

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Salvia officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
9	CAMPHENE	Leaf	20.0	18592.0	6.834837822452428	--
35	BORNEOL	Shoot		7000.0	6.370019299829522	--
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.
5	BETA-THUJONE	Leaf	200.0	9968.0	2.7606909658238585	--
35	BORNEOL	Leaf Essent. Oil	16000.0	250000.0	2.73359024149356	--
6	ALPHA-THUJONE	Leaf	200.0	10172.0	2.575761084269138	--
12	BORNYL-ACETATE	Shoot	5.0	1780.0	2.5481701537732313	--
7	LINALYL-ACETATE	Plant	0.0	6048.0	2.330313404492723	--
41	CAMPHOR	Leaf Essent. Oil	44000.0	458000.0	2.005169580755753	--
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	LINALOOL-ACETATE	Essential Oil	2000.0	216000.0	1.9636083246350857	--
0	1,8-CINEOL	Leaf Essent. Oil	91000.0	357000.0	1.9399550242552641	--
0	1,8-CINEOL	Essential Oil	73000.0	217000.0	1.9052102662799937	--
0	FIBER(CRUDE)	Leaf		196000.0	1.790184111544934	--
12	STIGMASTEROL	Leaf	5.0	230.0	1.7806618408085848	--
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.
0	LINALOOL-ACETATE	Leaf Essent. Oil	2000.0	34900.0	1.6339378873531796	--
0	FAT	Leaf	21666.0	138000.0	1.6247882242706593	--
13	BETA-PINENE	Leaf Essent. Oil	21000.0	55000.0	1.622889330955553	--
2	CARNOSIC-ACID	Leaf		12400.0	1.5899657743835183	--
9	CAMPHENE	Leaf Essent. Oil	28000.0	66400.0	1.484566818920243	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	EO	Plant	5000.0	28000.0	1.3878217608821395	--
0	TRICYCLENE	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.
57	ROSMARINIC-ACID	Plant	30000.0	50600.0	1.3515537858959146	--
13	BETA-PINENE	Plant	20.0	1540.0	1.2273041399455444	--
67	1,8-CINEOLE	Plant	390.0	6288.0	1.2033227605211898	--
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.
9	CAMPHENE	Essential Oil	30200.0	60700.0	1.1306904837156095	--
47	BETA-SITOSTEROL	Stem		1214.0	1.0861956164972184	--
23	ALPHA-TERPINEOL	Leaf	5.0	910.0	1.0071602347564552	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Et		35000.0	1.0	--
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.
0	ISOBORNEOL-ACETATE	Essential Oil		33700.0	1.0	--
0	CALAMENE	Plant	5.0	28.0	1.0	--
64	OLEANOLIC-ACID	Stem		400.0	1.0	--
17	THUJONE	Essential Oil	451300.0	531000.0	1.0	--
60	LIMONENE	Plant	39.0	2380.0	0.9769131249982739	--
0	LINOLENIC-ACID	Seed	42000.0	86750.0	0.9345778796061399	--
0	EO	Leaf		20000.0	0.7445770670718886	--
0	THIAMINE	Leaf	1.3	8.2	0.7312289774690919	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	KILOCALORIES	Leaf		3420.0	0.6478563559445962	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
35	BORNEOL	Essential Oil	19700.0	156000.0	0.627691236095563	--
28	ALPHA-PINENE	Plant	7.0	1540.0	0.6083638735756228	--
2	ALPHA-HUMULENE	Leaf	110.0	616.0	0.5782902434464878	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
41	CAMPHOR	Essential Oil	76000.0	305000.0	0.54343127227621	--
0	CARBOHYDRATES	Leaf	103620.0	660000.0	0.38292106761842515	--
0	LINALOL	Plant	0.0	3500.0	0.3590366860587444	--
5	SABINOL	Leaf	85.0	476.0	0.31621378249351945	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Leaf	10.0	1120.0	0.29918716656064637	--
57	ROSMARINIC-ACID	Inflorescence	30000.0	42000.0	0.25850024578765574	--
2	ALPHA-HUMULENE	Leaf Essent. Oil		29000.0	0.25622083823143005	--
9	TERPINOLENE	Plant		112.0	0.2506839298132136	--
47	BETA-SITOSTEROL	Leaf	5.0	2449.0	0.24430946587626218	--
0	WATER	Leaf		843000.0	0.1764219759131201	--
8	CARYOPHYLLENE-OXIDE	Plant	55.0	308.0	0.16441757054150238	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Leaf	1.0	1430.0	0.1300669724943753	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Leaf	500.0	760.0	0.03728060572503595	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.)
0	BORNEOL-ACETATE	Leaf Essent. Oil	1000.0	63500.0	-0.028206534857999635	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
41	CAMPHOR	Leaf	0.0	9324.0	-0.03988163889064865	--
35	TANNIN	Plant	20000.0	80000.0	-0.053082229266390064	--
31	THIAMIN	Leaf	7.0	8.0	-0.06349209547044472	Father Nature's Farmacy: The aggregate of all these three-letter citations.
0	FAT	Seed		250000.0	-0.08105194719463996	--
11	GAMMA-TERPINENE	Leaf	15.0	140.0	-0.1019870841807531	--
22	MYRCENE	Plant	0.0	336.0	-0.10695418064014987	--
16	P-CYMENE	Shoot	15.0	495.0	-0.10900236438234769	--
0	BORNEOL-ACETATE	Essential Oil	17900.0	59000.0	-0.13264034547163733	--
31	CARYOPHYLLENE	Essential Oil		33000.0	-0.14865660979366116	--
13	BETA-PINENE	Essential Oil	11300.0	26100.0	-0.15085215632839455	--
15	RIBOFLAVIN	Leaf	0.6	3.6	-0.16098657500422545	--
0	ALLO-AROMADENDRENE	Leaf	15.0	84.0	-0.1830077223581628	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Plant	0.0	3500.0	-0.1908197582561713	--
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.)
28	ALPHA-PINENE	Essential Oil	11700.0	40100.0	-0.2072109908720455	--
0	BETA-CARYOPHYLLENE	Essential Oil	18900.0	66000.0	-0.22342680293575198	--
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.
60	LIMONENE	Essential Oil	6600.0	85000.0	-0.2478161403169539	--
14	POTASSIUM	Leaf	3878.0	24700.0	-0.24922981870565544	--
13	ALPHA-TERPINENE	Leaf	10.0	56.0	-0.2834251845983478	--
27	LINOLEIC-ACID	Seed		73000.0	-0.29236236831545726	--
1	SODIUM	Plant	11.0	12.0	-0.30341378566295807	Father Nature's Farmacy: The aggregate of all these three-letter citations.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Leaf Essent. Oil	9000.0	15700.0	-0.3056695322092534	--
2	ALPHA-HUMULENE	Essential Oil		19300.0	-0.306582227205239	--
22	MYRCENE	Essential Oil	3700.0	10400.0	-0.3077036496607786	--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil		11000.0	-0.34048091992384494	--
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.
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.
64	OLEANOLIC-ACID	Leaf	140.0	786.0	-0.36135857674665767	--
89	URSOLIC-ACID	Leaf	1255.0	1300.0	-0.38650833417091646	--
0	ALPHA-THUJENE	Essential Oil		1200.0	-0.3928412484180114	--
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.
53	LINALOOL	Leaf Essent. Oil	4000.0	46600.0	-0.40077393425160296	--
4	SILICON	Leaf	0.5	3.1	-0.40397146474890056	--
112	ASCORBIC-ACID	Leaf	55.0	350.0	-0.4114445568899699	--
0	ALPHA-THUJENE	Leaf Essent. Oil		13800.0	-0.41897395872827414	--
39	NIACIN	Leaf	10.0	62.0	-0.4318167758906651	--
28	ALPHA-PINENE	Leaf Essent. Oil	35000.0	55000.0	-0.4505855480163243	--
14	MANGANESE	Leaf	0.5	3.0	-0.4548985090553243	--
1	SODIUM	Leaf	170.0	1080.0	-0.4554694713688264	--
0	GAMMA-CADINENE	Plant	2.0	14.0	-0.45984857009077795	--
13	ALPHA-TERPINENE	Essential Oil		11200.0	-0.4634179308976379	--
9	DELTA-CADINENE	Plant	2.0	14.0	-0.4659017963716953	--
0	PROTEIN	Seed		180000.0	-0.4785438804290316	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETULIN	Leaf		15.0	-0.47962706385165327	--
77	ZINC	Leaf	1.0	5.9	-0.4905596892021207	--
65	MAGNESIUM	Leaf	444.0	2830.0	-0.5003307709599559	--
16	P-CYMENE	Leaf Essent. Oil	7000.0	17700.0	-0.5156620336360256	--
60	LIMONENE	Leaf Essent. Oil	10000.0	36400.0	-0.517322999711508	--
28	CALCIUM	Leaf	1696.0	10800.0	-0.5218305708813075	--
23	TERPINEN-4-OL	Leaf Essent. Oil	2000.0	3000.0	-0.523716551964413	--
0	RESIN	Plant	50000.0	60000.0	-0.5271561735476993	--
20	CARNOSOL	Leaf		1660.0	-0.5296891454855135	--
12	COPPER	Leaf	7.0	8.0	-0.540960423661207	USDA's Ag Handbook 8 and sequelae)
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).
53	LINALOOL	Essential Oil	1700.0	5000.0	-0.560725569158283	--
0	ASH	Leaf	13659.0	87000.0	-0.5611877153937178	--
23	TERPINEN-4-OL	Essential Oil		4500.0	-0.5734207195469667	--
13	ALPHA-TERPINENE	Leaf Essent. Oil		2000.0	-0.5761001164044018	--
57	ROSMARINIC-ACID	Shoot	2000.0	5800.0	-0.5832582116490932	--
5	SABINENE	Essential Oil		1200.0	-0.5875917391877868	--
16	P-CYMENE	Essential Oil	3100.0	5400.0	-0.5888102139189108	--
9	TERPINOLENE	Leaf Essent. Oil		2000.0	-0.5940205732207128	--
5	SABINENE	Leaf Essent. Oil		2000.0	-0.6066700271910461	--
23	ALPHA-TERPINEOL	Essential Oil		3700.0	-0.6091856576306849	--
24	CHROMIUM	Leaf	0.1	0.3	-0.621193465203015	--
5	ALUMINUM	Leaf	18.0	115.0	-0.6571553869693828	--
2	CARNOSIC-ACID	Shoot		35.0	-0.666399572485972	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Leaf	201.0	1280.0	-0.6791795625313858	--
11	GAMMA-TERPINENE	Leaf Essent. Oil		3000.0	-0.6853547696905973	--
18	OLEIC-ACID	Seed		35500.0	-0.6872693677072723	--
0	SACCHAROPINE	Shoot		1.6	-0.7071067811865464	--
14	POTASSIUM	Plant	10700.0	11630.0	-0.7090536999047472	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	BETA-PHELLANDRENE	Leaf Essent. Oil		1000.0	-0.8347075553554938	--
23	ALPHA-TERPINEOL	Leaf Essent. Oil		1000.0	-0.8444420280137835	--
89	URSOLIC-ACID	Stem		200.0	-0.8584003823146588	--
6	IRON	Leaf	2.4	15.0	-0.8825570778618611	--
6	MASLINIC-ACID	Leaf		46.0	-0.8872714302780136	--
4	TIN	Leaf	1.3	8.0	-0.9124295958448216	--
15	FIBER	Leaf		87000.0	-0.9217097607872751	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
20	CARNOSOL	Shoot		34.0	-0.9354703756918734	--
0	PROTEIN	Leaf	18055.0	115000.0	-0.9661229417649582	--
53	BETA-CAROTENE	Leaf	6.0	39.0	-0.9680962342519674	--
0	LEDOL	Leaf Essent. Oil		3000.0	-1.0	--
22	MYRCENE	Et		8000.0	-1.0	--
12	PINENE	Essential Oil		84000.0	-1.0	--
0	TRICYCLEN	Leaf Essent. Oil		3000.0	-1.0	--
2	POMOLIC-ACID	Leaf		3.0	-1.0	--
0	7-METHOXY-ROSMANOL	Shoot		2.0	-1.0	--
7	ISOBORNEOL	Leaf Essent. Oil		28000.0	-1.0	--
0	TRANS-SABINENE-HYDRATE	Leaf Essent. Oil		2000.0	-1.0	--
16	P-CYMENE	Et		11000.0	-1.0	--
2	HUMULENE	Essential Oil		17900.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Et		14000.0	-1.0	--
0	ALLO-AROMADENDRENE	Essential Oil		1800.0	-1.0	--
0	FIBER(DIETARY)	Leaf		289000.0	-1.0282378241946064	--
0	TANNINS	Leaf	785.0	10000.0	-1.0854284522770363	--
13	PALMITIC-ACID	Seed				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	APIGENIN-7-O-BETA-D-GLUCURONYLPYRANOSIDE	Shoot				--
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.
18	TERPINEOL	Leaf				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	LINOLENIC-ACID	Fruit Essent. Oil				--
0	POTASSIUM-NITRATE	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.
1	CHOLESTEROL	Fruit Essent. Oil				--
0	THUJOL-ACETATE	Essential Oil		1300.0		--
10	ALPHA-AMYRIN	Leaf		1800.0		--
47	BETA-SITOSTEROL	Root				--
5	ROSMANOL	Resin, Exudate, Sap				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SAPONIN	Plant				--
3	ALPHA-CADINOL	Leaf Essent. Oil				--
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.
0	SAGERINIC-ACID	Plant		1300.0		--
6	BETA-SITOSTEROL-D-GLUCOSIDE	Seed				--
0	N-TRIACONTANE	Plant				--
0	VALERANONE	Leaf Essent. Oil				--
0	AVENASTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
7	LUTEOLIN-7-GLUCOSIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
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.
6	ALPHA-THUJONE	Leaf Essent. Oil	200000.0	363300.0		--
13	DIOSMETIN	Plant				Stitt, Paul. Why George should eat broccoli.
2	MYRTENOL	Leaf Essent. Oil		2000.0		--
0	(-)-THUJONE	Essential Oil				--
0	GAMMA-CADINENE	Leaf Essent. Oil				--
0	DELTA-TERPINEOL	Leaf Essent. Oil				--
10	CIRSILINEOL	Plant				Stitt, Paul. Why George should eat broccoli.
27	LINOLEIC-ACID	Fruit Essent. Oil				--
77	CHLOROGENIC-ACID	Inflorescence				--
47	BETA-SITOSTEROL	Fruit Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
62	GALLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
1	ROSMADIAL	Resin, Exudate, Sap		6000.0		--
3	SALVIOL	Essential Oil				--
0	ALPHA-BETA-THUJONE	Essential Oil		347000.0		--
1	ISOROSMANOL	Shoot		57.0		--
0	SAGEQUINONE-METHIDE-A	Shoot		207.0		--
2	ASPARAGINE	Plant				--
78	LUTEOLIN	Shoot				--
0	TRANS-SABINOL	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
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.
6	ALPHA-THUJONE	Et		206000.0		--
0	DELTA-TERPINEOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	ROYLEANONE	Root		20300.0		--
0	EUGENOL-GLUCOSIDE	Leaf		9.0		--
89	URSOLIC-ACID	Root				--
2	CAMPESTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	P-CYMEN-8-OL	Plant				--
0	CIS-BETA-TERPINEOL	Leaf Essent. Oil		2000.0		--
0	LINALOOL-ACETATE	Et		10000.0		--
8	CARYOPHILLENE-OXIDE	Essential Oil		13100.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	TERPINEOL	Essential Oil				--
13	BETA-PINENE	Et		18000.0		--
7	FUMARIC-ACID	Plant				--
3	SALVIN-MONOMETHYL-ETHER	Leaf				--
0	7-O-ACETYL-HORMINONE	Root				--
41	CAMPHOR	Pericarp Essent. Oil		229000.0		--
0	SAGEONE	Shoot	22.0	73.0		--
2	METHYL-ISOVALERATE	Plant	7.0	42.0		--
0	WAX	Plant				--
3	ALANINE	Plant				Stitt, Paul. Why George should eat broccoli.
7	CHRYSOERIOL	Plant				Stitt, Paul. Why George should eat broccoli.
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.
6	ALPHA-THUJONE	Essential Oil	73300.0	408500.0		--
0	BORNEOL-ACETATE	Et		26000.0		--
0	EPIROSMANOL	Shoot		1.0		--
25	P-COUMARIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	TRANS-SABINOL	Leaf Essent. Oil				--
7	HISPIDULIN	Leaf				--
0	CINAROSIDE	Shoot				--
4	PELLANDRENE	Essential Oil		20000.0		--
3	SALVIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
7	ISOBORNEOL	Essential Oil		3800.0		--
9	CAMPHENE	Et		47000.0		--
0	SAFFICINOLIDE	Shoot	35.0	57.0		--
0	ACETO-HYDROXY-ROYLEANONE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-OCIMENE	Plant				--
0	2-AMINO-ADIPIIC-ACID	Shoot		1.6		--
0	EPIROSMANOL	Resin, Exudate, Sap				--
0	TRANS-SALVENE	Essential Oil		800.0		--
9	OXALIC-ACID	Plant				--
11	ALPHA-PHELLANDRENE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
12	GLYCINE	Plant				Stitt, Paul. Why George should eat broccoli.
8	STEARIC-ACID	Seed				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
11	ALPHA-PHELLANDRENE	Essential Oil				--
0	PLANTEOSE	Seed				--
20	CARNOSOL	Resin, Exudate, Sap		36000.0		--
61	FERULIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
13	PALMITIC-ACID	Fruit Essent. Oil				--
0	SALVIGENIN-7-O-GLUCURONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	6,7-DIMETHOXY-ROSMANOL	Shoot		2.0		--
1	VIRIDIFLOROL	Leaf				--
0	6-METHOXYLUTEOLIN-7-METHYL-ETHER	Plant				--
1	CHOLESTEROL	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	AROMADENDRENE	Plant				--
0	TRANS-ALLO-OCIMENE	Plant				--
0	2-ALPHA-HYDROXY-3-OXOLEAN-12-EN-28-OIC-ACID	Leaf		17.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Leaf				--
63	MENTHOL	Plant				--
5	ROSMANOL	Plant				Stitt, Paul. Why George should eat broccoli.
35	BORNEOL	Et		79000.0		--
1	DELTA-CADINOL	Leaf Essent. Oil				--
102	CAFFEIC-ACID	Shoot				--
0	ALPHA-OLEANOLIC-ACID	Plant				--
2	CAMPESTEROL	Fruit Essent. Oil				--
5	GLUTAMINE	Plant				--
0	ALPHA-MUUROLENE	Leaf Essent. Oil				--
53	LINALOOL	Et		11000.0		--
12	STIGMASTEROL	Fruit Essent. Oil				--
0	SALVIGENIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2-METHYL-3-METHYLENE-HEPT-TRANS-5-ENE	Leaf Essent. Oil		1000.0		--
0	HYDROXY-ROYLEANONE	Plant				--
0	BETA-OLEANOLIC-ACID	Plant				--
15	MALIC-ACID	Plant				--
24	VANILLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	6-METHOXYLUTEOLIN	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	TRANS-3-HEXENAL	Plant				--
0	2-ALPHA,3-ALPHA-DIHYDROXY-OLEAN-12-EN-28-OIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-TERPINEOL ACETATE	Et		9000.0		--
53	CITRAL	Plant				Stitt, Paul. Why George should eat broccoli.
63	MENTHOL	Leaf				--
9	DELTA-CADINENE	Leaf Essent. Oil				--
2	TRANS-PINOCARVEOL	Leaf Essent. Oil				--
102	CAFFEIC-ACID	Inflorescence				--
0	GERMANICOL	Plant				--
2	ALPHA-HUMULENE	Et		21000.0		--
0	PICROSALVIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
0	CARNOSIC-ACID-METHYL-ESTER	Resin, Exudate, Sap		39000.0		--
8	STEARIC-ACID	Fruit Essent. Oil				--
0	2-METHYL-3-METHYLENE-HEPT-CIS-5-ENE	Leaf Essent. Oil		8000.0		--
57	ROSMARINIC-ACID	Leaf				--
0	BETA-COPAENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	UVAOL	Plant				--
0	6-METHOXYGENKWANIN-7-METHYL-ETHER	Plant				--
2	BETA-MYRCENE	Essential Oil				--
0	SALVIATANNIN	Leaf				--
101	APIGENIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	LEDENE	Plant				--
0	1-OCTEN-3-OL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-SABINENE-HYDRATE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	MANOOL	Shoot	556.0	1478.0		--
3	CYNAROSIDE	Leaf				--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil				--
43	CATECHIN	Plant				--
0	ALPHA-GURJUNENE	Plant				--
5	BETA-THUJONE	Leaf Essent. Oil	174000.0	356000.0		--
35	GERANIOL	Plant				Stitt, Paul. Why George should eat broccoli.
0	CARNOSIC-ACID-METHYL-ESTER	Shoot		45.0		--
0	SPATHULENOL	Leaf Essent. Oil				--
0	1,8-CINEOL	Leaf				--
2	HUMULENE	Leaf Essent. Oil				--
0	LUTEOLIN-7-O-GLUCURONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
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.
0	BETA-CARYOPHYLLENE	Et		41000.0		--
17	FARNESOL	Plant				--
34	SALICYLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
7	CARNOSOLIC-ACID	Leaf		2100.0		--
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.
71	THYMOL	Essential Oil				--
0	1,8-CINEOLE-SYNTHEASE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
2	MANOOL	Essential Oil				--
0	AVENASTEROL	Fruit Essent. Oil				--
0	CIS-SALVENE	Essential Oil		3200.0		--
71	THYMOL	Leaf				--
0	NICOTINIC-ACID-AMIDE	Plant		5000.0		--
0	ALPHA-COROCALENE	Plant				--
5	BETA-THUJONE	Et		151000.0		--
3	GENKWANIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	ROSMANOL-9-ETHYL-ETHER	Shoot		144.0		--
1	SERINE	Plant				Stitt, Paul. Why George should eat broccoli.
0	CARNOSIC-ACID-12-METHYL-ETHER	Shoot				--
0	SELIN-11-EN-4-OL	Leaf Essent. Oil		54000.0		--
0	HORMINONE	Root				--
57	ROSMARINIC-ACID	Tissue Culture				--
0	LUTEOLIN-7-O-BETA-D-GLUCOSIDE	Plant				Stitt, Paul. Why George should eat broccoli.
0	5-METHOXSALVIGENIN	Leaf				--
0	EPIOLEANOLIC-ACID	Leaf		20.0		--
18	OLEIC-ACID	Fruit Essent. Oil				--
0	1,8-CINEOL	Et		50000.0		--
20	CARNOSOL	Plant				--
24	PECTIN	Shoot				--
0	ALPHA-URSOLIC-ACID	Plant				--
13	ALPHA-TERPINENE	Et		1000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIRSIMARITRIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	LUTEOLIN-7-GLYCOSIDE	Root				--
101	APIGENIN	Shoot				--
0	CIS-SABINENE-HYDRATE	Leaf Essent. Oil				--
17	THUJONE	Et		457000.0		--
3	ALPHA-CEDRENE	Plant				Stitt, Paul. Why George should eat broccoli.
5	BETA-THUJONE	Essential Oil	52300.0	142500.0		--
0	ROSMANOL-7-ETHYL-ETHER	Shoot		144.0		--
0	SELINA-5,11-DIENE	Plant				--
0	ALPHA-COPAENE	Leaf Essent. Oil				--
2	CARNOSIC-ACID	Resin, Exudate, Sap		57000.0		--
0	SALVIGENIN	Shoot				--
0	BETA-URSOLIC-ACID	Plant				--
11	GAMMA-TERPINENE	Et		4000.0		--
9	BETA-AMYRIN	Plant				--
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	URS-12-EN-28-OIC-ACID	Leaf		14.0		--
0	3-EPIOLEANOLIC-ACID	Leaf		1.4		--
0	O-METHYL-CARNOSIC-ACID	Shoot		17.0		--
0	SABINYL-ACETATE	Plant	110.0	616.0		--
11	PANTOTHENIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
1	ISOCARYOPHYLLENE	Plant				--
2	3-ISOTHUJONE	Leaf				--
0	CIRSILION	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
78	LUTEOLIN	Leaf				--
0	PRISTANE	Leaf		56.0		--
0	CIS-BETA-OCIMENE	Leaf Essent. Oil				--
10	ALPHA-AMYRIN	Plant				--
47	BETA-SITOSTEROL	Sprout Seedling				--
0	GAMMA-MAALIENE	Plant				--
5	ROSMANOL	Shoot		11.0		--
60	SELENIUM	Leaf				--
3	ALPHA-CEDRENE	Leaf Essent. Oil				--
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil				--
0	SALVIANOLIC-ACID-K	Plant		5760.0		--
4	NEPETIN	Plant				--
1	VIRIDIFLOROL	Essential Oil				--
9	BETA-AMYRIN	Leaf		1000.0		--
0	LUTEOLIN-7-GLYCOSIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
8	TYROSINE	Plant				Stitt, Paul. Why George should eat broccoli.
0	3-CARENE	Plant				--
0	BETA-BOURBONENE	Leaf Essent. Oil				--
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.
0	OLEAN-12-EN-28-OIC-ACID	Shoot		86.0		--