

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	CARBOHYDRATES	Plant	605600.0	654050.0	-0.11813185716958748	USDA's Ag Handbook 8 and sequelae)
37	CARVACROL	Essential Oil	388800.0	795000.0	1.956448823344398	--
15	FIBER	Plant	170170.0	220600.0	-0.016312721496673874	--
0	PROTEIN	Plant	121450.0	143100.0	-0.2488413430316014	--
0	ASH	Plant	96900.0	123300.0	0.0413244786252859	--
0	WATER	Plant	74920.0	77880.0	-2.966987461751347	USDA's Ag Handbook 8 and sequelae)
0	PENTOSANS	Plant	70000.0	76800.0	-1.0044263136260358	--
11	GAMMA-TERPINENE	Essential Oil	48000.0	213000.0	2.0863713351738005	--
0	CIS-SABINENE-HYDRATE	Leaf Essent. Oil	20000.0	580000.0		--
28	CALCIUM	Plant	17925.0	23625.0	1.073474951470644	USDA's Ag Handbook 8 and sequelae)
71	THYMOL	Essential Oil	15000.0	40000.0	-0.930874809378824	--
14	POTASSIUM	Plant	14500.0	17225.0	-0.31886329834759486	USDA's Ag Handbook 8 and sequelae)
0	FAT	Plant	8000.0	77950.0	0.3824473420028041	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Plant	3300.0	3900.0	-0.0516230386408005	USDA's Ag Handbook 8 and sequelae)
0	EO	Plant	3000.0	30000.0	1.539818214457512	--
4	PHOSPHORUS	Plant	2670.0	3725.0	0.06551800424758951	USDA's Ag Handbook 8 and sequelae)
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.
23	TERPINEN-4-OL	Plant	1365.0	13650.0	5.665014759682814	--
37	CARVACROL	Plant	1092.0	10920.0	0.6439962127754266	--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	IRON	Plant	750.0	975.0	0.4098917877276588	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Plant	675.0	935.0	-0.25231992508556245	USDA's Ag Handbook 8 and sequelae)
2	PHYTOSTEROLS	Plant	600.0	650.0	-0.8083557786797939	USDA's Ag Handbook 8 and sequelae)
47	BETA-SITOSTEROL	Plant	520.0	540.0	-0.002824127733764179	--
112	ASCORBIC-ACID	Plant	514.0	555.0	-0.4633944303261279	USDA's Ag Handbook 8 and sequelae)
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.
11	GAMMA-TERPINENE	Leaf	210.0	2370.0	4.197708389548963	--
76	EUGENOL	Plant	200.0	2000.0	0.46992531158530604	--
13	ALPHA-TERPINENE	Plant	183.0	1830.0	2.256141022146814	--
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	--
23	TERPINEN-4-OL	Leaf	135.0	1530.0	0.5332933928836353	--
0	CIS-SABINENE-HYDRATE	Leaf	100.0	7965.0	3.162122330899287	--
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	--
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.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
31	CARYOPHYLLENE	Plant	52.0	1307.0	1.1553486678162894	--
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.
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.)
53	BETA-CAROTENE	Plant	48.0	52.0	-0.44555296413975976	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Plant	41.0	44.0	-0.45847508395560455	USDA's Ag Handbook 8 and sequelae)
0	BETA-CARYOPHYLLENE	Plant	35.0	750.0	0.12906156273708783	--
77	ZINC	Plant	32.0	43.0	-0.09018412071860993	--
0	TRANS-SABINENE-HYDRATE	Plant	30.0	1850.0	3.431164061315594	--
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).
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	--
16	P-CYMENE	Plant	21.0	210.0	-0.3655894027588645	--
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	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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	TRANS-PIPERITOL	Plant	9.0	52.0		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.
13	BETA-PINENE	Plant	6.0	34.0	-0.3987756455135756	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	LINALYL-ACETATE	Plant	3.0	3030.0	0.8790079353067117	--
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	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				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
0	CIS-4-ETHOXY-THUJANE	Essential Oil		52000.0		--
0	(+)-CAR-3-ENE	Essential Oil				--
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	--
3	CYNAROSIDE	Shoot				--
1	ETHYL-LAURATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NEROL-ACETATE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	CIS-3-ETHOXY-1-P-MENTHENE	Essential Oil		2000.0		--
18	VITEXIN	Shoot				--
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	--
4	COSMOSIIN	Shoot				--
0	ETHYL-CAPRATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
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		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
77	CHLOROGENIC-ACID	Shoot				--
0	VANILLIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				--
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				--
4	COSMOSIIN	Pollen Or Spore				--
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)
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	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
31	CARYOPHYLENE	Essential Oil		61000.0	0.37737527199565624	--
0	TRANS-Z-P-MENTHEN-1-OL	Essential Oil		61000.0		--
0	1,8-CINEOL	Essential Oil				--
57	ROSMARINIC-ACID	Shoot		9400.0	-0.4142658927809455	--
0	FIXED-OIL	Seed				--
5	NERYL-ACETATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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		--
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	TRANS-SABINENE-HYDRATE-METHYL-ETHER	Leaf Essent. Oil		60000.0		--
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.



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	--
0	ETHYL-TRANSHEXADECANOATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
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.
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		--
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	TRANS-SABINENE-HYDRATE	Essential Oil		51000.0	1.0	--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ETHYL-TRANS-HEXADECENOATE	Essential Oil				--
0	ETHYL-STEARATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DINATIN-7-GLUCOSIDE	Leaf				--
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	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	--
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	--
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				--
1	ETHYL-PALMITATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	DELTA-3-CARENE	Plant				--
0	3-BETA-HYDROXYURS-12-EN-28-OIC-ACID-3-O-BETA-D-GLUCOPYRANOSYL-(1->4)-O-BETA-D-XYLOPYRANOSIDE	Stem		13000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	--
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		--
0	P-CYMEN-8-OL	Essential Oil		0.0		--
0	ETHYL-CAPRATE	Essential Oil		61000.0		--
1	ETHYL-OLEATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	MANGANESE	Plant		54.0	-0.30787688494994525	USDA's Ag Handbook 8 and sequelae)
13	BETA-PINENE	Essential Oil		4000.0	-0.6415683948649324	--
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		--
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				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BICYCLOGERMACRENE	Essential Oil		27000.0	1.0	--
0	TRANS-P-MENTH-2-ENOL	Leaf Essent. Oil		50000.0		--
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				--
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	--
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	--
0	LINOLENIC-ACID-ETHYL-ESTER	Essential Oil				--
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				--
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	DIOSMETIN-7-O-BETA-GLUCURONIDE	Pollen Or Spore				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	BETA-FARNESENE	Essential Oil				--
12	COPPER	Plant		11.0	-0.33406963620245544	USDA's Ag Handbook 8 and sequelae)
0	LINOLEIC-ACID-ETHYL-ESTER	Essential Oil				--
0	4-ETHOXY-P-MENTH-1-ENE	Plant				--
0	CIS-P-MENTH-2-ENOL	Leaf Essent. Oil		30000.0		--
0	(+)-CARAN-TRANS-4-OL	Essential Oil				--
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		--