

Guide and recommendations of the propagation of *Lavandula stoechas* L.



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Keywords

Lavandula stoechas

Propagation

germination

Aromatics and Medicinal plants

natural remedies

aromatics

wild harvested plants

NWFP

Aromatic & Medicinal Plants

Scale

Global

National

Local

Context

This work was part of the EOPLANTMED Project (www.ecoplantmed.eu). The project aims to contribute to halting the loss of biodiversity and to promote a sustainable development model in the Mediterranean region by enhancing the conservation of native plants and promoting their use in habitat restoration and the plant production sector.

Objective

The *Lavandula* is an important species due to medicinal and aromatic properties. The local species population is suffering from Anthropozoic pressure improved by cutting and animal scuttling which made it essential to preserve the species population. Our work aims to test some ways of specie propagation.

Results

The main results of the tests seeds held in our laboratory showed an important germination rate about 80 % of. The transplantation of the new plants into peat mixed with soil showed a successful plant rate of about 90 %. The *Lavandula* is a native species which does not offer any form of protection in Tunisia. Seed germination is optimal at a temperature of 30 °C, with a photoperiod of 16 h light / 8 h dark in the peat. These results are very encouraging to better conserve this species with high economic value.



Recommendations

It is recommended to follow the main steps to get the best germination rate:

- Collecting, cleaning, and choosing the best seeds of the species
- Drying and conserving the seeds in 5 °C and 15 % humidity conditions for future use, or at -25 °C for long term storage.
- Applying an alternation between light (16 hours) and dark (8 hours) to obtain germination rates higher than 80%.
- Germination of the *Lavandula* requires no pre-treatment

Transplant the sprouted seeds into a substrate with a mixture of peat and sand at 25 °C in a greenhouse.



Impacts and weaknesses

The importance of these tests and essays is in helping us improve the state of the species, to identify one of the best methods for its propagation. Although we need to test the resilience of the new plants to natural habitat conditions. Also, more tests should be held using different provenances of the specie.



Future developments

The species is of great interest due to its content of essential oils, which are rich in monoterpenes and widely used for their antimicrobial, antifungal, and carminative and for their fine cosmetics. The leaves and flowers are endowed with antiseptic, antispasmodic, and analgesic properties. They are commonly used in the perfume, cosmetic, aromatic, and pharmaceutical industries.



Salma Sai

Further information

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About INCREDIBLE Project

INCREDIBLE project aims to show how Non-Wood Forest Products (NWFP) can play an important role in supporting sustainable forest management and rural development, by creating networks to share and exchange knowledge and expertise. 'Innovation Networks of Cork, Resins and Edibles in the Mediterranean basin' (INCREDIBLE) promotes cross-sectoral collaboration and innovation to highlight the value and potential of NWFPs in the region.



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