

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Origanum majorana*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-ELEMENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-ELEMENE	Essential Oil				--
5	SABINENE	Leaf Essent. Oil		30000.0	-0.13554261008120452	--
0	TRANS-4-ETHOXY-THUJANE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
71	THYMOL	Shoot Essent. Oil		115500.0	1.9615538252670992	--
1	ETHYL-LAURATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NEROL-ACETATE	Essential Oil				--
3	CYNAROSIDE	Shoot				--
0	CIS-3-ETHOXY-1-P-MENTHENE	Essential Oil		2000.0		--
18	VITEXIN	Shoot				--
0	LUSITANICOSIDE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
36	ANETHOLE	Essential Oil				--
9	TERPINOLENE	Essential Oil		20000.0	-0.2455444370688689	--
53	LINALOOL	Essential Oil		7000.0	-0.5517579885648786	--
0	ALPHA-COPAENE	Essential Oil				--
87	RUTIN	Shoot				--
0	TRANS-3-ETHOXY-P-MENTH-1-ENE	Plant				--
11	GAMMA-TERPINENE	Leaf Essent. Oil		180000.0	1.627787588377096	--
0	ETHYL-CAPRATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIOSMETIN-7-GLUCURONIDE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
22	MYRCENE	Essential Oil				--
0	ALPHA-TERPINYL-ACETATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
57	ROSMARINIC-ACID	Plant		33000.0	0.281534733255827	Fitoterapia No.62: 166.
4	COSMOSIIN	Shoot				--
77	CHLOROGENIC-ACID	Shoot				--
0	VANILLIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				--
0	LINOLENIC-ACID	Seed		27500.0	-0.09978029895951895	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-THUJENE	Essential Oil		19000.0	-0.27796616080745823	--
0	TERPINEN-4-OL-METHYL-ETHER	Leaf Essent. Oil		20000.0		--
0	CIS-4-ETHOXY-THUJANE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Shoot		164100.0	5.787049323750151	--
18	OLEIC-ACID	Seed		8000.0	-0.9133355142467426	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALLO-AROMADENDRENE	Essential Oil				--
57	ROSMARINIC-ACID	Inflorescence		33000.0	-0.13649164081487425	--
31	THIAMIN	Plant		3.0	-0.3909910138264638	USDA's Ag Handbook 8 and sequelae)
0	GAMMA-ELEMENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	ESTRAGOLE	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	MURWAOSIDE	Leaf		5025.0		--
15	RIBOFLAVIN	Plant		3.0	-0.5861819139119265	USDA's Ag Handbook 8 and sequelae)
4	COSMOSIIN	Pollen Or Spore				--
31	CARYOPHYLLENE	Essential Oil		61000.0	0.37737527199565624	--
0	TRANS-Z-P-MENTHEN-1-OL	Essential Oil		61000.0		--
27	LINOLEIC-ACID	Seed		10000.0	-0.8321526228533093	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-TERPINYL-ACETATE	Essential Oil				--
0	TERPINEN-4-OL-ACETATE	Essential Oil		61000.0	1.0	--
0	CIS-3-ETHOXY-P-MENTH-1-ENE	Plant				--
60	LIMONENE	Essential Oil		38000.0	-0.5183422055574805	--
64	OLEANOLIC-ACID	Plant		4700.0	0.19004070814741195	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	1,8-CINEOL	Essential Oil				--
57	ROSMARINIC-ACID	Shoot		9400.0	-0.4142658927809455	--
0	FIXED-OIL	Seed				--
2	CAMPESTEROL	Plant		30.0	-0.5969128791852656	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	METHYL-ARBUTIN	Shoot				--
0	CIS-Z-P-MENTHEN-1-OL	Essential Oil		2000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	NERYL-ACETATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE-METHYL-ETHER	Leaf Essent. Oil		60000.0		--
23	ALPHA-TERPINEOL	Essential Oil		7000.0	-0.4630448703246903	--
23	TERPINEN-4-OL	Essential Oil		103000.0	0.3836938468472445	--
0	URSOLIC-ACID-II	Plant		1200.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
60	LIMONENE	Leaf Essent. Oil		24000.0	-0.5721355904683862	--
19	CARVONE	Essential Oil		27000.0	-0.7525161257485199	--
0	ETHYL-TRANSHEXADECANOATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1,8-CINEOL	Leaf Essent. Oil		75000.0	-0.39968922610284335	--
1	PALMITIC-ACID-ETHYL-ESTER	Essential Oil		12000.0		--
0	BETA-FARNESENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TERPINENOL	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
76	EUGENOL	Leaf Essent. Oil		255000.0	-0.34777061356900674	--
35	BORNEOL	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
63	MENTHOL	Essential Oil				--
0	CIS-SABINENE-HYDRATE-METHYL-ETHER	Leaf Essent. Oil		20000.0		--
0	N-TRIACONTANE	Plant		182000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIOSMETIN-7-GLUCOSIDE	Leaf				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	TRANS-SABINENE-HYDRATE	Essential Oil		51000.0	1.0	--
23	ALPHA-TERPINEOL	Leaf Essent. Oil		49000.0	0.12538106410891894	--
23	TERPINEN-4-OL	Leaf Essent. Oil		310000.0	2.081229334325422	--
0	URSOLIC-ACID-I	Plant		4700.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LEDENE	Essential Oil				--
0	ETHYL-STEARATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Essential Oil		47000.0	-0.2453610155054874	--
0	TERPINENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ETHYL-TRANS-HEXADECENOATE	Essential Oil				--
0	MENTHA-1,3-DIENE	Essential Oil				--
0	ALPHA-HYDROXYDIHYDROCAFFEIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PLANTEOSE	Seed				--
0	CIS-SABINENE-HYDRATE-ACETATE	Leaf Essent. Oil		110000.0		--
0	DINATIN-7-GLUCOSIDE	Leaf				--
0	LEDENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Essential Oil		68000.0	1.1298113026643404	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	TERPINEN-4-OL	Shoot Essent. Oil		176700.0	1.412151043457717	--
1	LAURIC-ACID-ETHYL-ESTER	Essential Oil				--
102	CAFFEIC-ACID	Leaf		14100.0	1.2401706840629567	--
0	TRANS-SABINENE-HYDRATE	Leaf Essent. Oil		60000.0	1.0	--
1	ETHYL-PALMITATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Leaf Essent. Oil		20000.0	-0.4814765484301064	--
0	TERPINEN-4-YL-ACETATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ETHYL-MYRISTATE	Essential Oil				--
0	3-BETA-HYDROXYURS-12-EN-28-OIC-ACID-3-O-BETA-D-GLUCOPYRANOSYL-(1->4)-O-BETA-D-XYLOPYRANOSIDE	Stem		13000.0		--
0	MAJORANIN	Plant				--
2	ALPHA-HUMULENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Essential Oil		75000.0	1.0	--
8	DELTA-3-CARENE	Plant				--
13	ALPHA-TERPINENE	Leaf Essent. Oil		20000.0	0.9980633895203395	--
0	SYRINGIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				--
0	HYDROQUINONE-MONOMETHYL-ETHER	Shoot				--
102	CAFFEIC-ACID	Shoot				--
0	TRANS-PIPERITOL	Essential Oil		0.0		--
1	ETHYL-OLEATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	P-CYMEN-8-OL	Essential Oil		0.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ETHYL-CAPRATE	Essential Oil		61000.0		--
0	LUTEOLIN-7-O-BETA-D-DIGLUCOSIDE	Pollen Or Spore				--
0	ALPHA-COPAENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-ETHOXY-2-P-MENTHENE	Essential Oil		7000.0		--
14	MANGANESE	Plant		54.0	-0.30787688494994525	USDA's Ag Handbook 8 and sequelae)
13	BETA-PINENE	Essential Oil		4000.0	-0.6415683948649324	--
32	HYDROQUINONE	Plant				--
28	ALPHA-PINENE	Essential Oil		19000.0	-0.39287982164920143	--
0	STEARIC-ACID-ETHYL-ESTER	Essential Oil				--
102	CAFFEIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
32	HYDROQUINONE	Shoot				--
0	BICYCLOGERMACRENE	Essential Oil		27000.0	1.0	--
0	TRANS-P-MENTH-2-ENOL	Leaf Essent. Oil		50000.0		--
1	ETHYL-MYRISTATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OCIMENE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
25	P-COUMARIC-ACID	Leaf		1100.0	-0.06115839551859982	--
35	TANNIN	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	EO	Essential Oil				--
0	LINOLENIC-ACID-ETHYL-ESTER	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALLO-AROMADENDRENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-PIPERITOL	Essential Oil		0.0	-1.0	--
0	(+)-MENTHA-1,8-DIENE	Essential Oil				--
0	MAJARONIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	BETA-PHELLANDRENE	Essential Oil		14000.0	0.06102018933373759	--
11	ALPHA-PHELLANDRENE	Essential Oil		26000.0	-0.08979419499208481	--
0	SALICYLIC-ACID-2-BETA-D-GLUCOSIDE	Leaf				--
4	CADINENE	Plant				--
0	GERANIOL-ACETATE	Essential Oil		27000.0		--
0	TRANS-4-ETHOXY-THUJANE	Essential Oil		213000.0		--
0	ETHYL-LINOLEATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	METHYL-ARBUTIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	ORIENTIN	Shoot				--
15	ARBUTIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	DIOSMETIN-7-O-BETA-GLUCURONIDE	Pollen Or Spore				--
0	CIS-P-MENTH-2-ENOL	Leaf Essent. Oil		30000.0		--
0	(+)-CARAN-TRANS-4-OL	Essential Oil				--
0	BETA-FARNESENE	Essential Oil				--
12	COPPER	Plant		11.0	-0.33406963620245544	USDA's Ag Handbook 8 and sequelae)



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINOLEIC-ACID-ETHYL-ESTER	Essential Oil				--
0	4-ETHOXY-P-MENTH-1-ENE	Plant				--
35	GERANIOL	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-HUMULENE	Essential Oil				--
5	SABINENE	Essential Oil		82000.0	-0.015057370464564934	--
35	GERANIOL	Essential Oil		0.0	-0.677218689998221	--
0	TRANS-3-ETHOXY-1-P-MENTHENE	Essential Oil		2000.0		--
0	ETHYL-LINILENATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	LABIATIC-ACID	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	OLEIC-ACID-ETHYL-ESTER	Essential Oil				--
0	APIGENIN-7-GLUCOSIDE	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	SAPONIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	DIOSMETIN	Shoot				--
0	CIS-4-ETHOXY-THUJANE	Essential Oil		52000.0		--
0	(+)-CAR-3-ENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LUTEOLIN-7-GLUCOSIDE	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.
15	ARBUTIN	Shoot				--
53	CITRAL	Plant				--
0	LINALOOL-ACETATE	Essential Oil		34000.0	-0.3272680541058478	--
0	1-ETHOXY-P-MENTH-2-ENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	LINALYL-ACETATE	Plant	3.0	3030.0	0.8790079353067117	--
13	BETA-PINENE	Plant	6.0	34.0	-0.3987756455135756	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	P-CYMEN-8-OL	Plant	8.0	43.0	-0.06112505014632677	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	TRANS-ANETHOLE	Plant	8.0	43.0	-0.45493255526565674	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-PIPERITOL	Plant	9.0	52.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BICYCLOGERMACRENE	Plant	12.0	69.0	-0.6425880627184439	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
19	CARVONE	Plant	12.0	69.0	-0.42182429771324575	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	GERANYL-ACETATE	Plant	12.0	120.0	-0.4229146637825368	--
0	ALPHA-THUJENE	Plant	15.0	1100.0	0.10728911049715678	--
28	ALPHA-PINENE	Plant	15.0	86.0	-0.42061428285892105	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Plant	18.0	103.0	-0.4516907541435066	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Plant	18.0	103.0	-0.36294107421133504	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Plant	18.0	1710.0	0.5651398458031535	--
16	P-CYMENE	Plant	21.0	210.0	-0.3655894027588645	--
3	BETA-PHELLANDRENE	Plant	27.0	155.0	0.6528644248365976	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	D-ALPHA-TERPINEOL	Plant	27.0	826.0	1.0	--
4	BORON	Plant	28.0	48.0	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
0	TRANS-SABINENE-HYDRATE	Plant	30.0	1850.0	3.431164061315594	--
77	ZINC	Plant	32.0	43.0	-0.09018412071860993	--
0	BETA-CARYOPHYLLENE	Plant	35.0	750.0	0.12906156273708783	--
39	NIACIN	Plant	41.0	44.0	-0.45847508395560455	USDA's Ag Handbook 8 and sequelae)
53	BETA-CAROTENE	Plant	48.0	52.0	-0.44555296413975976	USDA's Ag Handbook 8 and sequelae)
9	TERPINOLENE	Leaf	50.0	600.0	0.5322296849470326	--
12	STIGMASTEROL	Plant	50.0	55.0	-0.7296625889468641	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	TRANS-P-MENTH-2-EN-1-OL	Plant	52.0	301.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Plant	52.0	1307.0	1.1553486678162894	--
0	CIS-P-MENTH-2-EN-1-OL	Plant	60.0	344.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Plant	75.0	7500.0	4.99614301661853	--
9	TERPINOLENE	Plant	75.0	430.0	3.057637791806235	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	METHYL-CHAVICOL	Plant	96.0	550.0	-0.9033588179021271	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LINALOL	Plant	99.0	568.0	-0.3038061677841181	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Plant	99.0	7965.0	0.4132286080067176	--
0	CIS-SABINENE-HYDRATE	Leaf	100.0	7965.0	3.162122330899287	--
23	TERPINEN-4-OL	Leaf	135.0	1530.0	0.5332933928836353	--
3	CHAVICOL	Plant	138.0	791.0	1.414213562373095	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	ALPHA-TERPINENE	Leaf	138.0	1620.0	0.5247481960598754	--
13	ALPHA-TERPINENE	Plant	183.0	1830.0	2.256141022146814	--
76	EUGENOL	Plant	200.0	2000.0	0.46992531158530604	--
11	GAMMA-TERPINENE	Leaf	210.0	2370.0	4.197708389548963	--
89	URSOLIC-ACID	Plant	500.0	2100.0	-0.695295811066768	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
112	ASCORBIC-ACID	Plant	514.0	555.0	-0.4633944303261279	USDA's Ag Handbook 8 and sequelae)
47	BETA-SITOSTEROL	Plant	520.0	540.0	-0.002824127733764179	--
2	PHYTOSTEROLS	Plant	600.0	650.0	-0.8083557786797939	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Plant	675.0	935.0	-0.25231992508556245	USDA's Ag Handbook 8 and sequelae)
6	IRON	Plant	750.0	975.0	0.4098917877276588	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-LINALOL	Plant	918.0	5263.0	1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	D-LINALOOL	Plant	918.0	5263.0	1.3717619314396152	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
37	CARVACROL	Plant	1092.0	10920.0	0.6439962127754266	--
23	TERPINEN-4-OL	Plant	1365.0	13650.0	5.665014759682814	--
26	PHENOL	Plant	1431.0	8204.0	1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	PHOSPHORUS	Plant	2670.0	3725.0	0.06551800424758951	USDA's Ag Handbook 8 and sequelae)
0	EO	Plant	3000.0	30000.0	1.539818214457512	--
65	MAGNESIUM	Plant	3300.0	3900.0	-0.0516230386408005	USDA's Ag Handbook 8 and sequelae)
0	FAT	Plant	8000.0	77950.0	0.3824473420028041	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Plant	14500.0	17225.0	-0.31886329834759486	USDA's Ag Handbook 8 and sequelae)
71	THYMOL	Essential Oil	15000.0	40000.0	-0.930874809378824	--
28	CALCIUM	Plant	17925.0	23625.0	1.073474951470644	USDA's Ag Handbook 8 and sequelae)
0	CIS-SABINENE-HYDRATE	Leaf Essent. Oil	20000.0	580000.0		--
11	GAMMA-TERPINENE	Essential Oil	48000.0	213000.0	2.0863713351738005	--
0	PENTOSANS	Plant	70000.0	76800.0	-1.0044263136260358	--
0	WATER	Plant	74920.0	77880.0	-2.966987461751347	USDA's Ag Handbook 8 and sequelae)
0	ASH	Plant	96900.0	123300.0	0.0413244786252859	--
0	PROTEIN	Plant	121450.0	143100.0	-0.2488413430316014	--
15	FIBER	Plant	170170.0	220600.0	-0.016312721496673874	--
37	CARVACROL	Essential Oil	388800.0	795000.0	1.956448823344398	--
0	CARBOHYDRATES	Plant	605600.0	654050.0	-0.11813185716958748	USDA's Ag Handbook 8 and sequelae)