

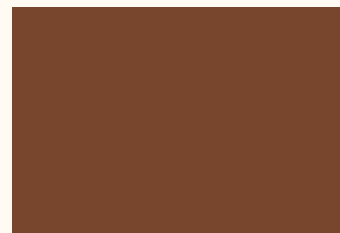
## What is GREENCASTANEA and which are its objectives?

**GREENCASTANEA** is a pilot project whose main objective is the implementation of a new, efficient and sustainable system for the *in vitro* production of Galician traditional varieties of chestnut trees mycorrhized with *Boletus edulis*.

More precisely, the project aims:

- 1 To produce, in a bioreactor, the mycelial inoculum of *Boletus edulis* on a liquid environment optimized with artificial intelligence.
- 2 To implement an innovative production system of mycorrhized chestnut plants.
- 3 To develop a thermo-hydrotherapy prototype to obtain chestnut wasp-free chestnut trees.
- 4 To detect, select and molecularly characterize clones of Protected Geographical Indication (PGI) varieties Longal, Negral e Xudía.

Thus, **GREENCASTANEA** seeks to improve the profitability of the Galician traditional chestnut groves by betting for the combined myco-fruit production and the diversification of the agri-forestry sector. This approach will allow an efficient, flexible, and quality production management of chestnuts and fungi, two products highly economically valued. In conclusion, to protect the autochthonous and keep rural environment alive.



# Greencastanea

Do you want to know more about GREENCASTANEA?

You can send us an email at [micorrizas@hifasforesta.com](mailto:micorrizas@hifasforesta.com)  
or call +34 661 67 11 82



Programa de Desenvolvemento Rural de Galicia 2014-2020  
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# Greencastanea

Production of mycorrhized chestnut tree through the *in vitro* cultivation and intravarietal selection of PGI varieties

Total budget: 187.774,91 €

Total grant: 150.000,00 €

UE co-fund: 75% Feader

GREENCASTANEA is funded by grants to support pilot projects, development of new products, processes, and technologies in the agri-forestry scope, co-funded by the European Agricultural Fund for the Rural Development (EAFRD), in the framework of the 2014-2020 Galician Rural Development Program (RDP). The Consellería do Medio Rural is the Galician Administration authority responsible for proposing and executing the general guidelines in the rural scope and encompasses powers in agriculture, livestock, rural development, and regional planning, rural structures, agri-food, and forestry industries, mountains, and prevention and defense against forest fires.

# Which are the expected results of the project?

- To implement a cultivation process that allows to flexibly adjust production to demand.
- To obtain the first grafts of traditional varieties of chestnut trees from *in vitro* cultivation.
- To obtain a high mycorrhization index of *Boletus edulis* on chestnut trees.
- To develop an innovative system to treat chestnut trees against the chestnut tree wasp.
- To introduce in the market high quality and molecularly identified varieties of Longal, Negral and Judía.
- To establish a demonstrative pilot plant, chestnut tree wasp free, mycorrhized and of clonal selection.



## GREENCASTANEA activities

**1<sup>st</sup> action**  
*In vitro* cultivation techniques



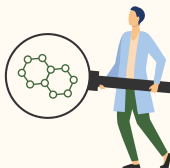
**2<sup>nd</sup> action**  
Biotechnological mycorrhization techniques



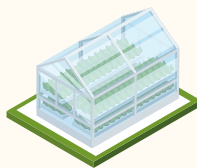
**3<sup>rd</sup> action**  
Biotechnological thermo-hydrotherapy techniques



**4<sup>th</sup> action**  
Biotechnological techniques for the clonal selection and molecular identification



**5<sup>th</sup> action**  
Establishment of a demonstrative pilot plant



**Dissemination**  
Transfer of the results onto the agri-forestry sector



# Whom is GREENCASTANEA aimed to?



Forestry and wood companies



Fungi producers and sellers



Agents of the agri-food value chain



Public Administrations related to food, environment and/or rural development



Investigation centres



General public

# Who are the members of GREENCASTANEA?

The GREENCASTANEA project is comprised by a multidisciplinary team coordinated by Hifas Foresta, which counts with the participation of Universidade de Vigo (through the Agrobiotech For Health group), the Indicación Xeográfica Protexida (IXP) Castaña de Galicia, Soutos Sativa and the Galician University-Enterprise Foundation (FEUGA).



Universidade de Vigo



Soutos Sativa S.L.

**FEUGA**  
FUNDACIÓN EMPRESA-UNIVERSIDAD GALLEGA