Selected *Origanum dubium* Boiss Genotypes With High Essential Oil Yields and Carvacrol Rates

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Origanum dubium Boiss is one of the economically important wild oregano species in Turkey and it is collected from the natural flora of Antalya. This species is used mainly for essential oil production due to its high essential oil and carvacrol yield. In preliminary works, one hundred genotypes of *Origanum dubium* originated from the wild flora of Antalya were selected according to their agronomic and chemical features. Also, essential oil colours were observed in all genotypes since it could be important for marketing choices. This study was conducted in Antalya located in Mediterranean Region of Turkey and this location was characterized by Mediterranean climate. Essential oils of different genotypes were obtained by hydrodistillation of the aerial parts of plants and they were analysed by GC-MS. According to the results, ten genotypes were selected and propagated by stem cuttings. After that, each genotype (clone) was planted in a separate plot with three replications. Among the selected genotypes carvacrol was the major component and followed by p-cymene, γ-terpinene, α-thujene and myrcene. Essential oil yields varied between 8% to 11.5%; carvacrol rates varied between 82.73% to 88.21%. These genotypes could be good candidates for developing new cultivars.

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