



# Lignocellulosic fruit residues for biocomposites or biocatalysts

COLOMBIA / SPAIN



Webstory



## The technological solution

In the harvesting and processing of fruits, a great variety and quantity of waste is generated, almost all of it wasted. Several alternatives have been developed for adding value to these materials.



## Description

Once dried and conditioned, the fruit plantation residues (or lignocellulosic residues) were used as fillers in the elaboration of biocomposite materials to which various properties were measured to evaluate their potential applications such as packaging, parts for vehicles, supports for enzymes, among others.



## Results

- Construction of a sustainable and sustainable innovation model for the blackberry, lulo (naranjilla), passion fruit, guava and tree tomato chain.
- Value was added to the residues of fruit production.
- Prototypes of food and non-food products were developed based on different types of waste.

1200

Benefited families

1276

Trained people

14

Papers

18

Training events

PARTICIPATING ORGANIZATIONS

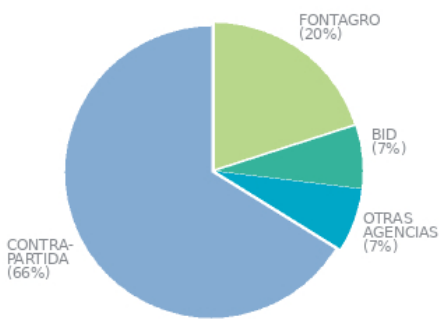


**ABOUT FONTAGRO**

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

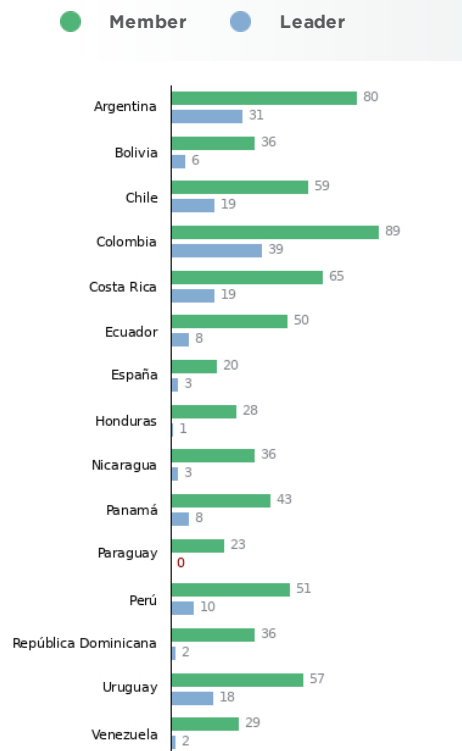


ORIGIN OF RESOURCES



- **Counterpart contribution**  
99.190.633
- **FONTAGRO**  
30.479.468
- **IDB**  
9.922.700
- **Other agencies**  
11.123.601

PARTICIPATION AND ROLE IN CONSORTIA SINCE 1998



FONTAGRO IN NUMBERS

**204** Number of projects approved

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

**11.1** Contribution from other agencies  
MILLONES

**33** Benefited countries

**63** Generated technologies

**15** New technologies for LAC

**8** Technology of global relevance

MEMBER COUNTRIES

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