

## The Essential Oil of *Sideritis athoa* Papanikolaou et Kokkini

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**ABSTRACT:** The essential oil of *Sideritis athoa* Papanikolaou et Kokkini was studied by GC and GC/MS. Forty compounds were identified, with myrcene (39.06%) being in most abundance.

**KEY WORD INDEX:** *Sideritis athoa*, Labiatae, essential oil composition, myrcene.

**PLANT NAME:** *Sideritis athoa* Papanikolaou et Kokkini (1), local name: Kedi Kuyrugü çayı.

**SOURCE:** Eybek Mountain-Edremit in Balikesir, Turkey. Voucher specimens are kept at the Herbarium of the Faculty of Pharmacy (ESSE 9211).

**PLANT PART:** Aerial parts of the plant were air-dried and hydrodistilled using a Clevenger apparatus to produce an oil in 0.25% yield.

**PREVIOUS WORK:** None.

**PRESENT WORK:** The essential oil was analyzed by capillary GC and GC/MS using Shimadzu GC-9A with CR4A integrator and Shimadzu GC/MS QP2000A system, respectively. GC and GC/MS conditions were previously published (2).

The compounds identified in the oil are listed as follows:

α-pinene (6.47%)	limonene (1.03%)
camphene (0.09%)	1,8-cineole (0.33%)
β-pinene (12.34%)	(E)-2-hexenal (0.17%)
sabinene (0.28%)	5-methyl-3-heptanone* (0.02%)
δ-3-carene (0.32%)	p-cymene (0.08%)
myrcene (39.06%)	6-methyl-5-hepten-2-one (0.01%)

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3-hexenol <sup>+</sup> (0.01%)	$\beta$ -caryophyllene (0.28%)
6-methyl-3-heptanol (0.02%)	terpinen-4-ol (0.01%)
nonanal (0.23%)	acoradiene* (4.12%)
perillene (0.04%)	$\alpha$ -terpineol (4.09%)
1-octen-3-ol (0.10%)	$\beta$ -himachalene + isoborneol (4.41%)
$\alpha$ -copaene (0.29%)	germacrene D (1.81%)
camphor (0.02%)	ar-curcumene* (6.52%)
$\beta$ -bourbonene (0.15%)	calamenene (0.43%)
linalool (0.40%)	p-cymen-8-ol (0.03%)
octanol (0.03%)	nerolidol <sup>+</sup> (0.04%)
isopulegol (0.03%)	spathulenol (1.05%)
cedr-8-ene* (0.03%)	nonanoic acid (0.14%)
bornyl acetate (0.10%)	thymol (0.14%)
$\alpha$ -bergamotene (0.19%)	

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\* tentatively identified by GC/MS data alone

+ isomeric form not characterized

## REFERENCES

1. P. H. Davis, *Flora of Turkey and the East Aegean Islands*. Vol. 10, p 203, University Press, Edinburgh (1988).
2. K.H.C. Baser and N. Öztürk, *Composition of the essential oil of *Dorystoechas hastata*, a monotypic endemic from Turkey*. J. Essent. Oil Res., **4**, 369-374 (1992).

