

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Viburnum opulus

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Bark		17.0	0.40123557571247687	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	WATER	Bark		782000.0	0.4581878715921525	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	VIBURNITAL	Leaf				--
9	VALERIC-ACID	Root Bark				--
1	VALERIANIC-ACID	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
89	URSOLIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	URSOLIC ACID GLUCOSIDE	Plant				--
4	TIN	Bark		18.0	0.668849450963278	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
35	TANNIN	Fruit		30000.0	-0.6222515111796854	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Root Bark				--
14	SUCROSE	Fruit		16600.0	-0.6291173949832924	--
1	SODIUM	Bark		184.0	-0.2785736779761555	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Bark		99.0	1.9960039711313557	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	SELENIUM	Bark		23.0	2.6167352397960517	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SCOPOLINE	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.
44	SCOPOLETIN	Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
44	SCOPOLETIN	Root Bark		7.5	-1.0	--
0	QUERCETIN-GLYCOSIDES	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
176	QUERCETIN	Leaf				--
0	PROTEIN	Bark		86000.0	0.2524208249192275	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	POTASSIUM	Bark		7360.0	0.2937629021909361	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	PHOSPHORUS	Bark		650.0	-0.46815956974940875	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
24	PECTIN	Fruit		50000.0	-0.03661673030520101	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	PECTIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	PALMITIC-ACID	Root Bark				--
13	PALMITIC-ACID	Bark				--
1	PAEONOSIDE	Flower		1200.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PAEONISIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OPULUS IRIDOID IV	Leaf		200.0		--
0	OPULUS IRIDOID III	Leaf		800.0		--
0	OPULUS IRIDOID II	Leaf		700.0		--
0	OPULUS IRIDOID I	Leaf	3000.0	7300.0		--
18	OLEIC-ACID	Root Bark				--
18	OLEIC-ACID	Fruit				--
18	OLEIC-ACID	Seed				--
0	OLEANOLIC ACID GLUCOSIDE	Plant				--
2	NEO-CHLOROGENIC-ACID	Branches				--
0	MYRICYL-ALCOHOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MYRICYL-ALCOHOL	Root Bark				--
0	METHYL-ARBUTIN	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.
14	MANGANESE	Bark		49.0	-0.34875097941765754	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	MALIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
65	MAGNESIUM	Bark		3110.0	0.9274461605911677	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LINOLENIC-ACID	Leaf				--

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27	LINOLEIC-ACID	Root Bark				--
27	LINOLEIC-ACID	Seed				--
27	LINOLEIC-ACID	Fruit				--
27	LINOLEIC-ACID	Bark				--
0	L-RHAMNOSE	Fruit				--
0	L-RHAMNOSE	Leaf				--
0	L-ARABINOSE	Leaf				--
0	L-ARABINOSE	Fruit				--
75	KAEMPFEROL	Leaf				--
6	IRON	Bark		880.0	3.0560740291801767	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	HYDROQIONONE	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	GLUCOSE	Root Bark				--
13	FORMIC-ACID	Root Bark				--
30	ESCULETIN	Bark				--
40	EPICATECHIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Bark	1000.0	3000.0	-0.7030724101422462	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	D-XYLOSE	Fruit				--
0	D-XYLOSE	Leaf				--
1	D-GLUCOSE	Leaf				--
1	D-GLUCOSE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-GALACTOURONIC-ACID	Leaf				--
0	D-GALACTOURONIC-ACID	Fruit				--
0	D-GALACTOSE	Fruit				--
0	D-GALACTOSE	Leaf				--
0	D,L-CATECHIN	Root Bark		900.0		--
0	D,L-CATECHIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	CYANIDIN	Leaf				--
2	COBALT	Bark		115.0	3.105040721922236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
23	CITRIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	CINNAMIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	CHROMIUM	Bark		21.0	1.416729279304621	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	CHLOROGENIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Branches				--
0	CEROTIC-ACID	Root Bark				--
5	CAPRYLIC-ACID	Root Bark				--
1	CAPROIC-ACID	Root Bark				--
3	CAPRIC-ACID	Bark				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
28	CALCIUM	Bark		23540.0	0.46526131569268436	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
102	CAFFEIC-ACID	Branches				--
47	BETA-SITOSTEROL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Root Bark				--
53	BETA-CAROTENE	Fruit		6400.0	12.220284060630327	--
9	BETA-AMYRIN	Root Bark				--
9	BETA-AMYRIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BALDRIANIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	ASTRAGALIN	Flower		900.0		--
112	ASCORBIC-ACID	Fruit		126100.0	7.556029777700852	--
15	ARBUTIN	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	Leaf		200.0	-0.7732537920967253	--
5	ALUMINUM	Bark		702.0	2.1099902097575876	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
10	ALPHA-AMYRIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
10	ALPHA-AMYRIN	Root Bark				--

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32	AESCULETIN	Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
16	ACETIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	ACETIC-ACID	Root Bark				--
0	2-CARBOXYARABINITOL	Leaf		26.0	-0.8084354957974759	Moore, B. D., Isidoro, E., Seemann, J. R. 1993. Distribution of 2-Carboxyarabinitol Among Plants. Phytochemistry 34 3: 703-707. Dept. Biochem. Univ. Nevada Reno 89557, USA.