



**Interview with Presidents** 

Join the campaign against the illegal trade of pesticides

Infographic: Agricultural technology, advancements and developments in the last 60 years

Latin America advances in

Creativity and ingenuity in the Agricultural Practices

Farmers and beekeepers: a

CropLife Latin America

#### **Board of Directors CropLife Latin America**

#### Valdemar Fischer, President

Syngenta

#### **Eduardo Leduc**

#### **Rodrigo Santos**

Bayer CropScience

#### Ronaldo Pereira

#### Ana Claudia Cerasoli

Corteva

#### To be confirmed

Sumitomo Chemical

#### José Perdomo

Executive President CropLife Latin America

#### **WORK TEAM**

#### José Perdomo

President

#### Juan Cruz Jaime

Executive Director Southern Cone

#### Martín Zúñiga

Executive Director Central America and Caribbean

#### Richard Franklin

Executive Director Andean Region

#### Javier Fernández

Legal Advisor and Director of Regulatory Affairs

#### Mauricio Rodríguez

Director of Scientific Affairs

#### Gabriela Briceño

Stewardship Manager

#### Alejandro Hernández

Biotechnology Manager Central America and Caribbean

#### Mónica Velásquez

Communications Director

#### Lina Rodríguez

Communications Assistant

#### Ligia Álvarez

Administrator

#### Margarita Maldonado

Administrative Assistant





# ACCESS TO A W **TECHNOLOGIES**

and adoption of Good Agricultural Practices (GAPs) are the keys to agriculture in Latin America

> Interview with Valdemar Fischer, Chairman of the Board and José Perdomo, Executive **President of CropLife Latin America**

> > Read the full interview on www.croplifela.org

#### Which were the issues that demanded the most effort in 2018 from CropLife and its associations?

JP. It was a very dynamic year, we focused on supporting the fight against the illegal trade of pesticides and winning allies for that purpose, we continued to promote good agricultural practices which is a daily mission that will never end, and we took care of multiple fronts in regulatory matters. All were efforts made as a team with the National Associations.

#### Did the authorities' commitment to the fight against illegal trade increase?

**VF.** Today we can say that there is a greater awareness because we have all made visible the negative impact of the illegal trade of pesticides. The joint efforts with authorities, associations, and member

companies have generated preventive and operational actions to seize and dismantle criminal organizations located mainly in Brazil, Paraguay, Chile, Colombia, Bolivia, Guatemala, and Mexico.

#### What were the milestones in regulatory matters in 2018?

**JP.** One of the most important processes in 2018, which has not been completed yet, is the law that modernizes the registration of pesticides in Brazil; this is necessary for the entry of cutting-edge products. In the Andean region, the Andean Technical Manual was updated. In Costa Rica, the registration regulation that will allow the entry of more innovative products is already in force. There were prohibition initiatives that were withdrawn once the authorities analyzed the technical and scientific support of the products.







Valdemar Fischer

#### What do you mean by innovative or stateof-the-art products?

**VF.** As in all industries, crop protection products or pesticides have permanent improvements. If we compare products from the 60s or 70s with the more modern ones, we find great differences; for example, newer ones are degraded more easily, they have lower toxicity, and lower doses are required. There is also innovation in the packaging, such as the water-soluble bags. These technologies are more environmentally friendly and safer. For this reason, to mention an instance, Brazil needs to update its regulation and allow access to cutting-edge products.

We can have all the possible technology at our hands, but without Good Agricultural Practices, (GAPs), we cannot move towards a more sustainable agriculture. What happens with the control and monitoring of the implementation of **GAPs in the field?** 

**VF.** There is increasing awareness of the need to comply with GAPs and mandatory processes are being put in place. Every country has regulations that force the authorities to monitor their compliance, and in all of them there are multiple guidelines and shared requirements. Additionally, 2018 leaves us with a learning experience on this front; the initiative of the GAP Network of Argentina, an interinstitutional alliance that promotes Good Agricultural Practices by recommending regulations for the application of crop protection products, using indicators so that each farmer can track their implementation, and granting agricultural

certifications. It is a model that demands the participation of the entire chain and that is also being considered in Uruguay.

#### What progress can be highlighted in CropLife Latin America's GAP training programs?

JP. Our network of 25 associations continued with different training models both in the CuidAgro program, dedicated to Good Agricultural Practices, and in CampoLimpio, focused on the final disposal of packaging. With the multiplier training model, we were able to reach 200 thousand people in person, and more than 60 thousand tons of plastic were collected from the field, which was mostly recycled.

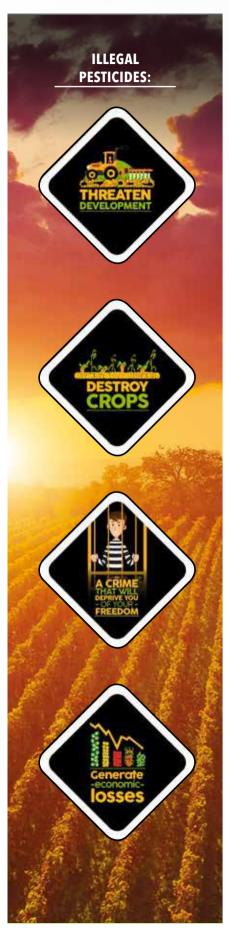
#### What progress does CropLife Latin America report in online education?

**JP.** This year we updated the design of the virtual courses platform, making it more userfriendly. We also launched the Introduction to Biotechnology course, and are currently working on a course about Pesticide Risk Management and Mitigation. Additionally, the English version of the platform was enabled. We applaud the development of other public and private virtual training initiatives, because it is the future.

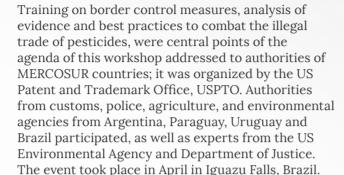
#### What are the most relevant issues for 2019?

**VF.** We will maintain our efforts in the promotion of the responsible handling of agrochemicals; we will continue the proactive dialogue with authorities, farmers and other sectors of society to seek the improvement of regulatory systems and a greater understanding of the sector in areas such as innovation, illegal trade in pesticides and the sustainability of modern agriculture.





#### KSHOP: HOW TO FIGHT ILLEGAL RADE OF PESTICIDES IN MERCOSUR?



#### LLEGAL TRADE IN THE SIGHT OF THE WORLD

The fight against counterfeiting, piracy and smuggling has gained importance every year at the global level. With a varied agenda of regional events, the subject was analyzed from different perspectives. CropLife Latin America was present at several of them in order to establish synergies with organizations that can support the fight against the illegal trade of pesticides in Latin America. CropLife was present at:

- III Seminar on the enforcement of intellectual property rights, organized by the International Trademark Association, INTA. Uruguay, April 2018.
- II Latin American Summit for the Protection of Trademarks, of the Coalition against counterfeiting, IACC. Orlando, USA, October, 2018.
- Launch of the illicit trade index for Panama, Colombia and Costa Rica in events organized by The Economist magazine in the second half of 2018.

#### **INALISTS IN AGROW AWARDS**



The campaign SAY NO TO ILLEGAL PESTICIDES was selected in the category of best communication program for the Agrow awards. This campaign began three years ago with the aim of raising awareness and preventing the negative effects of illegal trade of pesticides in Latin America. Today, the campaign has expanded because of the initiatives promoted by the network of associations. In Bolivia, Mexico, Guatemala, Brazil, Paraguay and Chile efforts are being made to expose the consequences of the use or commercialization of illegal crop protection products.

#### AZIL FIGHTS THE ORGANIZED CRIME OF ILLEGAL PESTICIDES

With operation WEBCIDA, in which more than six organizations participated, including Ministries, Secretaries and different forces of the Brazilian Police, internet portals were identified and shut down for selling pesticides without registration, counterfeit or adulterated products, and agrochemicals that violated all registration, sale, and marketing regulations. On the other hand, there were many training sessions on the strategies used by organizations dedicated to this crime, aimed at police officers and other control entities.

# BOUT THE DANGER OF ILLEGAL PRODUCTS

During 2018, the Crop Protection and Fertilizer Chamber, CAFYF, and the National Plant Health and Quality Service, SENAVE, worked on raising awareness about the danger of using illegal products, whether smuggled, counterfeited or adulterated. They conducted more than 150 training sessions for technicians and distributors, installed billboards on the roads of the main agricultural production areas and opened a whistleblower channel.



#### ORE CONTROL AND SURVEILLANCE IN **UATEMALA AGAINST ILLEGAL TRADE**

Out of 995 supervised agricultural dealers, 85% did not have a sanitary license and 88% had no registration with the Ministry of Agriculture and Livestock, MAGA. These were the main findings of a first round of supervision conducted by the Ministry in its fight against the illegal trade of pesticides. This initiative received support from the Association of Agricultural Chemicals Guild, Agrequima, by monitoring for two years the containers of agrochemicals that were recovered through the CampoLimpio program. They found 104 brands without registration number and 105 contraband brands.

#### EARN TO IDENTIFY AN ILLEGAL PESTICIDE

With an explanatory video about the main characteristics that identify an illegal product, the Mexican Association for Crop Protection, Science and Technology, PROCCyT, joined the national initiatives in the fight against the illegal trade of pesticides. The video was produced in Náhuatl and in Spanish, adapted by CAFYF in Paraguay, by Sindiveg in Brazil and by CropLife Latin America for the entire region. It is available in YouTube, where it had more than 16,000 views in Náhuatl, 24,000 in Spanish and 22,000 in Portuguese.



# AGRICULTURAL TECHNOLOGY

Advancements and developments in the last 60 years:

#### **Improved crop** varieties

Hybrids with higher production.

Seeds resistant to diseases.

Seeds that require less water.



Greater absorption of nutrients.

Development of biostimulants.

### **Mechanization**

Planters and tractors with GPS.

Increased use of solar energy vs fossil fuels.

1960



# **Biotechnology**

Food with higher nutritional content.

Drought-resistant seeds.

Genetic editing technology,

CRISPR.

### Crop protection

1990 Pesticides with greater efficacy, less toxicity.

Lower doses per hectare.

Safer packaging

Use of nanotechnology.

Better application techniques and equipment.

Boom of biological products.

## **Irrigation** technification

Sprinkling.

Micro-irrigation.

Drip.

Telematic irrigation.



# **BENEFITS**

- :: Simplify the work of farmers.
- :: Contribute to food production.
- Decrease the environmental footprint of agriculture.
- :: Contribute to development.



# **CHALLENGES**

- :: Democratization and transfer of technology.
- :: Good Agricultural Practices.
- :: Inclusive development.
- :: Greater appreciation of agrotechnologies in the cities.



## **Precision** farming

Satellite images and weather stations to make precise decisions about nutrition, protection and productivity.



# **Digitization**

Information and communication technologies (Big Data).

Agricultural sensors to measure humidity, pests, nutrients, etc.

Internet of things.

Drones.

#### Robotics

Use of Artificial Intelligence.

Automation and traceability.

What comes next...



# **AMERICA** ADVANCES

in improving agrochemical sector regulations



#### Dialogue with **Rainforest Alliance**

At the request of agroexporters from different countries in the region, CropLife Latin America began an approach with the certifier Rainforest Alliance in 2018. Among the discussed issues are the handling of containers, the use of personal protective equipment and the responsible use of agrochemicals. Rainforest Alliance put in consultation a new Sustainability Guide for 2019, and we are contributing to it.



#### Advances in the assessment of aquatic environmental risk

In order to strengthen the institutional capacities of the authorities responsible for environmental assessment of pesticides, CropLife International, CropLife Latin America, Procultivos-Andi in Colombia and CultiVida in Peru, worked on the development of an environmental simulator to determine residues in water. Phase II of the project will be executed in 2019 in Colombia, Ecuador and Peru.



#### **The Andean Technical** Manual was updated

Colombia, Ecuador, Bolivia and Peru updated the Andean Technical Manual for the Registration and Control of Pesticides. Worth highlighting among the novelties are the adoption of the classification and labeling of pesticides under the Globally Harmonized System (GHS) and the acceptance of the **United States Environmental** Agency (EPA) methodology for the carcinogenicity classification of pesticides. Approval is expected for the first semester of 2019.



#### **Test Data protection** in Mexico

Ten years of protection for test data, which is the information that supports the efficacy and safety of an agrochemical, were included in the new trade treaty between the United States. Mexico and Canada, T-MEC, which replaces NAFTA and in the CPTPP treaty of the Pacific Basin.



#### Two new corn technologies under test in Honduras

In Honduras, two new biotechnological corn events are under test with prospects to be released commercially in 2019. These are technologies for insect control and tolerance to herbicides. Honduras started testing biotechnological crops in 1997 and they are in use commercially since 2002. Today, approximately 32.000 hectares are cultivated.



#### **CRISPR** technology in Latin America

Honduras, Brazil, Colombia and Chile advanced in the regulation of the CRISPR genome editing technology. This technique allows activating or deactivating genes and promises a revolution, not only in agriculture but in human medicine as well.



#### Draft bill in Brazil to modernize agrochemical registrations

The Brazilian Congress is debating an initiative that would update the law on pesticide registration that has been in effect for 28 years. The Associação Nacional de Defesa Vegetal (National Association for Plant Protection), ANDEF, supports the project because it responds to high scientific standards in the control and surveillance of agrochemicals, maintains the protection of human and environmental health as priorities, and streamlines administrative procedures for access to new technologies. The project is expected to be approved in the first months of 2019.



#### **Capacity building** to mitigate pesticide risks

In 2018, we participated in three workshops on risk mitigation and benefits of pesticides to generate criteria for making decisions about risk and benefit, and prevent having regulatory decisions based only on considerations of danger. The workshops were conducted by APIA in Bolivia, APA in El Salvador and CAFYF in Paraguay. Around 200 people attended, including authorities, technicians, academia and industry. Given the importance of this topic, CropLife Latin America is developing a new virtual course that will be available in March 2019 at www.croplifela.org



#### **Maximum Residue Limits and European** legislation

Authorities of the main exporting countries of Latin America are concerned about the impact of changes in European regulations that may affect trade due to changes in the Maximum Residue Limits, MRLs, or the established import tolerances. As part of this effort, we participated in a workshop in Paraguay organized by CAFYF and SENAVE, attended by more than 100 people, including authorities and exporters. Likewise, we maintain a sustained dialogue with commercial authorities in Argentina, Guatemala, Brazil, Colombia and Mexico.



and understand the

in the promotion of Good Agricultural Practices

Through the CampoLimpio<sup>SM</sup> and CuidAgro® programs, implemented by the network of associations, we train and promote the responsible handling of pesticides, and the final disposal of empty containers. We seek natural allies in these processes such as farmer organizations, distributors, food traders, universities, NGOs and authorities. Here are some of the most outstanding achievements of the 2018 operation.



**CuidAgro Mobile in Mexico and Mobile Classroom in Costa Rica** 

In 2018, Let's Clean our Fields Foundation (Fundación Limpiemos Nuestros Campos, FLNC), in Costa Rica and PROCCyT in Mexico innovated with mobile pedagogical strategies to approach farmers in isolated areas. With CuidAgro Mobile and the Mobile Classroom, more than 1300 people were trained in the responsible use of agrochemicals.

#### **Argentina: passion for sustainable** agriculture and GAPs

2018 was a year of great intensity for CASAFE; it trained more than 28,000 people in Good Agricultural Practices, BPAs, and held its 2nd National Crop Protection Conference, in which 1,500 people participated. It also made progress with the audits to certify the safety of crop protection product warehouses, and made more than 33 agrochemical application demonstrations, which were attended by local authorities, academics, students and farmers who could appreciate how with GAPs it is possible to use crop protection products in a safe way.





Anifoda ventures into new communication channels to convey the message of responsible use of pesticides. With radio spots and messages on WhatsApp it promotes better cultivation techniques. It also signed cooperation agreements with an active participation in the Superior



the American Nicaraguan Foundation, ANF; UTZ / Rainforest Alliance and it maintains Council of Private Enterprise, COSEP.



In partnership with the Municipality of Flores, the company ABBAPLAST and the University of the Enterprise, UDE, the industrial design students developed parking lot stops and traffic signals.

#### CampoLimpio Colombia:

In the last 4 years, more than 6.000 tons of plastic have been recycled and used to build 1.500.000 plastic logs, substituting those made of wood from natural forests.

#### **Let's Clean our Fields Foundation** (Fundación Limpiemos Nuestros Campos, FLNC), Costa Rica:

Banana bunch covers converted into plastic pallet corners; sewer covers made of plastic from pesticide containers; and a project to convert used agribon, a row crop cover material, into building blocks, are environmental solutions that transform different kinds of agricultural use plastic into useful final products.

#### **Regulations on** packaging management

The Ministry of Health of Panama issued a resolution stating that triple-washed pesticide containers are "Non-hazardous waste". This will enable the development of the CampoLimpio program, because it facilitates the handling, transportation and recycling of the containers.



#### **CampoLimpio Peru receives National Environmental Award**

For its comprehensive and responsible management of empty pesticide containers in the country, CampoLimpio Peru received the National **Environmental Award Antonio** Brack EGG 2018. Due to the triple rinsing of the containers and their collection in specialized centers, the risk of contamination has been minimized, the health of the farmers protected and the care of the land and water increased, said the evaluation committee, made up of scientists and academics.

#### Mandatory packaging management programs

El Salvador is moving forward with a bill for the integral management of waste and the promotion of recycling. Establishing and demanding the co-responsibility of the entire production chain in waste management is the objective of this project supported by the Industry. Mandatory management of packaging is a reality in countries such as Brazil, Colombia, Chile and Ecuador.





in good condition.

and

PPE. Keep application equipment and

# DIGITAL TOOLS for informed citizens

#### **CropLife Latin America renews** its virtual course platform

A new design for a more user-friendly navigation, courses available with audio to reinforce learning, an ethical code of conduct that invites students to take courses conscientiously and three courses available in English, are some of the innovations incorporated into the virtual education platform.

Currently the platform offers 6 free courses in Spanish, 4 in Portuguese and 3 in English, aimed at regulatory authorities, distributors, farmers, technicians, agronomists, companies in the agrochemical industry, students and anyone interested in learning about crop protection and sustainable agriculture.

# 8.801 certificates awarded in 2018



#### **Digital Ecosystem** of CropLife Latin **America conquers** more audiences

Three web pages and their social media channels make up the Digital Ecosystem of CropLife Latin America. In 2018, the pages had 540,000 visitors and followers on social media were 354,574.

# elagricultorprimero.org 115,222 Readers during the year

In order to generate greater understanding of agricultural technologies and innovation in the cities, the El Agricultor Primero (The Farmer First) campaign ventured into disruptive narratives that expanded its reach.



# most requested course in 2018

The contents of this course are inspired by the experiences of responsible use of biotechnology in countries such as Argentina and Brazil. The course, available since February 2018, is divided into four chapters on biology, biotechnology background, its use and application in different disciplines, and the principles of its responsible use in agriculture.

#### :: Introduction to Biotechnology, the :: Coming Soon: Course on Pesticide Risk **Management and Mitigation**

Directed to agronomists, technicians, distributors, authorities and in general to the agricultural world, this new course will be available in 2019 in Spanish, English and Portuguese. The course offers information on the importance of the concepts of risk and danger of pesticides, how these concepts are central in all regulation, and it demonstrates how an adequate risk mitigation plan allows for the rational use of agrochemicals.

# Plaguicidas.Info 83,452 Readers during the year

The myths surrounding pesticides was the most read content in this portal, aimed at women, which seeks to inform on scientific perspectives on pesticides.



# www.croplifela.org 344.600 Readers during the year

Information on the responsible use of pesticides and virtual courses were the preferred contents for the audiences.



Use Personal Protective Equipment,

# FARMERS AND BEEKEEPERS: a perfect marriage?

Mutual cooperation between farmers and beekeepers, the responsible use of pesticides, and good beekeeping practices are key conditions to protect pollinators. However, communication between both sectors is non-existent in many areas, and knowledge about pollination and its benefits is scarce for many farmers in the region.

In order to create a more productive relationship between these activities and to improve beekeeping and agricultural practices, we participated in building a common agenda with authorities, academia, farmers and beekeepers in Brazil, Chile, Colombia, Ecuador, Venezuela and Mexico.

### **HOW TO REDUCE THE RISK OF AGRICULTURAL PESTICIDES ON POLLINATORS?**

#### DESIGN

#### FIND OUT

#### **INFORM**

# **READ** the label

# **CHOOSE** green

**IDENTIFY** the

# MAINTAIN

**AVOID** applying

#### :: Mexico

#### Together for the health of pollinators

PROCCyT held the discussion Together for the health of pollinators; the participants were authorities, academia and experts in agriculture and beekeeping. At the meeting, the multifactorial causes that can affect the health of bees such as climate change, diseases caused by the Varroa mite, and poor beekeeping and agricultural practices were ratified. This is one of the conclusions of a study conducted by the Autonomous University of Mexico.

#### **::** Colombia



#### **Farmers and Beekeepers are** made aware with andragogy

When we gather farmers and beekeepers from the same region, the vast majority only meet each other once they arrive at the conference, where they discover that they are neighbors, says María Helena Latorre, Director of Procultivos - ANDI, referring to the educational days held in partnership with the Ministry of Agriculture and the Colombian Agricultural Institute, ICA. In 2018, 900 beekeepers and farmers were trained using the adult education methodology "Andragogy".

#### **Ecuador**

#### **Guild's Risk Prevention plan** for Bee Health

InnovAgro, in collaboration with Agrocalidad and the Ministries of Environment, Agriculture and Health, is working on a public-private collaboration plan to promote better beekeeping and agricultural practices. With the support of Procultivos, Colombia, InnovAgro adopted andragogy for its workshops, and trained 547 farmers, beekeepers and technicians of the sector.

#### :: Chile

#### **Recommendations to protect** pollinators through the responsible use of crop protection products

More than 20,000 beekeepers and farmers have been trained by AFIPA over the past 3 years. The recommendations that seek greater protection for pollinators have also been promoted in digital media and in sectoral events with authorities, academia, farmers and beekeepers.

#### :: Brazil



#### A more productive relationship between beekeeping and agriculture

Colmeia Viva (Live hive) is the project that the industry has been conducting since 2014 under the leadership of Sindiveg to create a more productive relationship between beekeepers and farmers. Colmeia Viva promotes the responsible use of crop protection products and the importance of protecting pollinators through a digital application (APP), regional meetings, studies and training sessions.

#### Venezuela

#### **Efficient management of crop protection** products and care of Pollinators

Afaquima held 6 workshops in fruit and vegetable production areas, which counted with the participation of farmers, beekeepers and the National Institute of Agricultural Health, INSAI. The attendees stressed the importance of pollination in these crops and the need to implement Integrated Pest Management (IPM) plans to control the vector Diaphorina citri that transmits the Yellow Dragon disease or HLB affecting citrus-growing areas of the country.



CropLife Latin America 2018

DIALOGUES

icultura en

5 Moportuni

#### Forum

Agriculture in El Salvador, challenges and opportunities.

Organized by APA. El Salvador. November 2018

#### **Presentation**

Presentation of the Farmer First campaign.

Universidad Landívar, Guatemala. February 2018

# Workshop

Capacity building workshop on Risk Mitigation in the Use of Pesticides.

Organized by APIA. Bolivia, October 2018

# Ceremony

José Perdomo and Javier Fernández at Agrow Awards. The campaign NO to Illegal Pesticides was a finalist on the Best Outreach Program category.

United Kingdom. November, 2018

# Meeting

Annual meeting of the CampoLimpio<sup>SM</sup> and CuidAgro® programs.

Panama, October 2018



How to combat illegal trade of pesticides in Mercosur?

Organized by USPTO. Iguazu Falls, Brazil, April 2018

#### Conference

International Conference on Good Agricultural Practices.

Organized by AFIPA. Dominican Republic. May 2018

#### **Presentation**

Presentation of the Farmer First campaign.

A workshop organized by Rabobank, Colombia. June 2018

# Workshop

Workshop on Risk Mitigation and Management of Highly Hazardous Pesticides.

Organized by CAFYF and SENAVE. Paraguay. November 2018.

#### Convention

CropLife Latin America **Annual Convention** 

Guadalajara, Mexico. April 2018

### **FORUM Innovation and Safety:** Agri-food challenges of the 21st century

The adoption of better agricultural practices, the provision of food and environmental services (biodiversity) and a greater awareness of food safety are areas to work with more decision in Latin America. This is what several of the speakers concluded in April 2018 at CropLife Latin America's International Forum in Guadalajara, Mexico.

The event had the support of the National Agricultural Council, CNA; the International Center for Improvement of Maize and Wheat, CIMMYT, Mexico Calidad Suprema, the Secretary of Rural Development of Jalisco, the Mexican Research Institute of Forestry, Agriculture and Livestock, INIFAP, PROCCvT, AMOCALI and AgroBio Mexico..

More than 500 attendees and 12,400 people following the live broadcast received the analysis and information delivered by the speakers.

- Latin America and the Caribbean and scenarios of the global agri-food system: The future is no longer what it was before, Eugenio Diaz-Bonilla, IFPRI.
- Mexico to the conquest of new markets, Luis Fernando Haro, CNA.
- Interinstitutional Dialogue: Network of Good Agricultural Practices in Argentina, Naiara Fernandez, Red BPAs.

See all presentations at www.croplifela.org

#### Some of the data shared at the Forum:



of the food produced today in the world is wasted.



agri-food sector.





is the third largest food supplier in Latin America, after Brazil and Argentina.

Mexico



500 million small farmers supply

**50%** of the planet's food.



1/3 of the planet's soil is degraded, it is necessary to improve agricultural practices.

cm of soil can take from **100 to 1000** years to form.

















