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## Based on the Quantity, Temperature and Time, The Examination of Variability in Odorous Components of *Tanacetum abrotanifolium* from Turkey: An Exclusive Gradient Work

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**Abstract:** In these exclusive study accomplished by plant of *Tanacetum abrotanifolium* collected from natural habitats in the eastern region of Anatolia in Turkey and was studied for the first time. Twenty-three volatile components of this species were analyzed with head-space solid micro-extraction (HS-SPME) and determined by gas chromatography mass spectrometer (GC-MS) for the first time. Moreover, while this process depending on the temperature, time and amount are formed twelve different gradients. Carried out according to these the gradients eucalyptol, in the range of 20.8 % to 31.5 % in the all those gradient, was determined as main components, sort it followed by components camphor by 6.94-25.79 % and p-cymene by 8.37-13.6 %. Executed these different gradients revealed that are specific and different operating conditions for each compound.

**Keywords:** *Tanacetum abrotanifolium*, eucalyptol, p-cymene, camphor, HS-SPME, GC-MS, gradient.