**CLEANLEACH**

*Working towards more sustainable nursery production*

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**Leachates in nurseries**

Cultivation of plants in containers, for gardening, landscaping and reforesting, facilities soil management and transfer to the final planting area. The leachates generated from this activity should be used and/or treated.

The CLEANLEACH system offers an alternative to traditional leachate management methods, making it possible to use the nutrients and irrigation water, and facilitating its purification.

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**What is CLEANLEACH?**

The CLEANLEACH system comprises technology for the recovery and treatment of leachates, based on the combination of a horizontal slow sand filter, constructed under the cultivation zone, and wetlands adjacent to it.

CLEANLEACH also refers to the project intended to raise awareness and market this technology in Europe, with the aim of expanding its use in gardening and agricultural production.

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**Working towards more sustainable production**

The markets are increasingly demanding the implementation of environmentally-friendly production systems, using natural resources and processes. In this respect, CLEANLEACH offers:

- More efficient irrigation and use of fertilisers
- Use and treatment of leachates in the same nursery
- Low cost implementation and maintenance

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**HOW IT WORKS**

**A. RECIRCULATION**

Use of leachate water (water + fertilisers) through the irrigation system

**B. PURIFICATION**

Treatment of water using artificial wetlands. Nitrates turn into $N_2$ (non-polluting atmospheric gas) and potassium and phosphorus levels are reduced.

**B1. DISPOSAL**

Disposal of purified water into the environment

**B2. RECIRCULATION OF THE TREATED WATER**

Addition of purified water to the irrigation system

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**About the project**

CLEANLEACH was developed by the IRTA (Spanish Food and Agriculture Research and Technology Institute) with the collaboration of the companies Naturalea, Buresinnova and Salix in the implementation and marketing of the product.

The CLEANLEACH Project is an initiative co-financed by the European Union’s Eco-Innovation Programme (ECO/12/332862), which supports projects aimed at preventing and/or reducing environmental impacts and promoting the best use of natural resources.

The development of the Project also relies on the collaboration of the nursery Sala Graupera (Sant Andreu de Llavaneres), where the first full-scale replica was constructed.