

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Melissa officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	CATECHINS	Plant	30000.0	50000.0		--
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.
57	ROSMARINIC-ACID	Plant	8400.0	47000.0	1.1326862524013512	--
0	EO	Shoot	100.0	8000.0	-0.2125586401432373	--
0	METHYL-CITRONELLATE	Shoot	50.0	390.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	GERMACRA-1-(10)E,5E-DIEN-4-OL	Shoot	30.0	230.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	CITRAL-B	Shoot	15.0	900.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	NERAL	Shoot	10.0	1100.0	2.9340769370161395	--
13	GERANIAL	Shoot	10.0	1425.0	3.11316057777946	--
3	ISOPULEGOL	Shoot	10.0	70.0	2.2198772855670956	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
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	BETA-CARYOPHYLLENE-EPOXIDE-II	Shoot	5.0	40.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	3E,6E-ALPHA-FARNESENE	Shoot	5.0	40.0		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.
5	BETA-ELEMENE	Shoot	4.0	32.0	-0.23146867791456002	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	METNYL-GERANIATE	Shoot	4.0	32.0		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
1	COPAENE	Plant	4.0	120.0	1.555886532696986	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	METHYL-GERANIATE	Shoot	4.0	32.0		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	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	CITRONELLIC-ACID	Shoot	3.0	24.0	-0.22761530123484752	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ALPHA-MUUROLENE	Shoot	3.0	24.0	-0.07276998032172868	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	T-CADINOL	Shoot	3.0	24.0	0.342183471609886	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	E-BETA-FANESENE	Shoot	3.0	24.0		--
0	OCTYL-BENZOATE	Plant	2.6	80.0		--
0	(+)-CITRONELLAL	Shoot	2.0	975.0		--
0	METHYL-HEPTENONE	Shoot	2.0	215.0		J. Aromatherapy 1: 11.
0	ALPHA-COPAENE	Shoot	2.0	120.0	1.0287771756246513	--
3	CIS-OCIMENE	Shoot	1.0	24.0	-0.3465366561767933	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.
10	NEROL	Shoot	1.0	24.0	-0.30473758138615226	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.
1	DELTA-CADINOL	Shoot	1.0	16.0		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.
9	DELTA-CADINENE	Shoot	1.0	145.0	1.0143225193489915	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
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	Shoot	1.0	870.0	1.3538170513191368	--
0	3-OCTANONE	Shoot	1.0	15.0	-0.2368906462405579	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	GAMMA-CADINENE	Shoot	1.0	25.0	-0.17755951291950214	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	BETA-BOURBONENE	Shoot	1.0	48.0	-0.010984614464242788	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.
0	TRANS-OCIMENE	Plant	1.0	250.0	-0.12174498965264288	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
20	CITRONELLAL	Shoot	1.0	2900.0	-0.20064622354718603	--
0	BICYCLOGERMACRENE	Shoot	1.0	8.0	-0.8368651614312598	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
2	ALPHA-HUMULENE	Shoot	1.0	80.0	0.3515068254306274	--
0	10-(ALPHA)-CADINOL	Plant	1.0	8.0	-0.9956212487968413	--
0	CIS-ROSENOXIDE	Shoot	1.0	8.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
53	LINALOOL	Shoot	1.0	80.0	-0.21786833671265157	--
8	CARYOPHYLLENE-OXIDE	Plant	0.5	225.0	0.008356674487496966	J. Aromatherapy 1: 11.
0	TRANS-ROSENOXIDE	Shoot	0.5	4.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ISOGERANIAL	Shoot	0.4	16.0		--
5	GERANYL-ACETATE	Shoot	0.3	155.0	-0.1928424487074771	--
0	CIS-3-HEXEN-1-OL	Shoot	0.1	2.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ALPHA-CUBEBENE	Shoot	0.1	38.0	0.4419362351408426	--
0	TRANS-ROSE-OXIDE	Shoot	0.0	4.0		--
15	CITRONELLOL	Shoot	0.0	80.0	-0.17103024749122012	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CITRONELLIC-ACID-METHYL-ESTER	Shoot	0.0	145.0		--
2	3-OCTANOL	Shoot	0.0	8.0	-0.2871166540805351	--
0	1-OCTEN-3-OL	Shoot	0.0	50.0	-0.42181910774713277	--
2	GERMACRENE-D	Shoot	0.0	1080.0	0.23498177979924464	--
0	CIS-ROSE-OXIDE	Shoot	0.0	8.0		--
0	EUGENYL-GLUCOSIDE	Shoot				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	1,2-HUMULENE-EPOXIDE	Shoot		0.1		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
5	OCTANOIC-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	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.
71	THYMOL	Shoot				--
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	BETA-CURCUMENE	Shoot				--
1	STACHYOSE	Plant				--
25	P-COUMARIC-ACID	Shoot		8.3	1.414213562373095	--
77	CHLOROGENIC-ACID	Shoot		19000.0		--
0	ALPHA-CADINENE	Shoot		0.1	-0.4953081155688618	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
77	CHLOROGENIC-ACID	Plant				--
76	EUGENOL	Shoot				--
60	LIMONENE	Shoot		0.1	-0.3283880008447348	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
7	RHAMNOCITRIN	Shoot				--
57	ROSMARINIC-ACID	Leaf				Jim Duke's personal files.
3	DEHYDROABIETANE	Shoot				--
0	N-TRIDECAENE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. <i>J. Ess. Oil Res.</i> , 3: 111-114.
0	GERANIC-ACID	Shoot		0.1		Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
0	WAX	Plant				--
0	PULEGOL	Shoot				--
0	RHAMNAZIN	Plant				Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	DAMASCENONE	Shoot				--
0	N-TETRADECAENE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. <i>J. Ess. Oil Res.</i> , 3: 111-114.
89	URSOLIC-ACID	Plant				--
0	N-OCTADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. <i>J. Ess. Oil Res.</i> , 3: 111-114.
3	BETA-SELINENE	Shoot				--
43	PROTocatechuic-ACID	Plant				--
0	N-PENTADECANE	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. <i>J. Ess. Oil Res.</i> , 3: 111-114.
7	LUTEOLIN-7-GLUCOSIDE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
23	ALPHA-TERPINEOL	Shoot				--
0	PROTEIN	Seed		293000.0	0.526649639789516	--
102	CAFFEIC-ACID	Plant		2100.0	-0.75369427076109	--
0	APIGENIN-7-O-BETA-D-GLUCOSIDE	Shoot				--
6	FURFURAL	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.
3	CYNAROSIDE	Shoot				--
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	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.
5	NERYL-ACETATE	Shoot				--
0	2Z,4E,6E-ALLOFARNESENE	Shoot		0.1		Deutsche Apot. Ziti. 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	CADINA-1,4-DIENE	Shoot		0.1	-0.46291004988627565	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ANETHOL	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FAT	Seed		115000.0	-0.7921452365854982	--
4	COSMOSIIN	Shoot				--
71	THYMOL	Plant				--
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	NERIC-ACID	Shoot				--
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	P-CYMOL	Shoot		0.1	-1.0	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
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.
53	CITRAL	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
20	METHYL-EUGENOL	Shoot				--
64	OLEANOLIC-ACID	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	HEXANOIC-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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
22	ISOQUERCITRIN	Shoot				--
0	OCTYL-BENZOATE	Shoot				Abstract (See species file)
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	BETA-GUAIENE	Shoot		0.1	-0.4596385597769217	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
7	SUCCINIC-ACID	Plant				--