

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Salvia officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(-)-THUJONE	Essential Oil				--
4	NEPETIN	Plant				--
0	GAMMA-MAALIENE	Plant				--
0	APIGENIN-7-O-BETA-D-GLUCURONYLPYRANOSIDE	Shoot				--
18	TERPINEOL	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	POTASSIUM-NITRATE	Plant				--
9	BETA-AMYRIN	Plant				--
18	TERPINEOL	Essential Oil				--
0	SAPONIN	Plant				--
2	3-ISOTHUJONE	Leaf				--
0	LUTEOLIN-7-GLYCOSIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
47	BETA-SITOSTEROL	Fruit Essent. Oil				--
10	ALPHA-AMYRIN	Plant				--
13	PALMITIC-ACID	Seed				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	CIRSILIOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	N-TRIACONTANE	Plant				--
0	DELTA-TERPINEOL	Leaf Essent. Oil				--
0	3-CARENE	Plant				--
13	DIOSMETIN	Plant				Stitt, Paul. Why George should eat broccoli.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SALVIOL	Essential Oil				--
7	LUTEOLIN-7-GLUCOSIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	BETA-SITOSTEROL-D-GLUCOSIDE	Seed				--
0	7-O-ACETYL-HORMINONE	Root				--
10	CIRSILINEOL	Plant				Stitt, Paul. Why George should eat broccoli.
0	TRANS-SABINOL	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
62	GALLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	AVENASTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	EPIROSMANOL	Resin, Exudate, Sap				--
0	WAX	Plant				--
3	SALVIN-MONOMETHYL-ETHER	Leaf				--
78	LUTEOLIN	Shoot				--
0	DELTA-TERPINEOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	P-CYMEN-8-OL	Plant				--
13	PALMITIC-ACID	Fruit Essent. Oil				--
7	FUMARIC-ACID	Plant				--
0	TRANS-SABINOL	Leaf Essent. Oil				--
2	ASPARAGINE	Plant				--
12	STIGMASTEROL	Fruit Essent. Oil				--
1	DELTA-CADINOL	Leaf Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SALVIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	CAMPESTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
11	ALPHA-PHELLANDRENE	Essential Oil				--
63	MENTHOL	Plant				--
2	TRANS-PINOCARVEOL	Leaf Essent. Oil				--
3	ALANINE	Plant				Stitt, Paul. Why George should eat broccoli.
25	P-COUMARIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
7	HISPIDULIN	Leaf				--
0	CINAROSIDE	Shoot				--
0	TRANS-OCIMENE	Plant				--
0	HYDROXY-ROYLEANONE	Plant				--
8	STEARIC-ACID	Seed				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
7	CHRYSOERIOL	Plant				Stitt, Paul. Why George should eat broccoli.
0	PLANTEOSE	Seed				--
8	STEARIC-ACID	Fruit Essent. Oil				--
9	DELTA-CADINENE	Leaf Essent. Oil				--
1	VIRIDIFLOROL	Leaf				--
0	SALVIGENIN-7-O-GLUCURONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	CAMPESTEROL	Fruit Essent. Oil				--
57	ROSMARINIC-ACID	Leaf				--
0	ALPHA-MUUROLENE	Leaf Essent. Oil				--
63	MENTHOL	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil				--
0	ACETO-HYDROXY-ROYLEANONE	Plant				--
9	OXALIC-ACID	Plant				--
12	GLYCINE	Plant				Stitt, Paul. Why George should eat broccoli.
0	TRANS-ALLO-OCIMENE	Plant				--
5	ROSMANOL	Plant				Stitt, Paul. Why George should eat broccoli.
61	FERULIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	SPATHULENOL	Leaf Essent. Oil				--
24	VANILLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	SALVIGENIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
102	CAFFEIC-ACID	Inflorescence				--
11	ALPHA-PHELLANDRENE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	COBALT	Leaf				--
3	CYNAROSIDE	Leaf				--
71	THYMOL	Leaf				--
2	BETA-MYRCENE	Essential Oil				--
0	6-METHOXYLUTEOLIN-7-METHYL-ETHER	Plant				--
5	GLUTAMINE	Plant				--
0	TRANS-3-HEXENAL	Plant				--
15	MALIC-ACID	Plant				--
2	HUMULENE	Leaf Essent. Oil				--
1	CHOLESTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PICROSALVIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	AROMADENDRENE	Plant				--
6	UVAOL	Plant				--
0	SALVIATANNIN	Leaf				--
102	CAFFEIC-ACID	Shoot				--
0	ALPHA-OLEANOLIC-ACID	Plant				--
57	ROSMARINIC-ACID	Tissue Culture				--
2	MANOOL	Essential Oil				--
53	CITRAL	Plant				Stitt, Paul. Why George should eat broccoli.
0	6-METHOXYLUTEOLIN	Plant				--
0	1,8-CINEOL	Leaf				--
0	GERMANICOL	Plant				--
0	CARNOSIC-ACID-12-METHYL-ETHER	Shoot				--
0	BETA-OLEANOLIC-ACID	Plant				--
18	OLEIC-ACID	Fruit Essent. Oil				--
0	HORMINONE	Root				--
43	CATECHIN	Plant				--
77	CHLOROGENIC-ACID	Shoot				--
0	APIGENIN-7-O-BETA-D-GLUCURONYLPYRANOSIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	SALVIGENIN	Shoot				--
0	2-ALPHA,3-ALPHA-DIHYDROXY-OLEAN-12-EN-28-OIC-ACID	Leaf				--
0	AVENASTEROL	Fruit Essent. Oil				--
34	SALICYLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LEDENE	Plant				--
0	LUTEOLIN-7-GLYCOSIDE	Root				--
0	CIS-SABINENE-HYDRATE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CIS-SABINENE-HYDRATE	Leaf Essent. Oil				--
0	6-METHOXYGENKWANIN-7-METHYL-ETHER	Plant				--
35	GERANIOL	Plant				Stitt, Paul. Why George should eat broccoli.
71	THYMOL	Essential Oil				--
0	BETA-COPAENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
17	FARNESOL	Plant				--
1	SERINE	Plant				Stitt, Paul. Why George should eat broccoli.
101	APIGENIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	1-OCTEN-3-OL	Plant				--
101	APIGENIN	Shoot				--
0	LUTEOLIN-7-O-GLUCURONIDE	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
1	VIRIDIFLOROL	Essential Oil				--
0	ALPHA-GURJUNENE	Plant				--
0	ALPHA-COPAENE	Leaf Essent. Oil				--
0	PECTOLINAMARIGENIN	Plant				Stitt, Paul. Why George should eat broccoli.
1	LABIATIC-ACID	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
78	LUTEOLIN	Leaf				--
0	CIS-BETA-OCIMENE	Leaf Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	6-METHOXY-GENKWANIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	GENKWANIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	SELINA-5,11-DIENE	Plant				--
0	1,8-CINEOLE-SYNTHEASE	Leaf				--
0	LUTEOLIN-7-O-BETA-D-GLUCOSIDE	Plant				Stitt, Paul. Why George should eat broccoli.
0	VALERANONE	Leaf Essent. Oil				--
47	BETA-SITOSTEROL	Sprout Seedling				--
0	ALPHA-COROCALENE	Plant				--
3	ALPHA-CEDRENE	Leaf Essent. Oil				--
24	PECTIN	Shoot				--
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil				--
0	LINOLENIC-ACID	Fruit Essent. Oil				--
0	CIRSIMARITRIN	Plant				Stitt, Paul. Why George should eat broccoli.
1	CHOLESTEROL	Fruit Essent. Oil				--
0	5-METHOXSALVIGENIN	Leaf				--
5	ROSMANOL	Resin, Exudate, Sap				--
0	BETA-BOURBONENE	Leaf Essent. Oil				--
0	GAMMA-CADINENE	Leaf Essent. Oil				--
60	SELENIUM	Leaf				--
20	CARNOSOL	Plant				--
0	ALPHA-URSOLIC-ACID	Plant				--
51	ELLAGIC-ACID	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LUTEOLIN-7-METHYL-ETHER	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BETA-URSOLIC-ACID	Plant				--
89	URSOLIC-ACID	Root				--
47	BETA-SITOSTEROL	Root				--
3	ALPHA-CEDRENE	Plant				Stitt, Paul. Why George should eat broccoli.
3	ALPHA-CADINOL	Leaf Essent. Oil				--
11	PANTOTHENIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	6-METHOXYLUTEOLIN-7-METHYL-ETHER	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	ISOCARYOPHYLLENE	Plant				--
27	LINOLEIC-ACID	Fruit Essent. Oil				--
0	CIRSILION	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
77	CHLOROGENIC-ACID	Inflorescence				--
8	TYROSINE	Plant				Stitt, Paul. Why George should eat broccoli.
24	CHROMIUM	Leaf	0.1	0.3	-0.621193465203015	--
0	EPIROSMANOL	Shoot		1.0		--
0	3-EPIOLEANOLIC-ACID	Leaf		1.4		--
0	2-AMINO-ADIPIC-ACID	Shoot		1.6		--
0	SACCHAROPINE	Shoot		1.6	-0.7071067811865464	--
0	7-METHOXY-ROSMANOL	Shoot		2.0	-1.0	--
0	6,7-DIMETHOXY-ROSMANOL	Shoot		2.0		--
2	POMOLIC-ACID	Leaf		3.0	-1.0	--
14	MANGANESE	Leaf	0.5	3.0	-0.4548985090553243	--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	SILICON	Leaf	0.5	3.1	-0.40397146474890056	--
15	RIBOFLAVIN	Leaf	0.6	3.6	-0.16098657500422545	--
77	ZINC	Leaf	1.0	5.9	-0.4905596892021207	--
12	COPPER	Leaf	7.0	8.0	-0.540960423661207	USDA's Ag Handbook 8 and sequelae)
4	TIN	Leaf	1.3	8.0	-0.9124295958448216	--
31	THIAMIN	Leaf	7.0	8.0	-0.06349209547044472	Father Nature's Farmacy: The aggregate of all these three-letter citations.
0	THIAMINE	Leaf	1.3	8.2	0.7312289774690919	--
0	EUGENOL-GLUCOSIDE	Leaf		9.0		--
5	ROSMANOL	Shoot		11.0		--
1	SODIUM	Plant	11.0	12.0	-0.30341378566295807	Father Nature's Farmacy: The aggregate of all these three-letter citations.
0	GAMMA-CADINENE	Plant	2.0	14.0	-0.45984857009077795	--
9	DELTA-CADINENE	Plant	2.0	14.0	-0.4659017963716953	--
0	URS-12-EN-28-OIC-ACID	Leaf		14.0		--
6	IRON	Leaf	2.4	15.0	-0.8825570778618611	--
13	BETULIN	Leaf		15.0	-0.47962706385165327	--
0	2-ALPHA-HYDROXY-3-OXO-OLEAN-12-EN-28-OIC-ACID	Leaf		17.0		--
0	O-METHYL-CARNOSIC-ACID	Shoot		17.0		--
0	EPIOLEANOLIC-ACID	Leaf		20.0		--
0	2-METHYL-3-METHYLENE-HEPT-TRANS-5-ENE	Leaf	5.0	28.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CALAMENE	Plant	5.0	28.0	1.0	--
3	BETA-PHELLANDRENE	Leaf	5.0	28.0	-0.39745256523265804	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
20	CARNOSOL	Shoot		34.0	-0.9354703756918734	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CARNOSIC-ACID	Shoot		35.0	-0.666399572485972	--
53	BETA-CAROTENE	Leaf	6.0	39.0	-0.9680962342519674	--
4	BORON	Leaf	25.0	41.0	-0.5517818218876644	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).
2	METHYL-ISOVALERATE	Plant	7.0	42.0		--
0	CARNOSIC-ACID-METHYL-ESTER	Shoot		45.0		--
6	MASLINIC-ACID	Leaf		46.0	-0.8872714302780136	--
5	SABINENE	Leaf	10.0	56.0	-0.22552904691038753	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	TRANS-SABINENE-HYDRATE	Leaf	10.0	56.0	1.6793837527948157	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	ALPHA-TERPINENE	Leaf	10.0	56.0	-0.2834251845983478	--
0	CIS-BETA-TERPINEOL	Leaf	10.0	56.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PRISTANE	Leaf		56.0		--
1	ISOROSMANOL	Shoot		57.0		--
0	SAFFICINOLIDE	Shoot	35.0	57.0		--
39	NIACIN	Leaf	10.0	62.0	-0.4318167758906651	--
0	SAGEONE	Shoot	22.0	73.0		--
0	TRICYCLENENE	Leaf	15.0	84.0	1.3596086072298736	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	ALLO-AROMADENDRENE	Leaf	15.0	84.0	-0.1830077223581628	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	OLEAN-12-EN-28-OIC-ACID	Shoot		86.0		--
9	TERPINOLENE	Plant		112.0	0.2506839298132136	--
5	ALUMINUM	Leaf	18.0	115.0	-0.6571553869693828	--
2	CAMPESTEROL	Leaf		120.0	-0.2035509596292973	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
11	GAMMA-TERPINENE	Leaf	15.0	140.0	-0.1019870841807531	--
1	ROSMANOL-9-ETHYL-ETHER	Shoot		144.0		--
0	ROSMANOL-7-ETHYL-ETHER	Shoot		144.0		--
89	URSOLIC-ACID	Stem		200.0	-0.8584003823146588	--
0	SAGEQUINONE-METHIDE-A	Shoot		207.0		--
0	2-METHYL-3-METHYLENE-HEPT-CIS-5-ENE	Leaf	40.0	224.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
12	STIGMASTEROL	Leaf	5.0	230.0	1.7806618408085848	--
0	2-METHYL-3-METHYLENE-5-HEPTANE	Leaf	50.0	280.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Plant	55.0	308.0	0.16441757054150238	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Plant	0.0	336.0	-0.10695418064014987	--
112	ASCORBIC-ACID	Leaf	55.0	350.0	-0.4114445568899699	--
0	ALPHA-THUJENE	Leaf	0.0	386.0	3.2507273876024785	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
64	OLEANOLIC-ACID	Stem		400.0	1.0	--
5	SABINOL	Leaf	85.0	476.0	0.31621378249351945	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Shoot	15.0	495.0	-0.10900236438234769	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHELLANDRENE	Leaf	100.0	560.0	-0.35918289789876834	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	ALPHA-HUMULENE	Leaf	110.0	616.0	0.5782902434464878	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	SABINYL-ACETATE	Plant	110.0	616.0		--
0	BETA-CARYOPHYLLENE	Leaf	500.0	760.0	0.03728060572503595	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	ISOBORNEOL	Shoot	0.0	784.0	1.1758265637832626	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
64	OLEANOLIC-ACID	Leaf	140.0	786.0	-0.36135857674665767	--
0	TRANS-SALVENE	Essential Oil		800.0		--
23	ALPHA-TERPINEOL	Leaf	5.0	910.0	1.0071602347564552	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	BETA-AMYRIN	Leaf		1000.0		--
3	BETA-PHELLANDRENE	Leaf Essent. Oil		1000.0	-0.8347075553554938	--
0	2-METHYL-3-METHYLENE-HEPT-TRANS-5-ENE	Leaf Essent. Oil		1000.0		--
23	ALPHA-TERPINEOL	Leaf Essent. Oil		1000.0	-0.8444420280137835	--
13	ALPHA-TERPINENE	Et		1000.0		--
1	SODIUM	Leaf	170.0	1080.0	-0.4554694713688264	--
23	TERPINEN-4-OL	Leaf	10.0	1120.0	0.29918716656064637	--
0	ALPHA-THUJENE	Essential Oil		1200.0	-0.3928412484180114	--
5	SABINENE	Essential Oil		1200.0	-0.5875917391877868	--
47	BETA-SITOSTEROL	Stem		1214.0	1.0861956164972184	--
4	PHOSPHORUS	Leaf	201.0	1280.0	-0.6791795625313858	--
89	URSOLIC-ACID	Leaf	1255.0	1300.0	-0.38650833417091646	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	THUJOL-ACETATE	Essential Oil		1300.0		--
0	SAGERINIC-ACID	Plant		1300.0		--
31	CARYOPHYLLENE	Leaf	1.0	1430.0	0.1300669724943753	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	MANOOL	Shoot	556.0	1478.0		--
28	ALPHA-PINENE	Plant	7.0	1540.0	0.6083638735756228	--
13	BETA-PINENE	Plant	20.0	1540.0	1.2273041399455444	--
20	CARNOSOL	Leaf		1660.0	-0.5296891454855135	--
12	BORNYL-ACETATE	Shoot	5.0	1780.0	2.5481701537732313	--
10	ALPHA-AMYRIN	Leaf		1800.0		--
0	ALLO-AROMADENDRENE	Essential Oil		1800.0	-1.0	--
0	CIS-BETA-TERPINEOL	Leaf Essent. Oil		2000.0		--
5	SABINENE	Leaf Essent. Oil		2000.0	-0.6066700271910461	--
0	TRANS-SABINENE-HYDRATE	Leaf Essent. Oil		2000.0	-1.0	--
13	ALPHA-TERPINENE	Leaf Essent. Oil		2000.0	-0.5761001164044018	--
9	TERPINOLENE	Leaf Essent. Oil		2000.0	-0.5940205732207128	--
2	MYRTENOL	Leaf Essent. Oil		2000.0		--
7	CARNOSOLIC-ACID	Leaf		2100.0		--
12	PINENE	Leaf	420.0	2352.0	-0.35113562909022744	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
60	LIMONENE	Plant	39.0	2380.0	0.9769131249982739	--
2	PHYTOSTEROLS	Leaf		2440.0	0.0028854038801737	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
47	BETA-SITOSTEROL	Leaf	5.0	2449.0	0.24430946587626218	--
65	MAGNESIUM	Leaf	444.0	2830.0	-0.5003307709599559	--
0	TRICYCLEN	Leaf Essent. Oil		3000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	TERPINEN-4-OL	Leaf Essent. Oil	2000.0	3000.0	-0.523716551964413	--
11	GAMMA-TERPINENE	Leaf Essent. Oil		3000.0	-0.6853547696905973	--
0	LEDOL	Leaf Essent. Oil		3000.0	-1.0	--
0	CIS-SALVENE	Essential Oil		3200.0		--
0	KILOCALORIES	Leaf		3420.0	0.6478563559445962	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	DIPENTENE-O-DIPHENOLLACTONE	Leaf		3500.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
53	LINALOOL	Plant	0.0	3500.0	-0.1908197582561713	--
0	LINALOL	Plant	0.0	3500.0	0.3590366860587444	--
23	ALPHA-TERPINEOL	Essential Oil		3700.0	-0.6091856576306849	--
7	ISOBORNEOL	Essential Oil		3800.0		--
11	GAMMA-TERPINENE	Et		4000.0		--
23	TERPINEN-4-OL	Essential Oil		4500.0	-0.5734207195469667	--
53	LINALOOL	Essential Oil	1700.0	5000.0	-0.560725569158283	--
0	NICOTINIC-ACID-AMIDE	Plant		5000.0		--
16	P-CYMENE	Essential Oil	3100.0	5400.0	-0.5888102139189108	--
0	SALVIANOLIC-ACID-K	Plant		5760.0		--
57	ROSMARINIC-ACID	Shoot	2000.0	5800.0	-0.5832582116490932	--
1	ROSMADIAL	Resin, Exudate, Sap		6000.0		--
7	LINALYL-ACETATE	Plant	0.0	6048.0	2.330313404492723	--
0	CINEOLE	Shoot	500.0	6075.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
67	1,8-CINEOLE	Plant	390.0	6288.0	1.2033227605211898	--
35	BORNEOL	Shoot		7000.0	6.370019299829522	--
22	MYRCENE	Et		8000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-METHYL-3-METHYLENE-HEPT-CIS-5-ENE	Leaf Essent. Oil		8000.0		--
0	ALPHA-TERPINEOL ACETATE	Et		9000.0		--
41	CAMPHOR	Leaf	0.0	9324.0	-0.03988163889064865	--
0	ISOBORNEOL-ACETATE	Shoot	168.0	9436.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
5	BETA-THUJONE	Leaf	200.0	9968.0	2.7606909658238585	--
0	LINALOOL-ACETATE	Et		10000.0		--
0	TANNINS	Leaf	785.0	10000.0	-1.0854284522770363	--
6	ALPHA-THUJONE	Leaf	200.0	10172.0	2.575761084269138	--
22	MYRCENE	Essential Oil	3700.0	10400.0	-0.3077036496607786	--
28	CALCIUM	Leaf	1696.0	10800.0	-0.5218305708813075	--
53	LINALOOL	Et		11000.0		--
16	P-CYMENE	Et		11000.0	-1.0	--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil		11000.0	-0.34048091992384494	--
13	ALPHA-TERPINENE	Essential Oil		11200.0	-0.4634179308976379	--
14	POTASSIUM	Plant	10700.0	11630.0	-0.7090536999047472	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CARNOSIC-ACID	Leaf		12400.0	1.5899657743835183	--
17	THUJONE	Leaf	1453.0	12636.0	1.4138087279087124	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
17	THUJONE	Plant	2500.0	13000.0	1.9856348958487122	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	(-)-THUJONE	Plant	2500.0	13000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	CARYOPHYLLENE-OXIDE	Essential Oil		13100.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ALPHA-THUJENE	Leaf Essent. Oil		13800.0	-0.41897395872827414	--
60	LIMONENE	Et		14000.0	-1.0	--
22	MYRCENE	Leaf Essent. Oil	9000.0	15700.0	-0.3056695322092534	--
16	P-CYMENE	Leaf Essent. Oil	7000.0	17700.0	-0.5156620336360256	--
2	HUMULENE	Essential Oil		17900.0	-1.0	--
13	BETA-PINENE	Et		18000.0		--
9	CAMPHENE	Leaf	20.0	18592.0	6.834837822452428	--
2	ALPHA-HUMULENE	Essential Oil		19300.0	-0.306582227205239	--
4	PHELLANDRENE	Essential Oil		20000.0		--
0	EO	Leaf		20000.0	0.7445770670718886	--
0	ROYLEANONE	Root		20300.0		--
2	ALPHA-HUMULENE	Et		21000.0		--
14	POTASSIUM	Leaf	3878.0	24700.0	-0.24922981870565544	--
0	BORNEOL-ACETATE	Et		26000.0		--
13	BETA-PINENE	Essential Oil	11300.0	26100.0	-0.15085215632839455	--
7	ISOBORNEOL	Leaf Essent. Oil		28000.0	-1.0	--
0	EO	Plant	5000.0	28000.0	1.3878217608821395	--
2	ALPHA-HUMULENE	Leaf Essent. Oil		29000.0	0.25622083823143005	--
31	CARYOPHYLLENE	Essential Oil		33000.0	-0.14865660979366116	--
0	ISOBORNEOL-ACETATE	Essential Oil		33700.0	1.0	--
0	LINALOOL-ACETATE	Leaf Essent. Oil	2000.0	34900.0	1.6339378873531796	--
28	ALPHA-PINENE	Et		35000.0	1.0	--
18	OLEIC-ACID	Seed		35500.0	-0.6872693677072723	--
20	CARNOSOL	Resin, Exudate, Sap		36000.0		--
60	LIMONENE	Leaf Essent. Oil	10000.0	36400.0	-0.517322999711508	--
0	CARNOSIC-ACID-METHYL-ESTER	Resin, Exudate, Sap		39000.0		--
28	ALPHA-PINENE	Essential Oil	11700.0	40100.0	-0.2072109908720455	--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Et		41000.0		--
57	ROSMARINIC-ACID	Inflorescence	30000.0	42000.0	0.25850024578765574	--
53	LINALOOL	Leaf Essent. Oil	4000.0	46600.0	-0.40077393425160296	--
9	CAMPHENE	Et		47000.0		--
0	1,8-CINEOL	Et		50000.0		--
57	ROSMARINIC-ACID	Plant	30000.0	50600.0	1.3515537858959146	--
0	SELIN-11-EN-4-OL	Leaf Essent. Oil		54000.0		--
28	ALPHA-PINENE	Leaf Essent. Oil	35000.0	55000.0	-0.4505855480163243	--
13	BETA-PINENE	Leaf Essent. Oil	21000.0	55000.0	1.622889330955553	--
2	CARNOSIC-ACID	Resin, Exudate, Sap		57000.0		--
0	BORNEOL-ACETATE	Essential Oil	17900.0	59000.0	-0.13264034547163733	--
0	RESIN	Plant	50000.0	60000.0	-0.5271561735476993	--
9	CAMPHENE	Essential Oil	30200.0	60700.0	1.1306904837156095	--
0	BORNEOL-ACETATE	Leaf Essent. Oil	1000.0	63500.0	-0.028206534857999635	--
0	BETA-CARYOPHYLLENE	Essential Oil	18900.0	66000.0	-0.22342680293575198	--
9	CAMPHENE	Leaf Essent. Oil	28000.0	66400.0	1.484566818920243	--
27	LINOLEIC-ACID	Seed		73000.0	-0.29236236831545726	--
35	BORNEOL	Et		79000.0		--
35	TANNIN	Plant	20000.0	80000.0	-0.053082229266390064	--
12	PINENE	Essential Oil		84000.0	-1.0	--
60	LIMONENE	Essential Oil	6600.0	85000.0	-0.2478161403169539	--
0	LINOLENIC-ACID	Seed	42000.0	86750.0	0.9345778796061399	--
15	FIBER	Leaf		87000.0	-0.9217097607872751	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ASH	Leaf	13659.0	87000.0	-0.5611877153937178	--
0	PROTEIN	Leaf	18055.0	115000.0	-0.9661229417649582	--
0	FAT	Leaf	21666.0	138000.0	1.6247882242706593	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	BETA-THUJONE	Essential Oil	52300.0	142500.0		--
5	BETA-THUJONE	Et		151000.0		--
35	BORNEOL	Essential Oil	19700.0	156000.0	0.627691236095563	--
0	PROTEIN	Seed		180000.0	-0.4785438804290316	--
0	FIBER(CRUDE)	Leaf		196000.0	1.790184111544934	--
6	ALPHA-THUJONE	Et		206000.0		--
0	LINALOOL-ACETATE	Essential Oil	2000.0	216000.0	1.9636083246350857	--
0	1,8-CINEOL	Essential Oil	73000.0	217000.0	1.9052102662799937	--
41	CAMPHOR	Pericarp Essent. Oil		229000.0		--
0	FAT	Seed		250000.0	-0.08105194719463996	--
35	BORNEOL	Leaf Essent. Oil	16000.0	250000.0	2.73359024149356	--
0	FIBER(DIETARY)	Leaf		289000.0	-1.0282378241946064	--
41	CAMPHOR	Essential Oil	76000.0	305000.0	0.54343127227621	--
0	ALPHA-BETA-THUJONE	Essential Oil		347000.0		--
5	BETA-THUJONE	Leaf Essent. Oil	174000.0	356000.0		--
0	1,8-CINEOL	Leaf Essent. Oil	91000.0	357000.0	1.9399550242552641	--
6	ALPHA-THUJONE	Leaf Essent. Oil	200000.0	363300.0		--
6	ALPHA-THUJONE	Essential Oil	73300.0	408500.0		--
17	THUJONE	Et		457000.0		--
41	CAMPHOR	Leaf Essent. Oil	44000.0	458000.0	2.005169580755753	--
17	THUJONE	Essential Oil	451300.0	531000.0	1.0	--
0	CARBOHYDRATES	Leaf	103620.0	660000.0	0.38292106761842515	--
0	WATER	Leaf		843000.0	0.1764219759131201	--