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PP103. The composition of essential oil of *Veronica persica* Poir. from Istanbul

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Previously, phenylethanoid and iridoid glycosides were reported from *Veronica persica* Poir. (Plantaginaceae) [1]. However, to the best of our knowledge, there are no reports on its essential oil or volatiles' composition. The aim of the current study was to determine the essential-oil composition of *Veronica persica* to provide information on the chemistry of volatiles of this species. The plant material used in this study was collected from Kanuni Sultan Süleyman City Forest in Istanbul in January 2015. The essential oil of air-dried aerial parts of *V. persica* was obtained by hydrodistillation (3 h) using a Clevenger-type apparatus. The essential-oil yield obtained from the distillation of 16.5 g of plant material was below 0.01 mL. The essential oil was trapped in *n*-hexane (1 mL) and dried over anhydrous Na_2SO_4. The essential oil was analyzed without further dilution by GC-MS. The essential oil was analyzed with an Agilent 5977 MSD GC-MS system operating in EI mode; injector and MS transfer line temperatures were set at 250 °C. Splitless injection was used in the analysis. Innowax FSC column (60 m x 0.25 mm, 0.25 µm film thickness) and helium as the carrier gas (1 mL/min) were used in GC-MS analyses. The oven temperature program was: 60 °C for 10 min and then raised to 220 °C at a rate of 4 °C/min, afterward the temperature was kept constant at 220 °C for 10 min and then raised to 240 °C at a rate of 1 °C/min. Mass spectra were recorded at 70 eV with the mass range *m/z* 35-425. Relative amounts of the separated compounds were calculated from the integration of the peaks in MS chromatograms. Identification of essential-oil components was carried out by comparison of their retention indices (RI), relative to a series of *n*-alkanes (C_5 to C_{30}), with the literature values, as well as by mass spectral comparison. *Veronica persica* oil was mainly composed of the diterpene *trans*-phytol and *n*-alkanes. Seventeen compounds were identified representing 92.1% of the detected oil constituents. The main components of the oil were *trans*-phytol (24.4%), nonacosane (15.9%), heptacosane (13.1%), and hentriacontane (7.2%). The essential oil did not contain any monoterpenes but contained sesquiterpenes in only minor amounts. We believe the existence of the diterpene *trans*-phytol in high quantity points to the possibility that other monoterpenes and sesquiterpenes might also be present in the plant, but that they might be observed through headspace or SPME sampling.

Reference:
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