

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Sambucus nigra

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1-CAFFELOYL-BETA-D-GLUCOSIDE	Plant				--
0	1-CAFFELOYL-BETA-D-GLUCOSIDE	Flower				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	1-FERULOYL-BETA-D-GLUCOSIDE	Plant				--
0	2-METHYLHEPTANE	Flower Essent. Oil				--
0	2-PHENYLETHANOL	Flower Essent. Oil				--
0	20-BETA-HYDROXYURSOLIC-ACID	Flower				--
0	24-METHYL-CYCLOARTENOL	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	30-BETA-HYDROXYURSOLIC-ACID	Flower				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
6	ACETALDEHYDE	Leaf Essent. Oil				--
6	ACETALDEHYDE	Flower Essent. Oil				--
0	ALKANES	Flower	210.0	70000.0		--
0	ALPHA-AMYRENONE	Bark		178.0		--
10	ALPHA-AMYRIN	Leaf				--
10	ALPHA-AMYRIN	Bark		379.0		--
10	ALPHA-AMYRIN	Flower				--
5	ALPHA-AMYRIN-PALMITATE	Leaf				--
0	ALPHA-HYDROXYBEHENIC-ACID	Bark				--
23	ALPHA-TERPINEOL	Flower Essent. Oil				--
0	ANTIRHININ	Fruit				--
0	ARACHIDIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ARACHIDIC-ACID	Flower				--
0	ARACHIDYL-ALCOHOL	Flower				--
0	ASCORBIC	Plant				--
112	ASCORBIC-ACID	Fruit	128.0	1515.0	-0.1902908614886916	--
112	ASCORBIC-ACID	Leaf	739.0	11000.0	0.5767397343070575	--
0	ASH	Fruit	8600.0	48765.0	-0.2045411397200254	--
7	ASTRAGALIN	Flower				--
7	ASTRAGALIN	Plant				--
0	BALANOPHORIN	Leaf				--
1	BEHENIC-ACID	Plant				--
24	BENZALDEHYDE	Leaf Essent. Oil				--
24	BENZALDEHYDE	Flower Essent. Oil				--
24	BENZALDEHYDE	Plant				--
0	BENZOIC-ACID-ETHYL-ESTER	Leaf Essent. Oil				--
9	BENZYL-ALCOHOL	Leaf Essent. Oil				--
9	BENZYL-ALCOHOL	Flower Essent. Oil				--
9	BETA-AMYRIN	Flower				--
3	BETA-AMYRIN-PALMITATE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	BETA-AMYRIN-PALMITATE	Plant				--
53	BETA-CAROTENE	Leaf		150.0	-0.48469717165390036	--
53	BETA-CAROTENE	Fruit	100.0	150.0	0.13914666828563477	--
0	BETA-CARYOPHYLLENE	Flower Essent. Oil				--
47	BETA-SITOSTEROL	Bark				--
47	BETA-SITOSTEROL	Leaf				--
47	BETA-SITOSTEROL	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETULIN	Plant				--
13	BETULIN	Bark				--
22	BETULINIC-ACID	Bark				--
4	BIOTIN	Fruit	0.007	0.009	-1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BUT-3-EN-2-ONE	Flower Essent. Oil				--
0	BUT-3-EN-2-ONE	Leaf Essent. Oil				--
0	BUTYL-ACETATE	Flower Essent. Oil				--
102	CAFFEIC-ACID	Plant				--
28	CALCIUM	Fruit	235.0	1440.0	-0.5575831533309608	--
0	CALCIUM-NITRATE	Plant				--
4	CALCIUM-OXALATE	Plant				--
2	CAMPESTEROL	Flower				--
2	CAMPESTEROL	Leaf				--
0	CAPRIFOLIC-ACID	Seed		20000.0		--
0	CAPRONIC-ACID	Seed				--
5	CAPRYLIC-ACID	Seed				--
0	CARQUEOL-ACETATE	Flower Essent. Oil				--
0	CERYL-ALCOHOL	Bark				--
77	CHLOROGENIC-ACID	Flower		26000.0	-1.0	--
1	CHOLESTEROL	Plant				--
1	CHOLESTEROL	Hh				--
1	CHOLESTEROL	Flower				--
20	CHOLINE	Bark				--
20	CHOLINE	Leaf				--
20	CHOLINE	Flower				--
0	CHRYSANTHEMIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-LINALOOL-OXIDE	Flower Essent. Oil				--
0	CIS-ROSE-OXIDE	Flower Essent. Oil				--
23	CITRIC-ACID	Fruit	500.0	7340.0	-0.5315125738760625	--
2	CONIINE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CYANIDIN-3,5-DIGLUCOSIDE	Fruit				--
0	CYANIDIN-3-O-(6-O-CIS-P-COUMAROYL-2-O-BETA-D-XYLOPYRANOSYL)-BETA-D-GLUCOPYRANOSIDE-5-O-BETA-D-GLUCOPYRANOSIDE	Fruit				--
0	CYANIDIN-3-O-(6-O-TRANS-P-COUMAROYL-2-O-BETA-D-XYLOPYRANOSYL)-BETA-D-GLUCOPYRANOSIDE-5-O-BETA-D-GLUCOPYRANOSIDE	Fruit				--
0	CYANIDIN-3-O-(6-TRANS-P-COUMAROYL-2-O-BETA-D-XYLOPYRANOSYL)-BETA-D-GLUCOPYRANOSIDE	Fruit				--
0	CYANIDIN-3-SAMBUBIOSIDE	Fruit				--
0	CYANIDIN-3-SAMBUBIOSIDE	Plant				--
0	CYANIDIN-3-SAMBUBIOSIDE-5-GLUCOSIDE	Plant				--
5	CYANIN	Fruit				--
7	CYCLOARTENOL	Flower				--
1	DEXTROSE	Fruit	25000.0	30000.0	-1.0	--
0	EMULSIN	Plant				--
0	EO	Flower	37.0	3200.0	-0.31678734503807	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ETHYL-AMINE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	ETHYL-SALICYLATE	Leaf Essent. Oil				--
0	FAT	Fruit	800.0	5045.0	-0.6027187856091647	--
0	FAT	Seed		123000.0	-0.7500063749919659	--
0	FAT	Leaf		48200.0	-0.1646373205488591	--
0	FATTY-ACIDS	Flower		2000.0		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
61	FERULIC-ACID	Plant				--
15	FIBER	Fruit	63000.0	392935.0	2.3709971061121426	--
0	FLAVOXANTHIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
8	FRUCTOSE	Fruit	24100.0	154150.0	1.574573707912044	--
7	GLUCOSE	Fruit	31000.0	221410.0	1.454836787583785	--
0	GLUCOSIDES	Plant		640.0		--
0	HENEICOSANE	Plant		23000.0	1.4142135620121807	--
0	HEPTACOSAN-1-OL	Flower				--
0	HEPTADECAN-1-OL	Flower				--
0	HEPTADECENOIC-ACID	Flower				--
0	HEPTAN-1-AL	Flower Essent. Oil				--
0	HEX-2-EN-1-AL	Flower Essent. Oil				--
0	HEX-2-EN-1-AL	Leaf Essent. Oil				--
0	HEX-3-EN-1-OL	Leaf Essent. Oil				--
0	HEX-3-EN-1-OL	Flower Essent. Oil				--
0	HEX-4-EN-1-OL	Flower Essent. Oil				--
0	HEXACOSAN-1-OL	Flower				--
0	HEXAN-1-AL	Flower Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEXAN-1-OL	Leaf Essent. Oil				--
0	HEXAN-1-OL	Flower Essent. Oil				--
0	HEXEN-2-AL	Plant				--
0	HOTRIENOL	Flower Essent. Oil				--
30	HYPEROSIDE	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.
15	INDOLE	Leaf Essent. Oil				--
0	INVERTOSE	Plant				--
6	IRON	Fruit	15.0	90.0	-0.17048243955267198	--
2	ISOAMYL-ACETATE	Flower Essent. Oil				--
3	ISOAMYL-ALCOHOL	Flower Essent. Oil				--
0	ISOAMYL-AMINE	Flower				--
0	ISOAMYL-AMINE	Plant				--
0	ISOBUTYL-AMINE	Flower				--
22	ISOQUERCITRIN	Flower				--
75	KAEMPFEROL	Flower				--
8	LACTIC-ACID	Fruit		1800.0		--
7	LAURIC-ACID	Seed				--
7	LAURIC-ACID	Flower				--
1	LEVULOSE	Fruit	21000.0	29000.0	-1.0	--
60	LIMONENE	Flower Essent. Oil				--
53	LINALOOL	Flower Essent. Oil				--
27	LINOLEIC-ACID	Flower				--
27	LINOLEIC-ACID	Leaf				--
0	LINOLENIC-ACID	Flower				--
21	LUPEOL	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	265.0	1635.0	-0.22909190199546076	--
15	MALIC-ACID	Fruit	1200.0	19000.0	0.2852247526927457	--
14	MANGANESE	Fruit	2.0	11.0	-0.3310049249023243	--
0	MARGARIC-ACID	Flower				--
63	MENTHOL	Flower Essent. Oil				--
2	METHYL-ISOBUTYL-KETONE	Flower Essent. Oil				--
0	MONTANYL-ALCOHOL	Flower				--
0	MORRONISIDE	Shoot		1400.0	1.0	--
3	MUCILAGE	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.
22	MYRCENE	Flower Essent. Oil				--
6	MYRISTIC-ACID	Flower				--
6	MYRISTIC-ACID	Seed				--
0	N-HENEICOSANE	Flower Essent. Oil				--
3	N-HENTRIACONTANE	Leaf				--
0	N-HEPTACOSANE	Leaf				Jim Duke's personal files.
0	N-HEPTADECANE	Flower Essent. Oil				--
2	N-HEXACOSANE	Leaf				Jim Duke's personal files.
1	N-NONACOSANE	Leaf				--
0	N-NONADECANE	Flower Essent. Oil				--
0	N-OCTACOSANE	Leaf				Jim Duke's personal files.
0	N-OCTADECANE	Flower Essent. Oil				--
0	N-PENTACOSANE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	N-TETRADECANE	Leaf Essent. Oil				--
0	N-TRIACONTANE	Leaf				Jim Duke's personal files.
0	N-TRICOSANE	Flower Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	NEROL	Flower Essent. Oil				--
0	NEROL-OXIDE	Flower Essent. Oil				--
39	NIACIN	Fruit	4.0	7.0	-0.7178505836876389	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	NICOTINIC-ACID	Fruit				--
0	NIGRIN-B	Bark				--
0	NIGRITIN-F-1	Fruit				--
0	NIGRITIN-F-2	Fruit				--
0	NONADECAN-1-OL	Flower				--
0	NONADECANOIC-ACID	Flower				--
2	OCIMENE	Flower Essent. Oil				--
0	OCTACOSAN-1-OL	Flower				--
0	OCTAN-1-AL	Flower Essent. Oil				--
64	OLEANOLIC-ACID	Flower				--
64	OLEANOLIC-ACID	Leaf				--
64	OLEANOLIC-ACID	Bark		503.0	-1.0	--
18	OLEIC-ACID	Leaf				--
18	OLEIC-ACID	Flower				--
9	OXALIC-ACID	Fruit		410.0	-0.283740659370344	--
25	P-COUMARIC-ACID	Flower				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	PALMITIC-ACID	Seed				--
13	PALMITIC-ACID	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PALMITOLEIC-ACID	Seed				--
2	PALMITOLEIC-ACID	Flower				--
24	PECTIN	Flower				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
24	PECTIN	Leaf		2300.0	-1.5375729434269683	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	PENT-3-EN-2-ONE	Flower Essent. Oil				--
0	PENTACOSAN-1-OL	Flower				--
1	PENTADECANOIC-ACID	Flower				--
0	PENTADECENOIC-ACID	Flower				--
0	PENTENOL	Leaf Essent. Oil				--
2	PHENYL-ACETALDEHYDE	Leaf Essent. Oil				--
2	PHENYL-ACETALDEHYDE	Fruit				--
4	PHOSPHORUS	Fruit	540.0	3300.0	0.0255157665019095	--
0	PLASTOCYININ	Flower				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
14	POTASSIUM	Fruit	105.0	22090.0	0.369244042498007	--
0	PROPIONIC-ACID-ETHYL-ESTER	Flower Essent. Oil				--
0	PROPIONIC-ACID-PROPYL-ESTER	Flower Essent. Oil				--
0	PROTEIN	Seed		269000.0	0.31315721071655006	--
0	PROTEIN	Fruit	19400.0	114910.0	0.0725429744274665	--
176	QUERCETIN	Leaf				--
0	QUERCETIN-3-O-2(G)-RHAMNOSYL-RUTINOSIDE	Flower				--
0	QUERCETIN-3-O-NEOHEPERSIDOSIDE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	R-HOLOCALIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	RESIN	Leaf		43400.0	-0.5983063057309587	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	RIBOFLAVIN	Plant	0.6	0.7	-0.7464596260374953	--
0	RUBBER	Root		540.0	-0.3038660589351565	--
87	RUTIN	Leaf	210.0	9200.0	-0.43338842821411155	--
87	RUTIN	Flower	19000.0	25000.0	-0.37410870193006646	--
0	S-SAMBUNIGRIN	Leaf		420.0		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	SALICYLIC-ACID-METHYL-ESTER	Leaf Essent. Oil				--
0	SALICYLIC-ACID-METHYL-ESTER	Flower Essent. Oil				--
0	SAMBUBIOSE	Plant				--
0	SAMBUCINE	Bark				--
0	SAMBUCINE	Plant		1100.0		--
0	SAMBUCULIN-A	Plant				--
0	SAMBUCYANIN	Plant				--
2	SAMBUNIGRIN	Leaf		420.0		--
14	SHIKIMIC-ACID	Plant				--
1	SODIUM	Fruit	75.0	535.0	-0.1332173373035911	--
8	STEARIC-ACID	Flower				--
8	STEARIC-ACID	Leaf				--
8	STEARIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	STIGMASTEROL	Leaf				--
12	STIGMASTEROL	Flower				--
14	SUCROSE	Fruit	700.0	9530.0	-0.6792454901028104	--
0	SUGAR	Fruit	47000.0	58000.0	-0.8817872224910017	--
35	TANNIN	Leaf	4400.0	30000.0	-0.9831117667907324	--
23	TERPINEN-4-OL	Flower Essent. Oil				--
0	TETRACOSAN-1-OL	Flower				--
31	THIAMIN	Plant		1.0	-0.5609871067944916	--
0	TRANS-LINALOOL-OXIDE	Flower Essent. Oil				--
0	TRANS-ROSE-OXIDE	Flower Essent. Oil				--
0	TRICOSAN-1-OL	Flower				--
0	TRICOSANE	Flower		18720.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	TRIDECANOIC-ACID	Flower				--
8	TYROSINE	Fruit Juice				--
8	TYROSINE	Fruit	2200.0	2900.0	0.19942785780417618	--
3	UNDECYLENIC-ACID	Seed				--
89	URSOLIC-ACID	Leaf				--
89	URSOLIC-ACID	Flower				--
89	URSOLIC-ACID	Bark				--
1	VALERIANIC-ACID	Fruit				--
0	WATER	Fruit	791000.0	821600.0	0.22185827349835952	--
1	ZIERIN	Leaf				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
77	ZINC	Fruit	3.0	17.0	-0.40018873103446667	--