



Operational Group:

Increasing the viability of sown biodiverse pastures through optimization of phosphate fertilization.

Viabilização de pastagens semeadas biodiversas através da otimização da fertilização fosfatada.



Supported by:



Practical problem

Most Portuguese pastures are poor grasslands on degraded soils. Some farmers invest in improved and fertilized grasslands, namely sown biodiverse pastures, however their economic viability is threatened by production costs, namely phosphate fertilizers.

Partners

Type:

Agri enterprise
Research /Teaching
Agri Association
Agri enterprise

Name:

Terraprima – Serviços Ambientais, Sociedade Unipessoal Lda
Universidade de Évora; Instituto Superior de Agronomia
Associação dos Criadores de Bovinos da Raça Alentejana
Herdade dos Grous – Agricultura e Pecuária, Lda; Terraprima Sociedade Agrícola Lda; ZEA - Sociedade Agrícola Unipessoal,Lda; Tapada dos Números, Sociedade Agrícola,Lda; Sociedade Agrícola Herdade dos Padres,SA; Pedro Sacadura Teixeira Cabral Duarte da Silveira - Herdade do Azinhal
Fundação Eugénio de Almeida

Other company

Project

Objectives:

Optimize the use of fertilizers in sown biodiverse pastures by using remote data sensing for evaluating pasture nutrient needs and using Variable Rate Technology for fertilizer distribution.

Expected results:

Technological method for obtaining high-resolution phosphate fertilization prescription maps.
Obtain phosphate fertilization prescriptions in order to optimize pasture productivity and to reduce production costs.
Establish a service to farmers in improving the economic viability of sown biodiverse pasture.

Results so far/first lessons:

The first activities will be selection of experimental plots and obtaining satellite data. 3D terrain models will be obtained as well as soil measurements with optic sensors, capacitance sensors and electric conductivity sensors. Soil and plant samples will also be analysed. UAV flights will be performed, collecting multispectral images and correlating them with soil and vegetation measurements.

Who will benefit:

Farmers will benefit from optimizing pasture fertilization, improving its productivity and decreasing production costs.



Start: May/2017
End: December/2021

Budget: 503.033 €



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