

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in *Mentha longifolia***

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,2-EPOXYNEOMENTHYL-ACETATE	Shoot	1	3190		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
67	1,8-CINEOLE	Shoot	30	10930	0.021156215665233555	
0	1-OCTEN-3-OL	Shoot	1	150	0.02798933004139073	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-CARENE	Shoot	10	130	-1	Planta Medica, 57: A83, 1991.
0	2-METHYL-BUTYL-2-METHYL-BUTYRATE	Shoot	--	20		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-PENTADECANONE	Shoot	15	395		Planta Medica, 57: A83, 1991.
0	3-CARENE	Shoot	--	30	1.42028408522841	Planta Medica, 57: A83, 1991.
2	3-OCTANOL	Shoot	1	2395	5.319914789020483	
0	3-OCTYL-ACETATE	Shoot	--	40	1.413873784152749	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	4-HYDROXY-PIPERITONE	Shoot	1	1065		
0	4-HYDROXYPERICONE-OXIDE	Shoot	150	570		Fitoterapia No.60: 349.
0	5,5,4'-TRIHYDROXY-7,3'-DIMETHOXYFLAVONE	Plant	--	--		
0	5,6,4'-TRIHYDROXY-7,3'-DIMETHOXYFLAVONE	Plant	--	--		
0	5-HYDROXYCHROMONE-7-RUTINOSIDE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ACACETIN-7-RUTINOSIDE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALLO-AROMADENDRENE	Shoot	--	380	0.3121646925060578	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ALPHA-CADINOL	Shoot	34	250	3.6671319397513846	Planta Medica, 57: A83, 1991.
0	ALPHA-CARYOPHYLLENE	Shoot	45	285	-0.23326606283137005	Planta Medica, 57: A83, 1991.
0	ALPHA-FARNESENE	Shoot	18	100	1.4607834411202152	Planta Medica, 57: A83, 1991.
0	ALPHA-GURJUNENE	Shoot	--	1	-1.0123402787476072	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Shoot	11	70	-0.13159795789038686	Planta Medica, 57: A83, 1991.
28	ALPHA-PINENE	Shoot	7	1065	-0.04123398777705887	
13	ALPHA-TERPINENE	Shoot	--	170	-0.004806475844184345	
0	ALPHA-TERPINENYL-ACETATE	Plant	--	605		Planta Medica, 57: A83, 1991.
23	ALPHA-TERPINEOL	Shoot	1	1175	0.9256745012139821	
0	ALPHA-YLANGENE	Shoot	--	85	1.4141951037901395	Planta Medica, 57: A83, 1991.
0	APIGENIN-7-GLUCURONIDE	Plant	--	--		
0	BETA-BOURBONENE	Shoot	1	535	4.321101307401028	
0	BETA-CARYOPHYLLENE	Shoot	30	5700	8.013638481250267	
0	BETA-COPAENE	Shoot	--	1585		
0	BETA-CUBEBENE	Shoot	19	200	0.15529214839619873	Planta Medica, 57: A83, 1991.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	BETA-ELEMENE	Shoot	--	275	0.5927988006074945	
13	BETA-PINENE	Shoot	28	1160	-0.0398446940909524	
0	BETA-YLANGENE	Shoot	--	340	1.739887818061042	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	BORNEOL	Shoot	1	1250	0.8099246345244387	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
12	BORNYL-ACETATE	Shoot	1	175	-0.11715337786974139	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
9	CAMPHENENE	Shoot	--	385	-0.0987549654618178	
19	CARVONE	Shoot	--	29560	5.1429437483451235	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Shoot	110	9995	4.379447073242362	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Shoot	--	835	1.4318059365230096	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-3-HEXYNYL-2-METHYLBUTYRATE	Shoot	--	225		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-BETA-FARNESENE	Shoot	28	325		Planta Medica, 57: A83, 1991.
0	CIS-CARVEOL	Shoot	10	115	-0.20432590278626614	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-CARVYL-ACETATE	Shoot	--	530	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-DIHYDROCARVONE	Shoot	--	5090	-0.0755247022830521	
0	CIS-JASMONE	Shoot	--	85	1.3180106481034386	
3	CIS-OCIMENE	Shoot	1	685	2.6374819692309295	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-PIPERITONE-OXIDE	Shoot	1	9765	1.4051805941396913	
9	DELTA-CADINENE	Shoot	--	140	0.9634066643685961	
2	DIHYDROCARVEOL	Shoot	1	3150	1.4142135623730951	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	DIHYDROCARVYL-ACETATE	Shoot	--	3570	1	
0	DIOSMETIN-7-RUTINOSIDE	Shoot	--	--		
34	DIOSMIN	Plant	--	--		
4	DIOSPHENOL	Shoot	4770	18125		
0	EO	Plant	10000	38000	2.147804028759002	
0	ERIODICTYOL-7-RUTINOSIDE	Plant	--	--		
76	EUGENOL	Shoot	--	--		
0	GAMMA-CADINENE	Shoot	1	75	-0.06623553837467899	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Shoot	--	57	-0.35495130817227305	
35	GERANIOL	Shoot	1	115	-0.4373077769387356	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	GERANYL-ACETATE	Shoot	1	45	-0.4289795641877345	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
2	GERMACRENE-D	Shoot	140	8850	4.5910282751920635	
0	HEDYOSMIN	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	HESPERIDIN	Plant	--	--		
0	HESPERITIN-7-RUTINOSIDE	Plant	--	--		
0	ISOBUTANAL	Shoot	10	38		Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
0	ISODIHYDROCARVYL-ACETATE	Shoot	35	370		Planta Medica, 57: A83, 1991.
1	ISOMENTHOL	Shoot	--	190	-0.6584710029748253	Planta Medica, 57: A83, 1991.
3	ISOMENTHONE	Shoot	--	16065	2.323453721592974	
0	ISOMENTHYL-ACETATE	Shoot	--	95	-1	Planta Medica, 57: A83, 1991.
0	ISOPIPERITENONE	Shoot	1	115	2.062060258043236	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Shoot	7	3040	1.2190702567969351	
0	LINALOL	Shoot	10	33360	5.831890498983289	
53	LINALOOL	Shoot	10	33360	1.0005419775185522	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LUTEOLIN-7-GLUCOSIDE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	LUTEOLIN-7-GLUCURONIDE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LUTEOLIN-7-RUTINOSIDE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	MENTHOFURAN	Shoot	--	14570	2.447922371975267	
63	MENTHOL	Shoot	--	620	0.29142386877781745	
30	MENTHONE	Shoot	--	4485	-0.05903408796777609	
2	MENTHYL-ACETATE	Plant	43	275		Planta Medica, 57: A83, 1991.
22	MYRCENE	Shoot	17	550	0.2854137429610451	
5	MYRTENAL	Shoot	1	100	-0.1860343737134976	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. J. Ess. Oil Res., 3: 57.
2	MYRTENOL	Shoot	1	35	-0.19316706460982225	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. J. Ess. Oil Res., 3: 57.
0	NEODIHYDROCARVEOL	Shoot	50	645	1.414213243437181	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NEODIHYDROCARVYL-ACETATE	Plant	--	315		Planta Medica, 57: A83, 1991.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NONANAL	Shoot	1	22	2.3341311966504157	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
0	OCTANOL	Shoot	1	34	2.2283528536386723	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
0	OCTANYL-ACETATE	Shoot	--	125		Planta Medica, 57: A83, 1991.
16	P-CYMENE	Shoot	1	23	-0.4831699125902253	
2	PHENYLETHYL-2-METHYLBUTYRATE	Shoot	1	60		Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
3	PIPERITENONE	Shoot	1	9920	3.3658952187586366	
2	PIPERITENONE-OXIDE	Shoot	1	22380	2.635518112325883	
0	PIPERITOL	Plant	--	--		
7	PIPERITONE	Shoot	--	30400	5.6949532593088605	
0	PIPERITONE-OXIDE	Shoot	5700	30400	1.4130369257695679	
28	PULEGONE	Shoot	--	26600	-0.059281243922669244	
44	QUERCITRIN	Plant	--	--		
57	ROSMARINIC-ACID	Plant	--	29000	0.038348584928534366	
0	ROTUNDIFOLINE	Shoot	3320	12615		
0	ROTUNDIFOLINE	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Shoot	20	750	0.5026397896400224	
0	SPATHULENOL	Shoot	--	1125	6.080240355798698	
0	TAU-CADINOL	Shoot	--	2700		Planta Medica, 57: A83, 1991.
23	TERPINEN-4-OL	Shoot	1	800	0.16443270447025435	
9	TERPINOLENE	Shoot	--	20	-0.22817845236300732	
71	THYMOL	Shoot	1	15	-0.3291951998363978	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
0	THYMONINE	Plant	--	--		
1	TRANS-CARVEOL	Shoot	1	340	-0.14188026442592658	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-CARVYL-ACETATE	Shoot	--	1	-0.624207579141803	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-DIHYDROCARVONE	Shoot	--	6965	2.524203703379644	
0	TRANS-FARNESOL	Shoot	--	85		Planta Medica, 57: A83, 1991.
0	TRANS-OCIMENE	Shoot	1	38	-0.0753209884097984	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-PIPERITONE-OXIDE	Shoot	80	26900	1.4132300020851452	
0	TRANS-SABINENE-HYDRATE	Shoot	1	80	-0.11758293122961287	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
6	UMBELLULONE	Shoot	27	168	1.413905734276786	Planta Medica, 57: A83, 1991.

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1	VIRIDIFLOROL	Shoot	--	85	0.28063481963637366	Planta Medica, 57: A83, 1991.