

# Prevention and control of HLB vector insect in citrus family farming

ARGENTINA / BOLIVIA / PARAGUAY / URUGUAY

 Webstory



## The technological solution

Integrated Pest Management (IPM) technology with focus on HLB vector control (*Diaphorina citri*) in citrus is proposed, through monitoring, use of safe products and natural enemies (*Tamarixia radiata*, *chrysopids*). Monitoring activates an alert system for family growers and other actors.



## Results

The results of the monitoring in the LD (IPM) versus LC show decreases of the HLB vector between 60-99% in 3 sites and an increase of natural enemies from 17% to 332% in 11 sites. The average environmental impact index in the evaluated LD was positive. The improvement in fruit quality was registered by lower incidence of diseases and/or less pest pressure. The economic analysis shows that direct IPM costs increased, with higher gross margins in some LD from the second or third season onwards. The following were designed and implemented: 3 editions of a virtual/on-site course for pest monitors on the INTA PROCADIS Web platform; an alert system with access to the BioTic INTA-FONTAGRO HLB Web platform; a prototype of a monitoring upload App; a graphic and digital communication campaign for the prevention and management of HLB-vector. Participatory workshops, training, 2 manuals published. More than 22,900 people reached.



## Description

Adaptation and dissemination of IPM through demonstration lots (DL) in family citrus establishments, selected with participatory methodology. Training and rising social awareness about HLB vector control and disease prevention. Monitoring of sustainability, phytosanitary quality and economic analysis.

**1030**

Total monitoring carried out at 17 sites (LD and LC) systematized in a database

**-99 %**

Population decline of the HLB vector insect at Bella Vista, Corrientes, Argentina

**+66 %**

More natural enemies of the HLB vector in the LD at 11 sites (from 17% to 332%).

**+126**

Producers who receive alerts by cell phone with access to the BioTic INTA - FONTAGRO HLB Web portal.

**247**

Certificates awarded in 3 editions of the virtual/on-site course for monitors from

**+3400**

Reached by project activities (workshops, lectures, courses, alert sistem,

ABOUT FONTAGRO

FONTAGRO is a unique cooperation mechanism for agricultural innovation in Latin America and the Caribbean (ALC) and Spain, that works through regional platforms. It is composed of 15 countries that have contributed capital exceeding 100 million dollars and the Inter-American Development Bank (IDB), which is its legal representative.

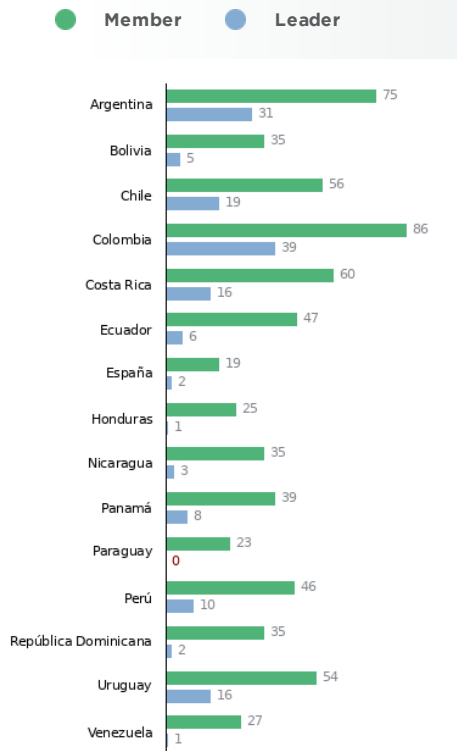


ORIGIN OF RESOURCES



- Counterpart contribution  
93.177.555
- FONTAGRO  
28.989.468
- IDB  
9.922.700
- Other agencies  
9.809.078

PARTICIPATION AND ROLE IN CONSORTIUMS SINCE 1998



FONTAGRO IN NUMBERS

**193** Number of projects approved

**141.9** Approved total amount US\$  
MILLONES

**9.8** Contribution from other agencies  
MILLONES

**32** Benefited countries

**63** Generated technologies

**15** New technologies for ALC

**8** Technology of global relevance

MEMBER COUNTRIES

- |            |                    |           |          |
|------------|--------------------|-----------|----------|
| Argentina  | Bolivia            | Chile     | Colombia |
| Costa Rica | Dominican Republic | Ecuador   | Honduras |
| Nicaragua  | Panama             | Paraguay  | Peru     |
| Spain      | Uruguay            | Venezuela |          |