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"Exploring opportunities ... for managing natural resources and a better life for all"

ALBAMAP - Promoting optimal map cultivation in Albania

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Abstract

Albania is one of the leading countries in the production of medicinal and aromatic plants (MAP) for e.g. therapeutic purposes. Among all MAPs, sage (Salvia Officinalis) and lemon balm (*Melissa Officinalis*) are two of the most important for export. The harvesting of natural stocks still plays the most important role in MAP production, while MAP cultivation is less important. However, the natural stocks are threatened by harvesting, which is why MAP cultivation should be promoted. But farmers often lack the agricultural knowledge to produce MAP of optimum quality. This is particularly true for essential oils, as their quality is poorly reflected in the optical characteristics of the plant.

The ALBAMAP project, an Albanian-German research project, was launched to promote MAP cultivation in Albania. In order to optimise MAP cultivation, a science-to-field approach is applied. The science-to-field approach is based on three pillars. As part of the work of pillar 1, scientific studies are being carried out in the greenhouse and in the field to determine the best fertiliser and irrigation management with regard to optimum essential oil quality. The work in pillar 2 comprises the evaluation of the project developments by means of life cycle assessment and the involvement of all stakeholders. Special importance is attached to farmers and their traditional knowledge. In pillar 3, the development of a control system for optimal MAP production is planned. Irrigation and fertilisation will be automated and plant quality will be continuously monitored using a newly developed optical plant monitoring system. The objective of this work is to present the ALBAMAP project in detail and to show first results. In addition, an outlook on further work is given and a first conclusion of the ALBAMAP project is drawn.

Keywords: Essential oil, fertilisation, irrigation

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