

## Promotion of bean growing Catalonia through the production of innovative canned and potted Protected Designation of Origin (PDO) Ganxet beans

### Summary

---

The Ganxet bean is a quality legume that is highly prized by consumers. However, it is not often sold canned or potted. This is due to the techniques used in its preservation, especially sterilisation, which significantly alter its organoleptic properties and sensorily make it similar to other bean preserves, which when cooked using conventional methods would present significant sensory differences. Accordingly, as consumers cannot recognise their quality, they are not willing to pay a higher price for these beans. Taking into account that the end product that reaches the consumer is the result of many factors, it seems that we can act on various levels to reduce the effects of thermal treatment and try to maintain objective sensory differences between the preservation of an excellent raw material and one of lower quality. The multifactorial nature of the problem requires solutions on various levels: the type of germplasm to be used, its handling in production, environmental cultivation conditions and the preservation methodology to be used.

The task force that has been constituted for the development of the project is made up of companies and entities with significant experience as Ganxet bean producers, processors, marketers and researchers. The members of this task force propose finding Ganxet germplasm combinations, along with different management systems for the crop, and designing a protocol for the preparation of the preserve to produce an end product that is as similar as possible to the Ganxet bean culinary preparations commonly found in restaurants or homes.

### Objectives

---

The general objective of the project is the optimisation of both the crop and the thermal treatment of Ganxet bean preserves in order to achieve a product that is objectively identifiable due to its sensory quality, maximising respect for the characteristics presented by the PDO Ganxet bean when it is cooked without thermal preservation treatment. These new preserve formats must enable the companies that form part of this task force to open up the preserved bean market and maximise the profitability of the Protected Designation of Origin of this legume both locally and internationally.

### Description of initiatives outlined in the project

---

Generally, the actions planned in the project are:

1. Quantitatively determine the objective sensory differences between the various commercial formats of Ganxet beans.
2. Multi-site testing, establishing different genotype and environment combinations for the optimisation of the crop, taking into account any associated problems, such as fungal diseases.
3. Study of the most suitable preservation method by means of sterilisation and/or pasteurisation, in trays or jars.

4. Study of nutritional parameters using spectrophotometric techniques.
5. Design of packages and logos for the new product and consumer testing to assess its acceptance.

## Expected results and practical recommendations

---

The expected results of this project are:

1. Prepare a series of recommendations for the optimisation of the cultivation of new varieties of the Ganxet bean in the geographical area of the Progrés-Garbí agricultural cooperative by means of management combinations with low inputs. These must enable the resolution of fungus and oomycete root rots, fungal infections at the end of the cycle, drying difficulties in the field and the improvement of water management. The environmental, edaphologic and management factors that affect the sensory value of thermally treated beans will also be identified.
2. Create one or more preservation protocols in line with the characteristics of the Ganxet bean raw material that is generated in the PDO area in order to express its full sensory potential.
3. Develop indirect phenotyping tools by means of infrared spectrophotometric techniques that enable, following rapid and non-destructive exploration of the raw material, the determination of its chemical (nutritional) properties, in addition to which type of thermal preservation treatment is best for each batch of raw material.
4. Create a new brand image in order to add value to the new product, in terms of both nutritional and sensory aspects, and to facilitate its introduction into the market, both locally and internationally.

### Task force leader

---

Entity: **Conserves Ferrer S.A.**

Contact e-mail:  
**josep.ferrer@c-ferrer.com**

Typology of entity:  
**Agri-food company**

---

### Task force coordinator

---

Entity: **Fundació Miquel Agustí**

Contact e-mail:  
**recerca@fundaciomiquelagusti.cat**

Typology of entity:  
**Cooperative federation or association**

---

### Other task force members (grant beneficiaries)

---

Entity: **Cooperativa Agrícola el Progrés-Garbí**

Contact e-mail:  
**progresgarbi@progresgarbi.com**

Typology of entity:  
**Cooperative**

---

### Other task force members

---

Entity: **Consell regulador DOP Mongeta del ganxet**

Contact e-mail:  
**crmongetesdelganxet@gmail.com**

Typology of entity:  
**Agrifood co./ind. assoc. or group**

---

Entity: **Institut de Recerca i Tecnologies Agroalimentàries (IRTA)**

Contact e-mail:  
**ingrid.aguilo@irta.cat**

Typology of entity:  
**Research centre**

---

## Subject area(s) of application

Agricultural production system  
Farming practice  
Food quality/processing and nutrition  
Genetic resource  
Plant production and horticulture  
Supply chain, marketing and consumption

## Geographical area(s) of application

<b>Province(s)</b>	<b>Region(s)</b>
Barcelona	Maresme
	Bages

## Dissemination of the project *(publications, conferences, multimedia...)*

Dissemination will be carried out in a number of ways. The platform of the Miquel Agustí Foundation website will be used to publicise the project, and the foundation's social media will report its development. Some of the activities scheduled in the project, such as consumer tasting, will also be used to explain the objectives of the project and its progress.

## Project website

<http://fundaciomiquelagusti.cat/>

## More information on the project

### Project dates

Starting date (month-year): June 2018  
Completion date (month-year):  
Current status: *Underway*

### Budget approved

<b>Total budget:</b>	<b>€208,820.00</b>
<i>DARP funding:</i>	€85,340.40
<i>EU funding:</i>	€64,379.60
<i>Own funding:</i>	€59,100.00

## With funding from:



Generalitat de Catalunya  
**Departament d'Agricultura,  
Ramaderia, Pesca i Alimentació**



**Fons Europeu Agrícola  
de Desenvolupament Rural:**  
Europa inverteix en les zones rurals

Project funded through Operation 16.01.01 (Cooperation for Innovation) through the Catalan Rural Development Programme 2014-2020.

*Order ARP/133/2017, of 21 June, approving the regulatory bases of grants for cooperation for innovation through the promotion of the creation of European Association for Innovation task forces in terms of agricultural productivity and sustainability and the execution of innovative pilot projects by these groups.*

*Resolution ARP/1868/2017, of 20 July, calling for applications for grants for the year 2017.*

Project ID: 010\_2017