

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Ocimum gratissimum*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Plant	10	65	-0.5434179762932174	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
67	1,8-CINEOLE	Shoot	690	690	-0.12570269509056325	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
16	ACETIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-HUMULENE	Plant	1	9	-0.6939943165099094	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Plant	10	125	-0.29836386179984437	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Plant	15	155	-0.3717838201395376	
28	ALPHA-PINENE	Shoot	55	55	-0.14196324983227973	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
28	ALPHA-PINENE	Flower	47	88	-0.11053476018835531	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
28	ALPHA-PINENE	Leaf	23	43	-0.22175276785352202	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
13	ALPHA-TERPINENE	Plant	60	370	0.05598568783451388	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Shoot	29	29	-0.39994766965147405	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Plant	15	145	-0.36823032873876144	
23	ALPHA-TERPINEOL	Shoot	65	65	-0.21881788146669784	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
24	BENZALDEHYDE	Shoot	0.1	0.1	-0.2247983186195243	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
20	BENZOIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Shoot	425	425	1.1016058861149356	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
5	BETA-ELEMENE	Plant	5	65	-0.23507648609792783	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Plant	5	30	-0.5405041807421095	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Leaf	19	41	-0.36865500696018655	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
13	BETA-PINENE	Plant	3	35	-0.3976959112602827	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Shoot	90	90	-0.11479606509386016	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
13	BETA-PINENE	Flower	10	37	-0.44739293677984854	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	BETA-SANTALENE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-SELINENE	Plant	15	240	1.7189831678276435	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
47	BETA-SITOSTEROL	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
35	BORNEOL	Plant	1	9	-0.6628031163302623	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BUTYRIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	CADINENE	Plant	20	600	-0.6916693495393653	
9	CAMPHENE	Plant	1	240	-0.19528506852546118	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Shoot	29	29	-0.13160068564211816	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. <i>Zeitschr. Naturforschung</i> 45(C): 1073-6.
41	CAMPHOR	Plant	2	35	-0.6361655666685819	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CAPROIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
37	CARVACROL	Plant	5	190	-0.8405099664546857	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Plant	5	125	-0.4107766515550845	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
31	CARYOPHYLLENE	Shoot	1155	1155	0.09839722753150715	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, Ocimum gratissimum, from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
3	CIS-OCIMENE	Plant	--	12	-0.4652071617896649	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	CITRAL	Plant	--	--		Tramil
1	COPAENE	Plant	1	65	0.4072454682898151	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	DELTA-3-CARENE	Plant	10	245	0.30346301474689075	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	ESTRAGOLE	Shoot	0.1	0.1	-0.9819112638081645	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, Ocimum gratissimum, from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
2	ETHYL-CINNAMATE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
76	EUGENOL	Plant	--	5340	2.2877369900870366	
76	EUGENOL	Seed	1670	1670	-0.4600193985654616	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
76	EUGENOL	Shoot	4045	4045	2.778562038279623	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, Ocimum gratissimum, from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
13	FORMIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	GALACTOSE	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Shoot	15	15	-0.38397056484220854	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
35	GERANIOL	Flower	11010	14245	2.521085544167122	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
35	GERANIOL	Leaf	10335	13455	6.019001970744656	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
2	GERMACRENE-D	Shoot	210	210	-0.2527608779860518	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
2	HUMULENE	Plant	5	30	-1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	HUMULENE	Shoot	300	300	1.7129313056964144	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
60	LIMONENE	Flower	158	220	-0.19427320252924737	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
60	LIMONENE	Leaf	185	335	-0.0953639879106407	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
60	LIMONENE	Plant	10	105	-0.4212722633135154	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Shoot	42	42	-0.30705884495303243	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
6	METHYL-CHAVICOL	Trichome	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	METHYL-CINNAMATE	Shoot	0.1	0.1		Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. <i>Zeitschr. Naturforschung</i> 45(C): 1073-6.
20	METHYL-EUGENOL	Plant	15	100	-0.5641652169732609	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	METHYL-EUGENOL	Shoot	9835	9835	2.374811128374582	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. <i>Zeitschr. Naturforschung</i> 45(C): 1073-6.
15	METHYL-ISOEUGENOL	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Flower	8	10	-0.7675164071760877	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. <i>J. Ess. Oil Res.</i> 4: 231-234.
22	MYRCENE	Leaf	24	47	-0.15571547532195812	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. <i>J. Ess. Oil Res.</i> 4: 231-234.
22	MYRCENE	Plant	15	480	0.051252311524016124	
22	MYRCENE	Shoot	75	75	-0.2567361653897198	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. <i>Zeitschr. Naturforschung</i> 45(C): 1073-6.
4	NERAL	Flower	466	695	1	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. <i>J. Ess. Oil Res.</i> 4: 231-234.
4	NERAL	Leaf	150	210	-0.32930303357193585	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. <i>J. Ess. Oil Res.</i> 4: 231-234.
2	OCIMENE	Plant	120	720	-0.1941665510282397	Guenther, E., <i>The Essential Oils</i> , 6 volumes, D. van Nostrand, New York, 1948-1952.
2	OCIMENE	Seed	400	400		ANON. 1948-1976. <i>The Wealth of India raw materials</i> . Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Plant	160	1945	0.08605315893183306	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	PROPIONIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Plant	10	60	-0.4105921170021046	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Shoot	17	17	-0.2778213291527909	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
23	TERPINEN-4-OL	Plant	5	50	-0.2597062503285473	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Shoot	0.1	0.1	-0.16713897346436285	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
9	TERPINOLENE	Shoot	23	23	-0.1415284071618653	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
71	THYMOL	Leaf	--	--	-0.42003924175296653	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
71	THYMOL	Plant	300	2850	-0.22308783825306838	
9	VALERIC-ACID	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.