Chemical Composition and Biological Activity of *Nepeta parnassica* Oils and Isolated Nepetalactones

Giorgos Gkinis, Olga Tzakou*, Dimitra Iliopoulou, and Vassilios Roussis

Department of Pharmacognosy and Chemistry of Natural Products, School of Pharmacy, University of Athens, Panepistimiopolis Zografou, Athens 15771, Greece. Fax: +21 07 27 45 91. E-mail: tzakou@pharm.uoa.gr

* Author of correspondence and reprint requests

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Essential oils of *Nepeta parnassica*, collected at different developmental stages, were analyzed by means of GC/MS. From the fifty-five identified constituents in samples A and B, representing 94.8 % and 98.7 % of the oils respectively, 4aα,7α,7aβ-nepetalactone (22.0 %), 1,8-cineole (21.1 %), α-pinene (9.5 %) and 4aα,7β,7aβ-nepetalactone (7.9 %) were the major components of sample A (vegetative stage), whereas in sample B (flowering stage) the main contributors were 1,8-cineole (34.6 %), 4aα,7α,7aα-nepetalactone (17.3 %), α-pinene (11.4 %) and 4aα,7α,7aβ-nepetalactone (8.9 %). The oils were tested on human health important insects such as the *Pogonomyrmex* sp. ants and the *Culex pipiens molestus* mosquitoes with promising results on insect repellency/toxicity.

Key words: Nepeta parnassica, Essential Oil, Nepetalactones, Insect Repellency