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GC-MS Analysis and Antibacterial Activity of Cultivated Satureja cuneifolia Ten. Essential Oil

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<u>Abstract:</u> The composition of the essential oil of Satureja cuneifolia Ten. cultivated in Konya, Turkey, was investigated by capillary GC-MS. The compounds were characterized by comparison with library searches. Six main compounds were identified. Carvacrol was the dominant component, comprising 59.28% of the essential oil. The oil also contained 15.72% thymol, 9.69% p-cymene, 4.16% γ -terpinene, 1.70% linalool and 1.25% borneol. The antibacterial activity of the essential oil of S. cuneifolia and its components was determined by a semiquantative disc-diffusion method, and the minimum inhibitory concentration (MIC) was determined based on a micro-well dilution method against strains of Pseudomonas aeruginosa, Bacillus cereus, Sarcina lutea, Escherichia coli, and Staphylococcus aureus}.

Key Words: Satureja cuneifolia, Lamiaceae, GC, Essential oil, Antibacterial activity

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