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Thymus vulgaris
Family: Lamiaceae



Background

Essential oil crops are crops that have volatile, aromatic oils in certain parts of the plant. Essential oils are natural plant products which accumulate in specialised structures such as oil cells, glandular trichomes, and oil or resin vessels. The oil is extracted from the plant through steam distillation, chemical extraction or CO₂ extraction.

Thymus vulgaris is a small perennial sub-shrub, semievergreen groundcover that rarely grows more than 40 cm tall.

Origin and distribution

Thymus vulgaris is a native crop of the Western Mediterranean region, extending to South-eastern Italy.

Thyme can be grown in most provinces of South Africa. Major production areas have not been established as most commercial growers are cultivating it on a small scale.

Climatic and soil requirements

Thyme grows well in the Mediterranean region where winter rainfall ranging from 500 to 1 000 mm per year occurs. It prefers light, well-drained soils with a pH of 5,0 to 8,0. Although thyme grows easily, especially in calcareous light, dry, stony soils, it can be cultivated in heavy wet soils, however, it then becomes less aromatic.

Uses

The oil is used to preserve processed meat and butter, and in making chewing gum, ice cream, candy, and the liqueur Benedictine. In aromatherapy the distinct types, Thymol 'Red thyme oil', Linalol type for its very gentle soft action and thuyanol for antiviral properties are used.

Cultural practices

Planting

Plants should be planted 15 to 30 cm apart in the row with a row width of 60 cm. Transplants or seedlings and cuttings can be established in beds approximately 1.2 m wide, with 3 rows on each bed.

The best times to sow seeds and transplant cuttings, is in spring. In some cases sowing is done before winter.

Propagation

Thyme is propagated from seeds, stem cuttings, or layering. The source of thyme seeds have to be known as there are possibilities of hybridisation. To have homogenous plants it is advisable to make cuttings. Plantations may also be increased by dividing plants at their roots.

Fertilisation

A basal fertiliser application containing nitrogen, phosphorus, potassium and sulphur should be applied annually according to the soil analysis results. Excess nitrogen should be avoided because the quality of the oil may be affected.

Irrigation

Drip and overhead irrigation is suitable, but do not over-irrigate.

Weed control

Thyme has been established successfully without herbicides by planting the crop into a land covered with weed-suppressing plastic mulch. Organic mulches and hand-weeding are also used.

Pest and disease control

Pests are not very common on thyme, because the volatile oils of the plants have pest repellent properties. However, some whitefly, scale and spider mites may infest the plants.

Thyme suffers from few diseases but in wetter environments with imperfect soil drainage, *Rhizoctonia* root rot can cause problems.

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Weed-free; thyme on research trials in North West Province