

Conference abstract PO-62

## **Study of Qualitative Characteristics of Essential Oil from Selected Species of the *Tanacetum* L. Genus**

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Medicinal plants are the main natural source of medicinal substances and natural drugs. Among the plants representing a potential source of such drugs is the *Tanacetum* L. genus.

The content of essential oils in leaves and flowers has been determined by water steam distillation according to the European Pharmacopeia and the Slovak Pharmaceutical Code. Particular essential oil components have been identified by comparing their relative retention times, retention indices and mass spectra of each component with the authentic samples from the topical KHS WILEY 275 (2001). The GC/MS chromatography was used to separate 46 major and minor components, and we have identified 36 of them. Those components represented 75 to 92% of essential oils of *Tanacetum vulgare* L., *T. parthenium* (L.) Schultz-Bip., *T. agrophyllum* (L.) C. Koch, and *T. balsamita* respectively. The main components in most of the species were 1,8-cineole, borneol, bornylacetate, camphor,  $\alpha$ -pinene,  $\alpha$ - $\beta$ -thujone and camphene. Major differences, but also close phylogenetic relations have been found between particular components of the examined species [1, 2].

- [1] Vaverkova Š, Mikulašova M, Birosova L, Sloboda P. Study of qualitative properties in selected species of the *Tanacetum* L.genus. *Nova Biotechnologica* VI, I, 2007; 16–17.
- [2] Vaverková Š, Birošová L, Lupták P, Brazdovičová B. Content of essential oil obtained from flowerheads in selected species *Tanacetum* L. genus and identification of selected components. *Herba Pol.* 2008; 54: 22–29.