

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Melissa officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	PROTEIN	Seed		293000.0	0.526649639789516	--
0	FAT	Seed		115000.0	-0.7921452365854982	--
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		--
57	ROSMARINIC-ACID	Plant	8400.0	47000.0	1.1326862524013512	--
77	CHLOROGENIC-ACID	Shoot		19000.0		--
0	EO	Shoot	100.0	8000.0	-0.2125586401432373	--
20	CITRONELLAL	Shoot	1.0	2900.0	-0.20064622354718603	--
102	CAFFEIC-ACID	Plant		2100.0	-0.75369427076109	--
13	GERANIAL	Shoot	10.0	1425.0	3.11316057777946	--
4	NERAL	Shoot	10.0	1100.0	2.9340769370161395	--
2	GERMACRENE-D	Shoot	0.0	1080.0	0.23498177979924464	--
0	(+)-CITRONELLAL	Shoot	2.0	975.0		--
0	CITRAL-B	Shoot	15.0	900.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	BETA-CARYOPHYLLENE	Shoot	1.0	870.0	1.3538170513191368	--
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	METHYL-CITRONELLATE	Shoot	50.0	390.0		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.
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.
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	METHYL-HEPTENONE	Shoot	2.0	215.0		J. Aromatherapy 1: 11.
5	GERANYL-ACETATE	Shoot	0.3	155.0	-0.1928424487074771	--
0	CITRONELLIC-ACID-METHYL-ESTER	Shoot	0.0	145.0		--
9	DELTA-CADINENE	Shoot	1.0	145.0	1.0143225193489915	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
1	COPAENE	Plant	4.0	120.0	1.555886532696986	--
0	ALPHA-COPAENE	Shoot	2.0	120.0	1.0287771756246513	--
3	ALPHA-CADINOL	Shoot	1.0	120.0	1.5075797159167184	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
15	CITRONELLOL	Shoot	0.0	80.0	-0.17103024749122012	--
2	ALPHA-HUMULENE	Shoot	1.0	80.0	0.3515068254306274	--
0	OCTYL-BENZOATE	Plant	2.6	80.0		--
53	LINALOOL	Shoot	1.0	80.0	-0.21786833671265157	--
3	ISOPULEGOL	Shoot	10.0	70.0	2.2198772855670956	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.
0	1-OCTEN-3-OL	Shoot	0.0	50.0	-0.42181910774713277	--
0	BETA-BOURBONENE	Shoot	1.0	48.0	-0.010984614464242788	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	T-MUUROLOL	Shoot	5.0	40.0	-0.33915268289149025	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	ALPHA-CUBEBENE	Shoot	0.1	38.0	0.4419362351408426	--
0	METHYL-GERANIATE	Shoot	4.0	32.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
5	BETA-ELEMENE	Shoot	4.0	32.0	-0.23146867791456002	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	METNYL-GERANIATE	Shoot	4.0	32.0		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	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		--
3	CIS-OCIMENE	Shoot	1.0	24.0	-0.3465366561767933	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.
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	LINALOL	Shoot	1.0	16.0	-0.21937107213486448	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	ISOGERANIAL	Shoot	0.4	16.0		--
1	DELTA-CADINOL	Shoot	1.0	16.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	3-OCTANONE	Shoot	1.0	15.0	-0.2368906462405579	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
25	P-COUMARIC-ACID	Shoot		8.3	1.414213562373095	--
0	BETA-CARYOPHYLLENE-EPOXIDE-I	Shoot	1.0	8.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
2	3-OCTANOL	Shoot	0.0	8.0	-0.2871166540805351	--
0	BICYCLOGERMACRENE	Shoot	1.0	8.0	-0.8368651614312598	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	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.
0	CIS-ROSE-OXIDE	Shoot	0.0	8.0		--
22	MYRCENE	Shoot	1.0	8.0	-0.3332078366728803	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	TRANS-ROSENOXIDE	Shoot	0.5	4.0		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	TRANS-ROSE-OXIDE	Shoot	0.0	4.0		--
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	GERANIC-ACID	Shoot		0.1		Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
2	CAMPESTEROL	Tissue Culture		0.1	-1.0	Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis 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.
0	CADINA-1,4-DIENE	Shoot		0.1	-0.46291004988627565	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	P-CYMOL	Shoot		0.1	-1.0	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	N-HENEICOSANE	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.
0	N-EICOSANE	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.
0	BETA-GUAIENE	Shoot		0.1	-0.4596385597769217	Deutsche Apot. Ziti. 129(4):155-163. W. Schulze et al. Die Melisse.
0	1,2-HUMULENE-EPOXIDE	Shoot		0.1		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	N-DOCOSANE	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	ALPHA-CADINENE	Shoot		0.1	-0.4953081155688618	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
60	LIMONENE	Shoot		0.1	-0.3283880008447348	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., 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	DAMASCENONE	Shoot				--
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.
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. J. Ess. Oil Res., 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. J. Ess. Oil Res., 3: 111-114.
7	LUTEOLIN-7-GLUCOSIDE	Shoot				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Shoot				--
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				--
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	ANETHOL	Shoot				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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 Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
47	BETA-SITOSTEROL	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
22	ISOQUERCITRIN	Shoot				--
0	OCTYL-BENZOATE	Shoot				Abstract (See species file)
7	SUCCINIC-ACID	Plant				--
0	EUGENYL-GLUCOSIDE	Shoot				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
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.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	BETA-CURCUMENE	Shoot				--
1	STACHYOSE	Plant				--
77	CHLOROGENIC-ACID	Plant				--
76	EUGENOL	Shoot				--
7	RHAMNOCITRIN	Shoot				--
57	ROSMARINIC-ACID	Leaf				Jim Duke's personal files.
3	DEHYDROABIETANE	Shoot				--
0	N-TRIDECANE	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.