ESSENTIAL OIL COMPOSITION OF *Platychaete aucheri* FROM IRAN

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The essential oil of *Platychaete aucheri* Boiss. was examined by GC and GC-MS. The constituents of the oil are summarized in Table 1. The components are arranged in order of GC elution from HP-5 column. Seventy-two components representing 97.9% of the total oil were characterized. It contains about 83% oxygenated monoterpenes, with myrtenol (60.4%) and borneol (16.8%) as the main constituents. The synonym name of *P. aucheri* is *Pulicaria persica* Jaub. et Spach., and in our literature review, we found a few reports on it. The essential oil of *Pulicaria gnaphalodes* (Vent.) Boiss. from Iran was investigated by GC, GC-MS, and NMR spectroscopy. The main components of the oil were α-pinene (34.1%), 1,8-cineol (11.9%), and cadina-1(10),4-dien-8α-ol (11.0%) [1]. In the other study the main constituents of the volatile oil of *Pulicaria crispa* (Forssk.) Benth. exoliv. was δ-cadinene (32.8%), α-elemene (7.4%) and sabinol (7.0%) [2], which were not the main compounds of the oil of *P. aucheri*.

TABLE 1. The Chemical Constituents of the Essential Oil of *Platychaete aucheri* Boiss.

Compound	RI	%	Compound	RI	%
α-Pinene	938	Tr.	Myrtenol	1195	60.4
Camphene	950	Tr.	Bornyl acetate	1289	1.4
Thuja-2,4(10)-diene	960	Tr.	Limonen-10-ol	1290	0.2
6-Methyl-5-hepten-2-one	986	Tr.	Carvacrol	1302	0.2
Dehydro-1,8-cineole	990	0.1	2*E*,4*E*-Decadienal	1320	0.1
Mesitylene	995	Tr.	Myrtenyl acetate	1329	0.5
Octanal	999	Tr.	Eugenol	1361	0.2
E,*E*-2,4-Heptadienal	1015	Tr.	α-Copaene	1377	0.2
α-Terpinene	1017	Tr.	β-Bourbonene	1387	0.8
p-Cymene	1025	Tr.	*cis*-Jasmone	1396	0.2
1,8-Cineole	1030	0.4	Methyl eugenol	1403	0.2
Z-β-Ocimene	1036	Tr.	(*E*)-Caryophyllene	1421	0.7
Benzeneacetaldehyde	1042	0.1	β-Copaene	1433	0.1
γ-Terpinene	1056	0.1	Aromadendrene	1444	0.1
m-Tolualdehyde	1069	Tr.	α-Humulene	1453	0.1
6-Camphenone	1095	0.3	Geranyl acetone	1456	0.1
Linalool	1101	0.8	*allo*-Aromadendrene	1465	0.1
Camphor	1144	0.2	Cabreuva oxide B	1464	0.1
trans-Verbenol	1148	2.2	Cabreuva oxide D	1478	0.1
Borneol	1168	16.8	Germacrene-D	1484	Tr.

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TABLE 1. (continued)

Compound	RI	%	Compound	RI	%
(*E*)-β-Ionone	1487	0.1	α-Eudesmol	1655	1.1
Neryl isobutyrate	1492	0.1	Pentadecanal	1711	0.1
Pentadecane	1500	0.1	Tetradecanoic acid	1786	0.1
γ-Cadinene	1514	0.1	Octadecane	1800	0.1
δ-Cadinene	1523	0.2	6,10,14-Trimethyl-2-pentadecanone	1847	0.3
α-Calacorene	1543	0.1	1-Nonadecene	1892	0.1
Elemol	1554	0.9	Nonadecane	1900	0.1
E-Nerolidol	1564	Tr.	Farnesyl acetone	1915	0.2
(*Z*)-3-Hexenyl benzoate	1570	0.1	Methyl hexadecanoate	1927	Tr.
Caryophyllene oxide	1585	2.6	Hexadecanoic acid	1980	0.1
Salvial-4(14)-en-1-one	1595	0.1	Eicosane	2000	0.1
Hexadecane	1600	0.2	Kaurene	2039	0.2
Cedrol	1605	0.4	Heneicosane	2100	0.1
Humulene epoxide II	1610	0.2	Phytol*	2115	0.3
γ-Eudesmol	1635	0.8	Docosane	2200	0.1
β-Eudesmol	1652	2.1	Tricosane	2300	Tr.

Tr.: trace (<0.05%), RI: retention indices relative to C_8-C_{28} *n*-alkanes on HP_5. The components are listed in order of elution from the HP-5 column, *Correct isomer not identified.

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