

# Morphological and Anatomical Studies of *Artemisia Vulgaris* L. and *Santolina Chamaecyparissus* L. (Asteraceae)

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## Abstract

The main objective of the present study was to carry out a detailed botanical study (phytography) of two plant species; namely, *Artemisia vulgaris* L. and *Santolina chamaecyparissus* L. under local conditions to get a better insight on their morphology and anatomy; in addition to the volatile oil composition. Plant identification and authentication procedures were carried out at the Herbarium, Flora & Phyto-Taxonomy Researches, Horticulture Research Institute, Agricultural Research Center, Dokki, Giza, Egypt (CAIM). Cultivation was carried out on October 20th., 2006 and the field work lasted to February 2009. The experiment was designed in RCB at the rate of 4 replicates (a replicate 3×4 m, 5 ridges 60 cm apart and plants 50 cm distance in between). Two plants were designated in each of the four replicates (total of 8 plants) of each of the studied species to follow up the vegetative characters at monthly intervals. Anatomical studies were carried out for various organs of the two studied plant species. At opened flowers stage, the volatile oil of mugwort composed 32 components and volatile oil of lavender cotton included 36 components.

**Keywords:** Anatomy; *Artemisia vulgaris* L.; Lavender cotton; Morphology; Mugwort; *Santolina chamaecyparissus* L.; Volatile oil.