

RESTORATION WITH MEDICINAL AND AROMATIC PLANTS IN MEDITERRANEAN FORESTS AND OPPORTUNITIES FOR YOUTH IN TURKEY



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INTRODUCTION

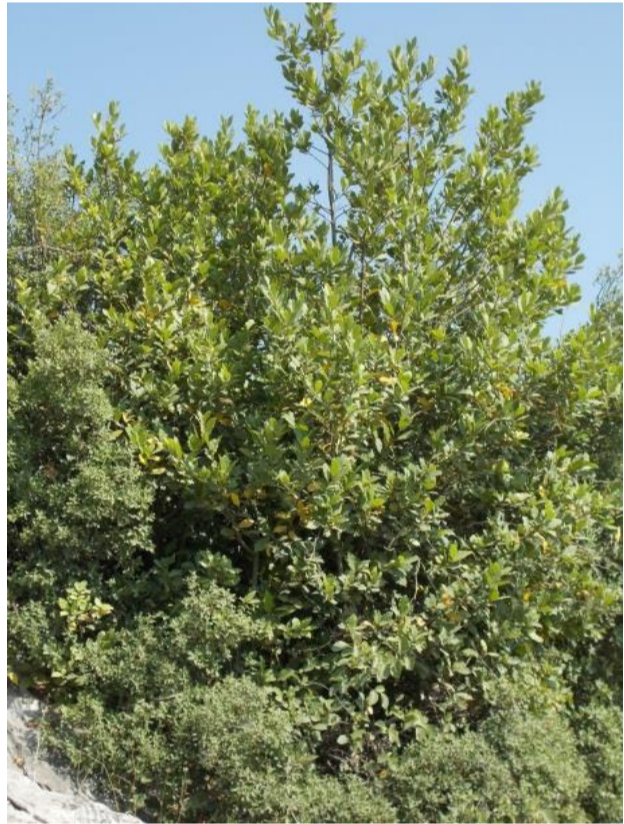
The Mediterranean ecosystem is unique in terms of plant species diversity. Medicinal and aromatic plants (MAP) used in many fields such as health, food industry, cosmetics, perfumery are a significant part of this richness. *Laurus nobilis*, *Origanum* sp., *Thymus* sp., *Ceratonia siliqua*, *Rosmarinus officinalis* are the most common MAP species for production in Eastern Mediterranean in Turkey. *Myrtus communis*, *Cistus* sp., *Salvia* sp., *Sideritis* sp., *Melissa officinalis*, *Hypericum* sp., *Erica* sp., *Arbutus* sp., *Rhus coriaria*, *Lavandula stoechas* are other species (1). In Turkey, various studies for the sustainable production of these species, which have high economic value and are imported and exported, are carried out by The General Directorate of Forestry (GDF). GDF increases the planting of MAP species in degraded forest areas. MAP production provides income for forest villagers and gives new opportunities for young people.

Some MAP Species in Eastern Mediterranean Forest Ecosystem in Turkey

The production makes by plans based on inventory studies and all kinds of precautions taken for sustainable production. In restoration work, planting and cultivating are carried out to increase medicinal and aromatic species in forest areas.

Bay Laurel (*Laurus nobilis* L.)

Bay laurel is one of Turkey's most critical exporting medicinal and aromatic plants. It spreads naturally along all the coastlines of Turkey, which leaves and fruits are used for production. Dried leaves are generally used as a spice. While the essential oil from the leaves is used in the food industry, the oil from fruits is used in soap making (2).



Laurus nobilis L.



Production of *Laurus nobilis* L.

Rosemary (*Rosmarinus officinalis* L.)

Rosemary is one of the most important medicinal and aromatic plants in the Eastern Mediterranean Region of Turkey. It uses as a spice and herbal tea in the food industry, an essential source of antioxidants. Rosemary is also consumed in aromatherapy, cosmetics, perfumery, and pharmaceutical industries (3).



Planting to *Rosmarinus officinalis* in degraded forest areas



Rosemary oil



RESULTS

In restoring Mediterranean forests, it is possible to MAP planting and cultivation in suitable ecological conditions. Ecological balance is provided to the restoration as made with these species, and accordingly, raw materials and income would obtain from these products. It is possible to cultivate MAP in state-owned degraded forest areas for a low rental price with the latest legal regulations in Turkey. In the Mediterranean forests, while young people could form their work area by MAP planting and its cultivating, degraded forest areas would be restored. MAP planting and cultivating could consider an opportunity for forest villagers and young entrepreneurs.

Thyme (*Thymus* sp., *Origanum* sp., *Satureja* sp., *Thymbra* sp.)

Species are belonging to *Thymus*, *Origanum*, *Satureja*, *Thymbra* genera are known as thyme. They are one of the most used spices, and their essential oil is also used medicinally. While species belonging to the *Thymus* and *Thymbra* are collected from nature, species belonging to the *Origanum* are to cultivation so that the needs are provided (4).



Cultivation of *Origanum syriacum* in Tarsus



Satureja sp. and *Thymbra* sp. in forest area



Other species, such as *Ceratonia siliqua*, *Myrtus communis*, *Cistus* sp., *Salvia* sp., *Sideritis* sp., *Hypericum* sp., *Erica* sp., *Arbutus* sp., *Rhus coriaria*, *Melissa officinalis*, could be used to plant and cultivate MAP.



Hypericum sp.



Cistus creticus



Lavandula stoechas



Arbutus sp.



Melissa officinalis



Myrtus communis



Salvia sp.



Rhus coriaria



Ceratonia siliqua



Erica sp.

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