

# Development of a fermented product based on lupinus

BOLIVIA / CHILE / ECUADOR

 Webstory



## The technological solution

One of the solid-state fermented foods is tempeh, which results from the fermentation of partially cooked legumes with rhizopus spores, of great nutritional value, high digestibility and a low-cost source of protein.



## Description

Lupinus tempeh of good physical, chemical, and organoleptic quality was obtained with dehulled grain, incubation temperature 31 °C, in aluminum trays and for 24 hours. As initiator of fermentation, the fungus (*Rhizopus oligosporus*) was used.



## 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**

Beneficiary farmers

**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

