

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Viburnum opulus

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
16	ACETIC-ACID	Root Bark				--
16	ACETIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
32	AESCULETIN	Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
10	ALPHA-AMYRIN	Root Bark				--
10	ALPHA-AMYRIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	ALUMINUM	Bark		702.0	2.1099902097575876	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	ARBUTIN	Leaf		200.0	-0.7732537920967253	--
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.
112	ASCORBIC-ACID	Fruit		126100.0	7.556029777700852	--
7	ASTRAGALIN	Flower		900.0		--
0	BALDRIANIC-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
9	BETA-AMYRIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	BETA-AMYRIN	Root Bark				--
53	BETA-CAROTENE	Fruit		6400.0	12.220284060630327	--
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				--
102	CAFFEIC-ACID	Branches				--
28	CALCIUM	Bark		23540.0	0.46526131569268436	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	CAPRIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CAPROIC-ACID	Root Bark				--
5	CAPRYLIC-ACID	Root Bark				--
0	CEROTIC-ACID	Root Bark				--
77	CHLOROGENIC-ACID	Branches				--
77	CHLOROGENIC-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.
18	CINNAMIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

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23	CITRIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COBALT	Bark		115.0	3.105040721922236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
7	CYANIDIN	Leaf				--
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.
0	D,L-CATECHIN	Root Bark		900.0		--
0	D-GALACTOSE	Fruit				--
0	D-GALACTOSE	Leaf				--
0	D-GALACTOURONIC-ACID	Leaf				--
0	D-GALACTOURONIC-ACID	Fruit				--
1	D-GLUCOSE	Leaf				--
1	D-GLUCOSE	Fruit				--
0	D-XYLOSE	Leaf				--
0	D-XYLOSE	Fruit				--
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.
40	EPICATECHIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	ESCULETIN	Bark				--
13	FORMIC-ACID	Root Bark				--
7	GLUCOSE	Root Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
6	IRON	Bark		880.0	3.0560740291801767	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
75	KAEMPFEROL	Leaf				--
0	L-ARABINOSE	Leaf				--
0	L-ARABINOSE	Fruit				--
0	L-RHAMNOSE	Fruit				--
0	L-RHAMNOSE	Leaf				--
27	LINOLEIC-ACID	Root Bark				--
27	LINOLEIC-ACID	Seed				--
27	LINOLEIC-ACID	Fruit				--
27	LINOLEIC-ACID	Bark				--
0	LINOLENIC-ACID	Leaf				--
65	MAGNESIUM	Bark		3110.0	0.9274461605911677	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.
14	MANGANESE	Bark		49.0	-0.34875097941765754	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.

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0	MYRICYL-ALCOHOL	Root Bark				--
0	MYRICYL-ALCOHOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	NEO-CHLOROGENIC-ACID	Branches				--
0	OLEANOLIC ACID GLUCOSIDE	Plant				--
18	OLEIC-ACID	Root Bark				--
18	OLEIC-ACID	Fruit				--
18	OLEIC-ACID	Seed				--
0	OPULUS IRIDOID I	Leaf	3000.0	7300.0		--
0	OPULUS IRIDOID II	Leaf		700.0		--
0	OPULUS IRIDOID III	Leaf		800.0		--
0	OPULUS IRIDOID IV	Leaf		200.0		--
0	PAEONISIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PAEONOSIDE	Flower		1200.0		--
13	PALMITIC-ACID	Root Bark				--
13	PALMITIC-ACID	Bark				--
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.
4	PHOSPHORUS	Bark		650.0	-0.46815956974940875	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	POTASSIUM	Bark		7360.0	0.2937629021909361	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PROTEIN	Bark		86000.0	0.2524208249192275	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
176	QUERCETIN	Leaf				--
0	QUERCETIN-GLYCOSIDES	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
44	SCOPOLETIN	Root Bark		7.5	-1.0	--
44	SCOPOLETIN	Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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.
60	SELENIUM	Bark		23.0	2.6167352397960517	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.
1	SODIUM	Bark		184.0	-0.2785736779761555	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	SUCROSE	Root Bark				--
14	SUCROSE	Fruit		16600.0	-0.6291173949832924	--
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.

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