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Report Highlights:

Despite the private sector's support for biotechnology, Venezuela maintains a ban on the domestic use and research of modern biotechnology-derived agriculture. Venezuela’s basis for the ban is through the Seed Law of December 2015, which also prohibits the importation of genetically engineered (GE) seeds. However, Venezuela still allows the importation of biotechnology-derived crops, with the United States being the leading exporter, including corn, soybeans, soybean meal, and soybean oil. In 2022, the United States supplied an estimated 979,000 metric tons (MT) of GE-crops to Venezuela, accounting for a 60 percent market share, followed by Brazil and Argentina.

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Executive Summary

Venezuela does not adopt modern agricultural biotechnology on a commercial scale. Due to legal considerations, Venezuela does not cultivate or develop any commercial biotechnology crops and importing GE-seeds is prohibited. Corn, the country's most important staple, would benefit from agricultural biotechnology through increased crop yields, is grown entirely with conventional seeds. Venezuela's Seed Law of December 2015 prohibits plant biotechnology research and the use of GE-seeds in agricultural production. However, the importation of biotechnology-derived crops and processed products is permitted. The United States is the leading exporter of biotechnology-derived crops to Venezuela including corn, soybeans, soybean meal, and soybean oil, followed by Brazil and Argentina. In 2022, the United States exported an estimated 979,000 MT of GE-crops, which accounted for 60 percent of the market share. In 2023 (January-August), U.S. market share of biotechnology crop exports decreased 54 percent year-on-year.

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Chapter 1: Plant Biotechnology

Part A: Production and Trade

a) Research and Product Development

Venezuela has not developed any genetically engineered crops. The only ongoing biotechnology research is in molecular genetics and tissue culture conducted by public universities and private extension institutions with minimal involvement by the Venezuelan authorities. The Seed Law of December 2015 bans the research and development of biotechnology-derived crops.

b) Commercial Production

There are no commercial biotechnology crops or genetic engineering under development.

c) Exports

Venezuela did not export biotechnology-derived products in 2022.

d) Imports

There are no barriers to importing or marketing GE-crops and processed products. Venezuela is a significant importer of GE-soybeans, soybean meal, soybean oil, and corn derived from biotechnology (Table 1).

Table 1. Venezuelan Imports GE Products* in 2022-2023 (January-August) (Thousand Metric Tons [TMT])

Country	Corn	Soybeans	Soybean Meal	Soybean Oil	Total	Annual Change %
2022 - (U.S. market share: 60 percent)						
USA	405	54	459	61	**979**	20.1
Mexico	-	-	-	-	**-**	(100.0)
Brazil	333	1	-	103	**437**	35.3
Argentina	199	-	-	-	**199**	126.1
Other Co.	-	-	-	10	**10**	(61.5)
Total	**938**	**55**	**459**	**174**	**1,626**	**11.5**
January- August 2023 - (U.S. Market Share: 54 percent)						
USA	243	54	384	-	**681**	(15.0)
Mexico	-	-	-	-	**-**	0.0
Brazil	289	7	9	64	**369**	15.0
Argentina	199	-	-	-	**199**	0.5
Other Co.	-	-	-	7	**7**	0.0
Total	**730**	**61**	**392**	**71**	**1254**	**(5.4)**

Data Source: Trade Data Monitor. *Commodity imports more than likely to be biotechnology derived.

e) Food Aid

The World Food Program is providing school meals in Venezuela since April 2021. There is no available data on the inclusion of food derived from GE-crops through this assistance. There are no restrictions on importing biotechnology-derived products for food aid purposes.

f) Trade Barriers

On December 28, 2015, the Maduro authorities enacted a law outlawing the application and research of modern biotechnology in domestic agriculture. This law prohibits the production, importation, use, release, and propagation of genetically engineered or transgenic seeds. This law also prohibits granting copyright and patent protection to any seeds, conventional or otherwise. Violations of this law may

result in penalties ranging from fines to imprisonment. Imports of GE-crops or biotechnology derived processed products are not restricted.

Part B: Policy

a) Regulatory Framework

The Seed Law of December 2015[1] effectively bans any transgenic or modern biotechnology research in agriculture. The National Seed Commission (CONASEM) drafted the Seed Law under the authority of the National Institute of Agricultural Research (INIA), which registers and certifies the seeds that are legally allowed.

The Seed Law forbids the use, application, and research of modern agricultural biotechnology. The following techniques and technologies are prohibited (Table 2):

- In vitro nucleic acid techniques, including the recombinant DNA technique and the direct injection of nucleic acids into cells or organelles.
- The fusion of cells of species beyond the taxonomic family, which exceeds the natural reproduction or recombination barriers and is not used in traditional reproduction and selection.

Table 2. Terminology Used in Venezuela Legislation Related to Agricultural Biotechnology

Legal Term (Spanish)	Legal Term (English)	Laws and Regulations Where Term is Applied	Legal Definition
Biotecnologia Moderna	Modern Biotechnology	Seed Law of 2015	In vitro nucleic acid techniques, including the recombinant DNA technique and the injection of nucleic acids into cells. The fusion of cells of different species that could not occur naturally and are not used in traditional breeding and selection.
Organismos Geneticamente Modificados o Transgénicos	Genetically Modified or Transgenic Organisms	Seed Law of 2015	Any living or non-living organism having a novel combination of genetic material obtained through the application of modern biotechnology.
Hibrido	Hybrid	Seed Law of 2015	The result of controlled crossbreeding between genetically distinct and stable parents of the same species, whose generations will express different traits.

[1] See: 2015 Ley de Semillas.

Semilla	Seed	Seed Law of 2015	Any botanical structure intended for the sexual or asexual reproduction of a species.
Semilla Transgenica	Transgenic Seed	Seed Law of 2015	Any seed that carries a novel combination of genetic material, which has been obtained through the application of modern biotechnology.
Agrobiodiversidad	Agro-biodiversity	Seed Law of 2015	Set of components of biological diversity for agricultural production, including food production, livelihood sustainability, and the conservation of agricultural systems.
Biopirateria	Biopiracy	Seed Law of 2015	Illegal appropriation and use of local genetic and biological resources, undermining national sovereignty and affecting biological diversity.
Bioseguridad	Biosafety	Seed Law of 2015	A set of safety measures required to prevent or minimize potential adverse effects on ecosystems and biological diversity resulting from the application of modern biotechnology.

The Seed Law also forbids the production, importation, use, release, and multiplication of GE-seeds. Furthermore, the law prohibits granting copyrights and patents on any biotechnology-derived (and naturally produced, non-GE) seed. Violators may face a variety of penalties, including fines and imprisonment for violating the Seed Law. The government opposes obtaining private profits from biotechnology research and commercialization of its results.

Venezuela's Ministry of Eco-Socialism[2] (MINEC) is responsible for deriving agricultural biotechnology policy and enforcing its regulations. The Directorate of Biosecurity and Bio-commerce at MINEC administers and regulates all genetic resources and biosecurity issues in Venezuela. MINEC is responsible for encouraging activities that improve biodiversity within the country, including assessing all biotechnology and biosecurity issues, assessing biological diversity information, and establishing contracts to provide access to genetic resources.

b) Approvals

There are no GE-cultivars approved for cultivation or export in Venezuela.

[2] See: Venezuela's Ministry of Eco-Socialism.

c) Stacked Events or Pyramided Event Approvals

Not applicable.

d) Field Testing

Not applicable.

e) Innovative Biotechnologies

Venezuela has no regulations related to innovative biotechnologies, but these are within the field of modern biotechnology, and as such are prohibited according to the current law.

f) Coexistence

Not applicable.

g) Labeling and Traceability

Venezuela does not require special labeling for products derived from GE plants or containing GE-plant ingredients.

h) Monitoring and Testing

A reference laboratory affiliated with INIA in the city of Maracay has been used for the detection of biotechnology products. The laboratory's operational status is unknown at present.

i) Low-Level Presence (LLP) Policy

No LLP policy.

j) Additional Regulatory Requirements

Not applicable.

k) Intellectual Property Rights (IPR)

The Seed Law prohibits copyright protections and patents on any biotechnology seeds.

l) Cartagena Protocol Ratification

On May 24, 2000, Venezuela signed the Cartagena Protocol on Biosafety (CPB) and ratified the agreement on September 11, 2003, and national measures are partially in place. To date, the CPB has not impacted trade.

m) International Treaties and Forums

Venezuela is a member of Codex Alimentarius. The Maduro representatives' Codex representation is managed by the Ministry of Industry and Commerce National Autonomous Service for Norms, Quality, Metrology, and Technical Regulations (SENCAMER). Venezuela is a signatory to the International Plant Protection Convention (IPPC). The Ministry of Agriculture and Land's National Institute of Agricultural Health (INSAI) represents the Venezuelan authority at IPPC events.

n) Related Issues

None.

Part C: Marketing

a) Public/Private Opinions

The Maduro representatives maintains public campaigns against biotechnology that convey an overall message on the "dangers" of their use in the environment and in human consumption. Private organizations, such as the Venezuelan Federation of Agricultural Producers (FEDEAGRO) and the Venezuelan Association of Seed Producers (AVESEM), publicly support agricultural biotechnology to improve production levels and capabilities.

b) Market Acceptance/Studies

Despite the legal prohibition on the development and marketing of agricultural biotechnology, Venezuelan producers continue to support the acceptance of biotechnology-derived products and crops. For example, FEDEAGRO has emphasized the potential increase in local agricultural production if a regulatory framework for agricultural biotechnology were to allow the cultivation of GE-seeds. Corn, the local crop that could benefit the most from agricultural biotechnology, is currently grown solely from conventional seed (hybrid, open pollinated). Some agricultural leaders have criticized the Venezuelan authorities for prohibiting domestic use of agricultural biotechnology while allowing the importation of biotechnology-derived products and crops, thereby undermining domestic production.

In general, Venezuelan consumers remain unconcerned about the consumption of biotechnology-derived foods, especially as they continue to confront high food inflation and the country's highly vulnerable food security situation.[3] Venezuela imports significant volumes GE-derived soybeans, soybean meal, soybean and vegetable oil, and corn, primarily from the United States, Brazil, and Argentina.

[3] For more information on the Venezuelan food security crisis, see: USDA GAIN; VE2022-0026.

Chapter 2: Animal Biotechnology

Part D: Production and Trade

a) Research and Product Development

There are no animal biotechnology events under development in Venezuela, and no approvals have been provided by Maduro representatives for animal biotechnology from any source. However, research centers and universities have shown interest in animal biotechnology techniques to enhance the quality of cattle and goats. At present, in vitro fertilization and embryo transfer are used in cattle genetic improvement, and several companies offer these services commercially, using Brazilian biotechnology. The use of modern animal biotechnology techniques is less developed. Animal cloning is not currently being researched or used to improve animal genetics in public or private institutions. Venezuela has mainly utilized modern animal biotechnology to diagnose animal diseases, predominantly viral.

b) Commercial Production

Not applicable.

c) Exports

Not applicable.

d) Imports

Venezuela imports recombinant vaccines and diagnostic kits for animal diseases. The primary markets for these products include the poultry, swine, and livestock industries.

e) Trade Barriers

Not applicable.

Part E: Policy

a) Regulatory Framework

Because there is no policy governing animal biotechnology, no government entity oversees regulating GE animals or livestock clones for food safety, animal welfare, or environmental safety issues. Animal biotechnology is mentioned in the Seed, Animal Reproductive Material, and Biological Inputs Law of 2002. However, no regulations have been implemented to address animal biotechnology research and commercialization.

b) Approvals

Not applicable.

c) Innovative Biotechnologies

No regulation currently.

d) Labeling and Traceability

Not applicable.

e) Additional Regulatory Requirements

Not applicable.
f) Intellectual Property Rights (IPR)

Not applicable.

g) International Treaties and Forums

Not applicable.

h) Related Issues

None.

Part F: Marketing

a) Public/Private Opinions

There is no information about public or private sector opinions on using livestock cloning or genome-edited animals.

b) Market Acceptance, Studies

The Venezuelan livestock sector routinely uses advanced genetic improvement techniques such as in vitro fertilization and embryo transfer. As a result, the industry overall supports a favorable attitude toward any technological innovations that help to increase milk and beef production.

Chapter 3: Microbial Biotechnology

Part G: Production and Trade

a) Commercial Production

The only microbial biotechnology-derived food ingredients in Venezuela are those traditionally used to produce alcoholic beverages, dairy products, and processed food products.

b) Exports

Venezuela exports alcoholic beverages, dairy products, and processed products that may contain microbial biotechnology-derived food ingredients. In 2022, exports of these products totaled approximately $11.5 million, with the United States as their principal market (46 percent), followed by Chile (28 percent).

c) Imports

In 2022, Venezuela imported $252 million of processed products (prepared foods, wine, beer, condiments and sauces, fruit juices, dairy products, and infant foods) and enzymes that may contain microbial biotechnology-derived food ingredients. The main suppliers of these products included Brazil (32 percent), the United States (25 percent), the European Union (14 percent), and Colombia (10 percent).

d) Trade Barriers

None.

PART H: Policy

a) Regulatory Framework

The Ministry of Health of Venezuela enforces food safety standards and regulations. It is responsible for regulating food ingredients for human consumption through its Sanitary Health Service (Servicio Autónomo de Contraloria Sanitaria) and the Directorate for Food Safety and Inspection (Direccion de Inocuidad e Inspeccion de Alimentos y Bebidas Alcoholicas). No specific regulations involve the use of microbial biotechnology-derived ingredients.

b) Approvals

Not applicable.

c) Labeling and Traceability

No labeling regulations for microbial biotech-derived ingredients or food products have been developed in Venezuela.

d) Monitoring and Testing

Venezuela does not perform tests for evidence of genetic engineering in biotechnology-derived food products or ingredients.

e) Additional Regulatory Requirements

There are no additional requirements at present.

f) Intellectual Property Rights (IPR)

Not applicable.

g) Related Issues

None.

Part I: Marketing

a) Public/Private Opinions

Not applicable.

b) Market Acceptance, Studies

The information provided in this report regarding plant biotechnology acceptance generally applies to microbial biotechnology.

Attachments:

No Attachments