

**Área Científica** Florestal

**Código** PTDC/AGR-FOR/3804/2012      **Início** 2013/7/1      **Termo** 2015/12/31

**Título** Modelação do crescimento e modelação do pinhão de *Pinus pinea* sob alterações ambientais

**Programa**

FCT

**Medida**

Projetos de I&amp;D em todos os Domínios Científicos

**Instituição Líder** Instituto Superior de Agronomia

**Investigador Responsável INIAV** Maria Isabel Carrasquinho de Freitas

**Orçamento Total** 155 632,00€

**Orçamento INIAV** 15 480,00€

**Parceria**

ISA	Instituto Superior de Agronomia	Nacional
INIAV	Instituto Nacional de Investigação Agrária e Veterinária, I.P.	Nacional

**Equipa**

Maria Isabel Carrasquinho de Freitas
Abel Martins Rodrigues
Pedro Manuel Barbosa Vasconcelos Jordão
Maria da Encarnação Ferreira Marcelo

## Resumo

The main objectives of the PINEA Project are:

- (i) the calibration and validation of a process-based model for *Pinus pinea* in Portugal. This will allow estimation of the productivity of existing stone pine plantations in the context of climate change, considering different climatic scenarios, and will provide a tool to support decision-making regarding new planting;
- (ii) evaluation of the effects of irrigation and nutrient availability on *Pinus pinea* growth and nut yields;
- (iii) to improve existing empirical modeling equations relating to growth and nut yield of *Pinus pinea*.

The PINEA Project will carry out nine planned Tasks. It will use existing *Pinus pinea* data, including data from permanent sample plots, previous biomass trials, and an established fertilization trial. A new irrigation and fertilization trial will be established. New data will be collected from it and from existing permanent sample plots and a fertilization trial. All these data will be validated and organized in databases. Following database development the data will be analyzed in different ways, bearing in mind that one of the major objectives is to develop a process-based model calibrated for *Pinus pinea*.