

## Development of new fresh and processed calçot products with high added value

### Summary

---

The aim of the project is to produce high quality calçots that can be easily identified and differentiated from others available on the market. A further aim is to develop new products that increase farm yields. To achieve these results, we have developed a comprehensive strategy that encompasses all stages from seed to processed product, through the field, storage chambers and quality assurance. The agents involved in this project represent the major players in the calçots industry, from both production and research areas.

### Objectives

---

The main objective of the project is to develop new products with high added value from calçots of the Protected Geographical Indication (PGI), Calçot de Valls, to differentiate them from other calçots available on the market, and at the same time, open new avenues of commercialisation that widen the current calçot market, such as exportation and new product development.

### Description of project activities

---

The planned project actions are:

- (1) Pre-commercial cultivation at several locations to test new varieties in different environments and conditions.
- (2) Research on the ideal conservation method to lengthen the shelf-life of the fresh product based on quality parameters (sensorial and nutritional).
- (3) Research on new processing methods for fresh calçots. Establishment of the efficacy of alternative physical and chemical treatments for product hygiene. Development of a new minimally processed products.
- (4) Development of new processed, cooked and packaged products based on the cooking of calçots of the PGI, Calçot de Valls.
- (5) Development of new products derived from calçots.
- (6) Evaluation of nutritional aspects of calçots depending on the intrinsic characteristics of the crop.

### Expected results and practical recommendations

---

The expected results, taking the previously described actions into account are:

- (1) a. Determination of the best farming conditions tailored to the two newly developed varieties, which enable the production of calçots with superior sensorial and nutritional characteristics.  
b. Production of plant material with distinct characteristics that are representative of the PGI area of production in order to perform the other planned project actions.
- (2) Detailed protocol for the storage conditions that enable lengthening of the shelf-life of the product while maintaining sensorial and nutritional quality parameters. This protocol must allow for better management of the production peaks inherent in seasonal crops such as calçots.
- (3) A new product that is minimally processed and decontaminated through physical or chemical treatments, with the lowest possible environmental and economic cost, which retains the sensorial and

nutritional quality parameters of the product. This product, combined with the protocols described in the previous point, must allow for the opening of an export market. The currently marketed untreated calçots present many problems in satisfying the sanitary regulations of prospective importing countries. On the other hand, usage of sodium hypochlorite as a disinfectant is regulated in many countries due to chloramine formation and its potential carcinogenic effects.

(4) A new processed, cooked and packaged product with a presentation similar to that of calçots consumed at a calçotada, with a shelf-life of no less than four months, and which meets the marketing requirements of the PGI, Calçot de Valls. This new product must enable expansion of the calçotada to new urban markets as well as to exportation. In addition, similar to the products derived from previous proceedings, the production of this product must allow for better management of production peaks during the season, which often coincide with low market prices.

(5) New products based on the use of calçots of non-commercial dimensions. These products must allow for better use of the production, revaluing material that is currently being discarded or sold at extremely low prices. In addition, these products must serve to reach new markets that deviate from the traditional association between calçots and the calçotada, and to position the calçot as a quality ingredient with a wide variety of uses.

(6) Detailed description of the nutritional profile of the various products developed. To date, the full nutritional potential of calçots is unknown. Detailed knowledge of the nutritional properties of the product would provide added value that currently remains unharnessed.

### Operational Group Leader

---

Entitat: **SOCIETAT AGRÍCOLA I SECCIÓ DE CRÈDIT DE VALLS SCCL**

E-mail de contacte:  
**info@coopvalls.cat**

Tipologia d'entitat:  
**Cooperativa**

---

### Operational Group Coordinator

---

Entitat: **FUNDACIÓ MIQUEL AGUSTÍ**

E-mail de contacte:  
**info@fundaciomiquelagusti.cat**

Tipologia d'entitat:  
**Centre de recerca**

---

### Other Operational Group members (beneficiaries of aid)

---

Entitat: **IGP CALÇOT DE VALLS**

E-mail de contacte:  
**info@igpcalcotdevalls.cat**

Tipologia d'entitat:  
**Altres agents del sector**

---

### Other Operational Group members

---

Entitat: **IRTA**

E-mail de contacte:  
**ingrid.aguilo@irta.cat**

Tipologia d'entitat:  
**Centre de recerca**

---

### Keyword-category

---

Agricultural production system  
Food quality / processing and nutrition  
Genetic resource

### Territorial scope

---

#### **Province**

Tarragona  
Lleida  
Barcelona

#### **County**

Tarragonès  
Baix Penedès  
Baix Camp  
Alt Camp  
Segrià

---

**Project dissemination** *(publications, seminars, multimedia...)*

---

**Project website**

---

www.calçot2020.com

**Other project information**

---

**Project period****Approved budget**

Starting date (month-year): Maig 2017

**Total budget: 166.500,00 €**

End date (month-year):

*Funding source DARP:* 69.255,00 €Project status: *Ongoing**Funding source EU:* 52.245,00 €*Own funds:* 45.000,00 €**With the support of:**

---

Project funded by Operation 16.01.01 (Cooperation for innovation) of the Rural Development Program of Catalunya 2014-2020.

*Basic regulation: Ordre ARP/96/2016, de 27 d'abril, per la qual s'aproven les bases reguladores dels ajuts a la cooperació per a la innovació a través del foment de la creació de grups operatius de l'Associació Europea per a la Innovació en matèria de productivitat i sostenibilitat agrícoles i la realització de projectes pilot innovadors per part d'aquests grups, i es convoquen els corresponents a 2016.*

Project id.: E+C 2016