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ESSENTIAL OIL PROFILE OF *SATUREJA KITAIBELII* WIERZB. EX HEUFF. IN RELATION TO VEGETATION STAGE

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The genus *Satureja* L. (Lamiaceae) has around 30 species distributed on sunny and rocky cliffs. *Satureja kitaibelii* Wierzb. ex Heuff. is endemic to the Balkan (southwest Romania, eastern Serbia, and northwest Bulgaria). *S. kitaibelii* also known in Serbia as Rtanj tea is used as a culinary herb, as well as in traditional medicine. It is used as a stomachic, carminative, expectorant, and as an aphrodisiac (1). The essential oil composition of *S. kitaibelii* is very variable. According to some authors *S. kitaibelii* essential oil showed three potential chemotypes: geraniol, limonene and *p*-cymene (2). A search of the available literature revealed no data on essential oil profile of *S. kitaibelii* in relation to vegetation stage. Given the importance of S. kitaibelii as a culinary herb and medicinal remedy, the aim of the present study was to examine the essential oil from natural populations *S. kitaibelii* at the Kravlje village, southeast Serbia during different vegetation stage. Hydrodistilled essential oils (EO) of aerial parts of *S. kitaibelii* Wierzb. ex Heuff. were analyzed by Gas Chromatography with Mass Selective Detector, Flame Ionization Detector (GC–MS/FID). Most abundant components among the EO volatiles are: geraniol (2.9-42.1%), limonene (8.7-15.3%) and p-cimene (9.1-11.9%). The obtained results indicate the fact that in geraniol chemotype, p-cymene has been one of three dominant components, which is not in accordance with the conclusions of some authors (2). Based on our experience, it can be stated that the chemotypes of essential oils should be analyzed in great detail and systematically, avoiding final conclusions.

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PROFIL ETARSKOG ULJA *SATUREJA KITAIBELII* WIERZB. EX HEUFF. U ODNOSU NA FAZU VEGETACIJE

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Rod *Satureja* L. (Lamiaceae) ima oko 30 vrsta rasprostranjenih na sunčanim i kamenitim liticama. *Satureja kitaibelii* Vierzb. ek Heuff. je endemična na Balkanu (jugozapadna Rumunija, istočna Srbija i severozapadna Bugarska). *S. kitaibelii* u Srbiji je poznata i kao rtanjski čaj, koristi se kao kulinarska biljka, takođe u tradicionalnoj medicini. Koristi se kao karminativ, ekspektorans i kao afrodizijak. Sastav etarskog ulja *S. kitaibelii* je veoma promenljiv. Prema nekim autorima etarsko ulje *S. kitaibelii* poseduje tri potencijalna hemotipa: geraniol, limonen i *p*-cimen (2). Pretragom dostupne literature nisu pronađeni podaci o profilu eterskog ulja *S. kitaibelii* u odnosu na fazu vegetacije. Imajući u vidu značaj *S. kitaibelii* kao biljke korišćene u kulinarstvu i pomoćnog lekovitog sredstva, cilj ove studije bio je ispitivanje etarskog ulja iz prirodne populacije *S. kitaibelii* u selu Kravlje, jugoistočna Srbija tokom različitih faza vegetacije. Hidrodestilovana etarska ulja (EO) nadzemnih delova *Satureja kitaibelii* Vierzb. ek Heuff. analizirani su gasnom hromatografijom sa masenim selektivnim detektorom, spregnutim sa plamen jonizacionim detektorom (GC-MS/FID). Najzastupljenije komponente EO su: geraniol (2,9-42,1%), limonen (8,7-15,3%) i p-cimen (9,1-11,9%). Dobijeni rezultati ukazuju na činjenicu da je u geraniol hemotipu etarskog ulja *p*-cimen bio jedna od tri dominantne komponente, što nije u skladu sa zaključcima nekih autora (2). Na osnovu našeg iskustva, može se konstatovati da hemotipove etarskih ulja treba detaljno i sistematski analizirati, izbegavajući konačne zaključke.

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