

## Exploitation of spontaneous aromatic plants of Central Italy

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Aromatic plants, as source of essential oils having fragrant scent, flavoured notes and possessing biological properties, are non food plants of economical importance in different application fields. Owing to a general popularity of the use of natural substances instead of synthetic compounds, an increase in their marked demand is predictable and, for this reason, to improve the knowledge of the biodiversity of aromatic plants can represent a valuable contribution to their exploitation. In our study, five spontaneous species of aromatic plants collected in different natural habitats of the Abruzzi Apennines (Central Italy), were classified and characterized on the basis of their essential oil composition. In particular, the plants were sage (*Salvia officinalis* L. var. *angustifolia* Ten.), hyssop (*Hyssopus officinalis* L. subsp. *aristatus* (Gogron) Briq.), winter savory (*Satureja montana* L. ssp. *montana*), artemisia (*Artemisia petrosa* (Baumg) Jan. Ex. D.C. ssp. *eriantha* (Ten.) Giac. e Pignatti) and calamint (*Calamintha nepeta* (L.) Savi subsp. *nepeta*). The essential oils, obtained by steam distillation of fresh material and characterized by GC/MS, showed that sage and artemisia were rich in cis - thujone (39% and 78% respectively), winter savory had as main compounds p-cymene (31.6%) and thymol (29.6%), calamint was characterized by high contents of menthone (41.7%) and pulegone (21.1%) whereas hyssop strains could be classified as three different chemotypes: methyl eugenol > limonene > 1,8-cineole, myrtenol >  $\alpha$ -pinene > isopinocampone and  $\alpha$ -pinene > 1,8-cineole > methyl eugenol.