

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Melissa officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-CITRONELLAL	Shoot	2.0	975.0		--
0	1,2-HUMULENE-EPOXIDE	Shoot		0.1		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	1-OCTEN-3-OL	Shoot	0.0	50.0	-0.42181910774713277	--
0	10-(ALPHA)-CADINOL	Plant	1.0	8.0	-0.9956212487968413	--
0	2-PHENYLETHANOL	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	2Z,4E,6E-ALLOFARNESENE	Shoot		0.1		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
2	3-OCTANOL	Shoot	0.0	8.0	-0.2871166540805351	--
0	3-OCTANONE	Shoot	1.0	15.0	-0.2368906462405579	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	3E,6E-ALPHA-FARNESENE	Shoot	5.0	40.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	6-METHYL-5-HEPTEN-2-ONE	Shoot	3.0	24.0	2.398135762614033	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ALPHA-CADINENE	Shoot		0.1	-0.4953081155688618	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
3	ALPHA-CADINOL	Shoot	1.0	120.0	1.5075797159167184	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ALPHA-COPAENE	Shoot	2.0	120.0	1.0287771756246513	--
0	ALPHA-CUBEBENE	Shoot	0.1	38.0	0.4419362351408426	--
2	ALPHA-HUMULENE	Shoot	1.0	80.0	0.3515068254306274	--
0	ALPHA-MUJROLENE	Shoot	3.0	24.0	-0.07276998032172868	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
23	ALPHA-TERPINEOL	Shoot				--
0	ANETHOL	Shoot				--
0	APIGENIN-7-O-BETA-D-GLUCOSIDE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	BENZALDEHYDE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	BETA-BOURBONENE	Shoot	1.0	48.0	-0.010984614464242788	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-CARYOPHYLLENE	Shoot	1.0	870.0	1.3538170513191368	--
0	BETA-CARYOPHYLLENE-EPOXIDE-I	Shoot	1.0	8.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-CARYOPHYLLENE-EPOXIDE-II	Shoot	5.0	40.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-CUBEBENE	Shoot	3.0	24.0	-0.21147406359697055	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-CURCUMENE	Shoot				--
5	BETA-ELEMENE	Shoot	4.0	32.0	-0.23146867791456002	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-GUAIENE	Shoot		0.1	-0.4596385597769217	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
3	BETA-SELINENE	Shoot				--
47	BETA-SITOSTEROL	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	BICYCLOGERMACRENE	Shoot	1.0	8.0	-0.8368651614312598	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	CADINA-1,4-DIENE	Shoot		0.1	-0.46291004988627565	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
102	CAFFEIC-ACID	Plant		2100.0	-0.75369427076109	--
2	CAMPESTEROL	Tissue Culture		0.1	-1.0	Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
8	CARYOPHYLLENE-OXIDE	Plant	0.5	225.0	0.008356674487496966	J. Aromatherapy 1: 11.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CATECHIN-TANNINS	Shoot	30000.0	50000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CATECHINS	Plant	30000.0	50000.0		--
77	CHLOROGENIC-ACID	Shoot		19000.0		--
77	CHLOROGENIC-ACID	Plant				--
0	CIS-3-HEXEN-1-OL	Shoot	0.1	2.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
3	CIS-OCIMENE	Shoot	1.0	24.0	-0.3465366561767933	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	CIS-ROSE-OXIDE	Shoot	0.0	8.0		--
0	CIS-ROSENOXIDE	Shoot	1.0	8.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
53	CITRAL	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CITRAL-A	Shoot	10.0	700.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	CITRAL-B	Shoot	15.0	900.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
20	CITRONELLAL	Shoot	1.0	2900.0	-0.20064622354718603	--
0	CITRONELLIC-ACID	Shoot	3.0	24.0	-0.22761530123484752	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	CITRONELLIC-ACID-METHYL-ESTER	Shoot	0.0	145.0		--
15	CITRONELLOL	Shoot	0.0	80.0	-0.17103024749122012	--
1	COPAENE	Plant	4.0	120.0	1.555886532696986	--
4	COSMOIIN	Shoot				--
3	CYNAROSIDE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DAMASCENONE	Shoot				--
3	DEHYDROABIETANE	Shoot				--
9	DELTA-CADINENE	Shoot	1.0	145.0	1.0143225193489915	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
1	DELTA-CADINOL	Shoot	1.0	16.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	DELTA-OCTALACTONE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	E-BETA-FANESENE	Shoot	3.0	24.0		--
0	EO	Shoot	100.0	8000.0	-0.2125586401432373	--
76	EUGENOL	Shoot				--
6	EUGENYL-ACETATE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	EUGENYL-GLUCOSIDE	Shoot				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	FAT	Seed		115000.0	-0.7921452365854982	--
6	FURFURAL	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	GAMMA-CADINENE	Shoot	1.0	25.0	-0.17755951291950214	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
13	GERANIAL	Shoot	10.0	1425.0	3.11316057777946	--
0	GERANIC-ACID	Shoot		0.1		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
35	GERANIOL	Shoot	1.0	65.0	-0.4686609992158695	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	GERANYL-ACETATE	Shoot	0.3	155.0	-0.1928424487074771	--
0	GERMACRA-1-(10)E,5E-DIEN-4-OL	Shoot	30.0	230.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
2	GERMACRENE-D	Shoot	0.0	1080.0	0.23498177979924464	--
2	HEXANOIC-ACID	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	ISOGERANIAL	Shoot	0.4	16.0		--
3	ISOPULEGOL	Shoot	10.0	70.0	2.2198772855670956	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
22	ISOQUERCITRIN	Shoot				--
60	LIMONENE	Shoot		0.1	-0.3283880008447348	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	LINALOL	Shoot	1.0	16.0	-0.21937107213486448	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
53	LINALOOL	Shoot	1.0	80.0	-0.21786833671265157	--
7	LUTEOLIN-7-GLUCOSIDE	Shoot				--
0	METHYL-CITRONELLATE	Shoot	50.0	390.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
20	METHYL-EUGENOL	Shoot				--
0	METHYL-GERANIATE	Shoot	4.0	32.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	METHYL-HEPTENONE	Shoot	2.0	215.0		J. Aromatherapy 1: 11.
0	METNYL-GERANIATE	Shoot	4.0	32.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
22	MYRCENE	Shoot	1.0	8.0	-0.3332078366728803	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	N-DOCOSANE	Tissue Culture		0.1		Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-EICOSANE	Tissue Culture		0.1		Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-HENEICOSANE	Tissue Culture		0.1		Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-HEPTADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-HEXADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-NONADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-OCTADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-PENTADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-TETRADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	N-TRIDECADE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
4	NERAL	Shoot	10.0	1100.0	2.9340769370161395	--
0	NERIC-ACID	Shoot				--
10	NEROL	Shoot	1.0	24.0	-0.30473758138615226	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	NERYL-ACETATE	Shoot				--
5	OCTANOIC-ACID	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. J. Ess. Oil Res., 3: 111-114.
0	OCTYL-BENZOATE	Plant	2.6	80.0		--
0	OCTYL-BENZOATE	Shoot				Abstract (See species file)
64	OLEANOLIC-ACID	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
25	P-COUMARIC-ACID	Shoot		8.3	1.414213562373095	--
0	P-CYMOL	Shoot		0.1	-1.0	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
2	POMOLIC-ACID	Shoot				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	PROTEIN	Seed		293000.0	0.526649639789516	--
43	PROTOCATECHUIC-ACID	Plant				--
0	PULEGOL	Shoot				--
0	RHAMNAZIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
7	RHAMNOCITRIN	Shoot				--
57	ROSMARINIC-ACID	Plant	8400.0	47000.0	1.1326862524013512	--
57	ROSMARINIC-ACID	Leaf				Jim Duke's personal files.
1	STACHYOSE	Plant				--
7	SUCCINIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	T-CADINOL	Shoot	3.0	24.0	0.342183471609886	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	T-MUUROLOL	Shoot	5.0	40.0	-0.33915268289149025	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
71	THYMOL	Shoot				--
71	THYMOL	Plant				--
0	TRANS-OCIMENE	Plant	1.0	250.0	-0.12174498965264288	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	TRANS-ROSE-OXIDE	Shoot	0.0	4.0		--
0	TRANS-ROSENOXIDE	Shoot	0.5	4.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
89	URSOLIC-ACID	Plant				--
0	WAX	Plant				--