

Chemical Composition of Hips Essential Oils of Some *Rosa* L. Species

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The chemical composition of the hips essential oils of 9 taxa of *Rosa* L. was analyzed and compared using the standardized analytical GC and GC/MS methods. The volatile hips oil compositions for these species are presented. All oil samples were dominated by following components: vitispiran (isomer), α -*E*-acaridial, dodecanoic acid, hexadecanoic acid, docosane (C22), β -ionone, 6-methyl-5-hepten-2-one, 2-heptanone, heptanal, myristic acid and linolic acid. Statistical analyses of 97 GC peaks of these oils were used to distinguish compositional patterns. There appeared to be correlation between the essential oil patterns and the classification within *Rosa* L. Cluster analysis of the composition of main components clearly showed two groups, one constituted by *R. rugosa* Thunb. from the Cinnamomea section, and the other constituted by the remaining taxa from the Caninae section.

Key words: GC-MS, Essential Oils, *Rosa* L.