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## The new data on the variability of essential oil of Teucrium montanum L. from Balkan Peninsula

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Teucrium montanum L. is a semi-woody, evergreen small shrub, widely distributed in Europe occurring from the seacoast to the subalpine and alpine belts. The study aimed to investigate and compare the chemical composition of essential oil of aerial parts of T. montanum from 24 populations collected from West, Central, and South West Balkans. The essential oils were obtained by hydrodistillation and qualitative and quantitative analysis was performed by GC-FID and GC-MS. The dominant compounds were oxidized sesquiterpenes (24.83–85.75%), then sesquiterpene hydrocarbons (3.00-62.81%), and oxidized monoterpenes (0-27.78%). Cluster analysis revealed 10 clearly separated groups. First group (Žumberak) is completely separated and characterized by high germacrene-D-4-ol (63.17%), the second (Gjergjevice) by high shyobunol (51.23%), the third (Vratna) by high (dehydro)-sesquicineole-acetate (45.29%), the fourth (Ostrovice) by high epi-α-cadinol (36.80%), the fifth (Nera canyon) by high limonene (36.65%), sixth group (Orovica, Sićevo, Galičica) by high cis-sesquisabinene hydrate (18.73-29.05%), seventh group (Štrpce, Dobrilovina) by high γ-cadinene (13.43–23.06%), eighth group (Tara, Durmitor, Biokovo, Fužine) by moderate germacrene-D-4-ol (19.76–23.44%), and the ninth large group (Potoci, Lovćen, Orjen, Premantura, Vodice, Pletvar, Senj, Oštarije, Trebinje, Korita) by germacren D (6.15–33.87%). Such a high variability needs more research to define relationships among populations.

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