

Production and use of 'zero-kilometre' substrates in nurseries

Summary

The members of this task force are working jointly to develop a local substrate. This will enable the application of the circular economy concept in nurseries. It will make it possible to better control the raw materials that make up the substrates. Synergies with other companies located close to the nursery are also to be generated.

Objectives

1. Produce, on the industrial scale, in the environs of the nursery, substrates based on forestry waste generated on the Belloch estate and supplemented with by-products richer in N and/or other fibrous materials.
2. Assess the properties of the composts obtained in relation to their use as substrate and determine the mixtures with other materials necessary to achieve the characteristics suitable for their use.
3. Study the behaviour of the mixtures obtained in a tree crop, in nursery conditions, with regard to fertilisation and also to irrigation.
4. Assess, from the environmental perspective, the process to obtain and use the substrates.
5. Determine the technical and economic viability of obtaining and using zero-kilometre substrates.
6. Disseminate the results of the project and provide the nursery staff with the knowledge they need to adopt techniques for the monitoring of the production system related to the use of the new substrates.

Description of initiatives outlined in the project

1. Production of compost with indigenous (zero-kilometre) materials.
2. Characterisation of the compost and formulation/characterisation of the substrates.
3. Agronomic assessment in the tree crop.
4. Assessment of the environmental impact of the production model.
5. Technical and economic viability.
6. Dissemination.

Expected results and practical recommendations

There are planned to be one or two indigenous, zero kilometre substrates based on forest residue that present optimal characteristics for application in nurseries. The formulation of the substrates should contain the least possible amount of materials from distant sources and, therefore, with significant environmental impact. The results could help avoid dependence on foreign markets and companies and increase the productivity and competitiveness of nurseries.

Task force leader

Entity: **Belloch Forestal SL**

Contact e-mail:

mateu.sans@belloch.eu

Typology of entity:

Forestry company

Task force coordinator

Other task force members (grant beneficiaries)

Other task force members

Entity: **IRTA**

Contact e-mail:
rafaela.caceres@irta.cat

Typology of entity:

Entity: **SAT 605 CAT**

Contact e-mail:
josep_serra@hotmail.com

Typology of entity:

Entity: **XURRI TERRES VEGETALS**

Contact e-mail:
enric@tervex.com

Typology of entity:
Forestry company

Subject area(s) of application

Plant production and horticulture
Waste, by-products and residues
management

Geographical area(s) of application

Province(s)

Girona
Barcelona

Region(s)

Vallès Oriental

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

A technical seminar will be held on the production of zero-kilometre substrates and their technical and environmental viability. A technical seminar will also be held on the effects on crops of the use of zero-kilometre substrates.

The result dissemination activities will produce two information sheets to be distributed to all associated nurseries in Catalonia (Catalan Federation of Nurseries). There will also be two results dissemination articles.

Project website

More information on the project

Project dates

Starting date (month-year): June 2018

Completion date (month-year):

Current status: *Underway*

Budget approved

Total budget: €114,200.00

DARP funding: €45,565.80

EU funding: €34,374.20

Own funding: €34,260.00


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: 012_2017