccine ICA resolution 4125	Vetiplus S.A.	Poultry	Laryngotracheitis and smallpox.	2011
Vectorvac FP-LT ICA resolution 5988	Amerivet SAS	Poultry	Laryngotracheitis and smallpox.	2012
Vectormune ND	Cesa Salud Animal	Poultry	Newcastle and Marek disease.	2017
Vectormune HVT-LT ICA resolution 2666	Cesa Salud Animal	Poultry	Marek and Laryngotracheitis disease.	2015
Vectormune HVT-NDV-RISPENS ICA resolution 2662	Cesa Salud Animal	Poultry	Newcastle and Marek disease.	2015
Vectormune HVT-IBD-RISPENS ICA resolution 2667	Cesa Salud Animal	Poultry	Newcastle and Gumboro disease.	2015
ProtequFlu-Te	Merial	Equine	Influenza and tetanus.	2017
AGID diagnostic kit		Equine	Equine Infectious Anemia Virus.	2017
Ingelvac-CircoFlex ICA resolution 2945	Boehringer-Ingelheim	Swine	Circovirus type 2.	2007
Vaccine ICA resolution 3318	Suvaxyn PCV2	Swine	Circovirus type 1.	2008

Porcillis inactivated subunit vaccine ICA resolution 1227	Intervet Colombia Ltda	Swine	Circovirus type 2.	2009
Porcilis porcoli DF vaccine ICA resolution 4472	Intervet Colombia Ltda	Swine	Neonatal entrerotoxicosis.	2010
Porcillis PCV ICA resolution 5987	Intervet Colombia Ltda	Swine		2012
Porcillis PCV ID vaccine_	Intervet Colombia Ltda	Swine		2017
Circumvent PCV M ICA resolution 5989	Intervet Colombia Ltda	Swine	Protection for both circovirus and Mycoplasma hyopneumoniae.	2012
Porcillis AR-T DF ICA resolution 4130	Intervet Colombia Ltda	Swine		2011
Relsure PCV MH combination vaccine ICA resolution 3329	Zoetis Colombia S.A.S.	Swine	Protects swine from porcine circovirus-associated disease (PCVAD) and enzootic pneumonia.	2017
Anigen Rapid E. diagnostic kit ICA resolution 4470	Annar Diagnostica Import S.A.S	Canine	Immunochromatography diagnostic kit.	2010

Recombitek C4	Carval de Colombia	Canine	Distemper, adenovirosis, hepatitis, parainfluenza and parvovirosis vaccine.	
Anigen Rapid Leishmania diagnostic kit	Annar Diagnostica Import S.A.S	Canine	Detection of Leishmania antibody.	2017
Recombitek C6 vaccine	Merial	Canine	Distemper virus, parvovirus, adenovirus type 1 (hepatitis), adenovirus type 2 (respiratory disease complex), parainfluenza virus, and the bacteria L. canicola and L. icterohaemorrhagiae.	2017
Recombitek C7 vaccine	Merial	Canine	Distemper virus, parvovirus, adenovirus type 1 (hepatitis), adenovirus type 2 (respiratory disease complex), parainfluenza virus, and the bacteria L. canicola and L. icterohaemorrhagiae.	2017
Feline immunodeficiency and leukemia virus diagnostic kit ICA resolution 2401	Annar Diagnostica Import S.A.S	Felines	Feline immunodeficiency and leukemia virus.	2010
Leucogen ICA resolution 4126	Virbac Colombia Ltda.	Felines	Leukemia	2011
Purevax FelV vaccine	Merial	Felines	Leukemia	2017
Synbiotics La-EZ/EIA Elisa diagnostic kit	ADN Internacional S.A.	Equines	Equine infectious anemia.	2012
Ingezim PRRS America	ADN Internacional S.A.	Swine	Porcine reproductive and respiratory syndrome virus.	

Elisa diagnostic kit				
Priocheck Ab CSFV 2.0 Elisa diagnostic kit	ADN Internacional S.A.	Swine	Swine fever virus.	
SensPERT FELV Ag/FIV Ab ICA resolution 3976	Gabrica S.A.	Feline	Feline immunodeficiency virus.	2012
SensPERT FIV Ab Elisa diagnostic kit ICA resolution 3973	Gabrica S.A.	Feline	Feline Immunodeficiency Virus.	2012
Recombitek C3	Carval de Colombia	Canine	Distemper, adenovirosis, and parvovirosis vaccine.	
Pro-Vac Circomaster one shot vaccine	Famabio S.A.S	Swine		2017
Ingezim Corona Diferencial 2.0 Elisa diagnostic kit	ADN Internacional S.A.	Swine	Transmissible Gastroenteritis and Porcine Respiratory Corona Virus.	
Priocheck BTV Elisa diagnostic kit	ADN Internacional S.A.	Cattle	Bluetongue vaccine.	
Mycobacterium bovis Elisa diagnostic kit	AquaLab S.A.	Cattle		2017
ID Screen® Ruminant IFN-g sandwich ELISA	IDVET	Cattle		2017

Diagnostic kit				
Hiprabovis IBR Marker Live vaccine	Hipra	Cattle		2017
Innofusion ND	Intervet Colombia Ltda.	Poultry	Marek Newcastle poultry vaccine.	
Porcilis Coliclos	Intervet Colombia Ltda	Swine	Infections caused by *E. coli*.	
Porcilis PCV MHYO vaccine	MSD Salud Animal	Swine		2016
Circogard vaccine	Coldiagro	Swine		2017
CircoMycogard vaccine	Coldiagro	Swine		2017
Ubac vaccine	Hipra	Cattle		2018
Virbagen Omega	Virbac Colombia Ltda.	Feline	Recombinant interferon omega vaccine.	
Farmune HVY-IBDV-LT	Amerivet SAS	Poultry	Laryngotracheitis, Gumboro and Marek disease.	
Advent vaccine	Huverpharma	Poultry		2017
HerdCheck PRRS X 3 Elisa diagnostic kit	AquaLab SAS	Swine	Porcine Reproductive and Respiratory Syndrome.	
Rhiniseng ICA resolution 3042	Hipra	Swine	Atrophic rhinitis.	2014
Vepured vaccine	Hipra	Swine	Prevention of edema disease	2017
Multispecies diagnostic kit	IDEXX	Multispecies		2017

Attachments:

No Attachments