

# Lupinus mutabilis debittering technique

BOLIVIA / CHILE / ECUADOR

 Webstory



## The technological solution

The main obstacle to the direct use of lupinus in human consumption is the presence of quinolizidine alkaloids, which are toxic and have a bitter taste, which is why it is necessary to apply a debittering process prior to their use.



## Description

Improvement of the artisanal process in reducing debittering time by adding sodium chloride to the cooking water, controlling the temperature and agitating the washing water.



## Results

- New technologies have been generated to improve lupine productivity.
- Families that sell lupine receive an additional profit (10% more) compared to the traditional market.
- Lupine products are used as substitutes for milk and meat in certain regions.

**+500**

Farmers benefited

**7**

Workshops

**4**

Publications

## 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