Early warning system for sustainable preventive management of potato late blight (*Phytophthora infestans*) in Latin America.

**CHILE / ARGENTINA / ECUADOR / PANAMA**

**The technological solution**
Implement an early warning system as decision support system for the integrated management of potato late blight, in order to reduce productive losses caused by this disease, in a sustainable and safe way for the user, in the small family farming of the participating countries.

**Description**
The alert uses weather data and epidemiological information of the disease to estimate optimal moments of control. Tizon.inia.cl, Phytoalert and DSS-HH systems were used according to the country. This allows to make management decisions, improving the efficiency of agrochemicals, increasing the productivity and profitability of the crop.

**Results**
Platform of late blight specialists in Latin America formed.

Two technical workshop of the platform carried out in Chiloe, Chile and Cerro Punta, Panama to standardize methodologies, validation of alert systems and analizys of results.

Calibration of the warning system in 29 demonstrative units, showing a reduction of 53%, 56% and 60% in the amount of applications, environmental impact and pesticide cost, respectively.

Monitoring of *Phytophthora infestans* using FTA cards and collected live samples, with a total of 528 samples for characterization and mapping.

44 workshops for pesticide management, IPM and BPA, 8 field days and seminars, 7 workshop to analyze results, 2 international symposia and 2 workshops for co-executors and associates, 4 meeting and workshop with the production chain, 13 publications and videos, 1 web platform and 1 scientific publication, reaching more than 2761 people, with 42% women.

**MAIN DONORS**

**PARTICIPATING ORGANIZATIONS**

<table>
<thead>
<tr>
<th>Number of women in the technical team</th>
<th>Total beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 %</td>
<td>542</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trained people</th>
<th>Women</th>
<th>Number of workshops, seminars and field days</th>
<th>Number of validation units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2761</td>
<td>42 %</td>
<td>63</td>
<td>29</td>
</tr>
</tbody>
</table>

**Number of workshops, seminars and field days**: 63

**Number of validation units**: 29
**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

- **Member**: 193
- **Leader**: 41
  - **Argentina**: 51
  - **Bolivia**: 45
  - **Chile**: 41
  - **Colombia**: 30
  - **Costa Rica**: 26
  - **Dominican Republic**: 21
  - **Ecuador**: 20
  - **El Salvador**: 19
  - **Honduras**: 12
  - **Nicaragua**: 11
  - **Panama**: 8
  - **Paraguay**: 6
  - **Peru**: 4
  - **Republica Dominicana**: 2
  - **Uruguay**: 2
  - **Venezuela**: 1

### FONTAGRO IN NUMBERS

- **Number of projects approved**: 193
- **Approved total amount US$**: $141.9 million
- **Contribution from other agencies**: $9.8 million
- **Benefited countries**: 63
- **Generated technologies**: 63
- **New technologies for ALC**: 15
- **Technology of global relevance**: 8

### MEMBER COUNTRIES

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- El Salvador
- Honduras
- Nicaragua
- Panama
- Paraguay
- Peru
- Republica Dominicana
- Uruguay
- Venezuela