

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Frangula purshiana*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FIBER(CRUDE)	Bark		310000.0	2.339823678190987	--
53	BETA-CAROTENE	Bark	13.0	46.0	2.1374028017190314	--
15	FIBER	Bark		310000.0	1.4973444643886513	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(DIETARY)	Bark		560000.0	1.1932784648463484	--
6	ANTHRAQUINONES	Bark	60000.0	100000.0	1.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	FAT	Bark	8864.0	32000.0	0.9470044614826844	--
0	PROTEIN	Bark	25207.0	91000.0	0.43752942985999416	--
0	CARBOHYDRATES	Bark	224093.0	809000.0	0.33938102144232346	--
0	WATER	Bark		723000.0	0.24192319620065653	--
0	PROTEIN	Seed		250000.0	0.14414237103378544	Earle, F. R., Glass, C. A., Geisinger, G. C., Wolff, I. A., Jones, Q. 1960. Search for New Industrial Oils. IV. J. Amer. Oil Chem. Soc. 37: 440-. Northern Regional Research Lab ARS USDA Peoria, IL, USA.
65	MAGNESIUM	Bark	440.0	1590.0	-0.10911131301072557	--
2	COBALT	Bark	3.2	11.6	-0.18574693845267193	--
0	ASH	Bark	18559.0	67000.0	-0.3419190329694244	--
28	CALCIUM	Bark	4100.0	14800.0	-0.3701186348289897	--
1	SODIUM	Bark	26.0	93.0	-0.408100271312514	--
5	ALUMINUM	Bark	27.0	99.0	-0.42073897270651045	--
14	POTASSIUM	Bark	1103.0	3980.0	-0.43722012313816594	--
60	SELENIUM	Bark	0.3	1.1	-0.4642594780283318	--
24	CHROMIUM	Bark	0.2	0.6	-0.5240392018021011	--
4	PHOSPHORUS	Bark	158.0	570.0	-0.5349997224798418	--
39	NIACIN	Bark	8.0	29.0	-0.5491524863663554	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SUGARS	Bark	13850.0	50000.0	-0.5773502691896257	--
31	THIAMIN	Bark		0.0	-0.6585046078685182	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Bark	0.4	1.4	-0.6672097230657966	--
0	THIAMINE	Bark		0.0	-0.7500000000000002	--
0	KILOCALORIES	Bark		2370.0	-0.7511810552670951	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
6	IRON	Bark	6.4	23.0	-0.8041825931162928	--
4	TIN	Bark	1.4	5.1	-0.9625249451887514	--
112	ASCORBIC-ACID	Bark		0.0	-1.0104899665727316	--
15	RIBOFLAVIN	Bark		0.0	-1.033653783963848	--
0	PALMIDINS	Bark				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.
12	ALOIN	Plant				--
0	CHRY SOPHANIC-ACID-DIMER	Bark		840.0		--
0	ANTHRANOL	Bark				Mary, N. Y., Christensen, B. V., Beal, J. L. 1956. A Paper Chromatographic Study of Aloe, Aloin and Cascara sagrada. J. Amer. Pharm. Ass. Sci. Ed., 45: 229-232.
1	CASCAROSIDE-A	Bark				--
6	SYRINGIC-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	FRANGULIN	Bark				--
0	CASCARIN	Plant				--
5	PHYSCION	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	OXANTHRONE	Plant				--
0	ALOE-EMODIN-8-MONO-BETA-GLUCOSIDE	Bark				--
0	CHRYSOPHANIC-ACID-DIANTHRONE	Tissue Culture				--
0	ALOE-EMODIN-DIMER	Bark		1300.0		--
0	BICASCAROSIDE-DD	Bark				--
58	EMODIN	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.
1	CASANTHRANOL	Bark				--
5	PHYSCION	Bark				--
24	ALOE-EMODIN	Bark				--
0	CHRYSOPHANIC-ACID-ANTHRONE	Tissue Culture				--
0	ALOE-EMODIN-8-O-BETA-D-GLUCOSIDE	Bark				--
0	BICASCAROSIDE-CD	Bark				--
77	ZINC	Bark				--
0	RHAMNUSTOXIN	Plant				--
1	FRANGULAEMODIN	Bark				--
0	1,6,8-TRIHYDROXY-3-METHYL-9-GLUCOSYL-ANTHRAQUINONE	Plant				--
2	CHRYSOPHANIC-ACID-9-ANTHRONE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
24	ALOE-EMODIN	Tissue Culture				--
6	MYRISTIC-ACID	Plant				--
0	BICASCAROSIDE-CC	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
58	EMODIN	Bl				--
0	RHAMNOL	Plant				--
0	EMOSIN-OXANTHRONE	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.
6	CHRYSOPHANIC-ACID	Tissue Culture				--
0	BICASCAROSIDE-BD	Bark				--
0	DEOXYBARBALOIN	Bark				--
0	11-DEOXYBARBALOIN	Bark				--
0	RESIN	Plant				--
0	EMODIN-ANTHRONE	Bark				--
0	CASSIAMIN-C	Bark		120.0		--
15	MALIC-ACID	Plant				--
0	BICASCAROSIDE-BC	Bark				--
0	10-HYDROXYALOIN-B	Bark				--
0	QUEBRACHOL	Plant				--
6	BARBALOIN	Bark				--
0	EMODIN-ANTHRONE	Tissue Culture				--
0	CASCAROSIDE-F	Bark				--
0	BICASCAROSIDE-BB	Bark				--
35	TANNIN	Plant				--
10	CHRYSOPHANOL	Bark				--
0	10-HYDROXYALOIN-A	Bark				--
0	BICASCAROSIDE-AD	Bark				--
0	PURSHIANIN	Plant				--
58	EMODIN	Tissue Culture				--
0	CASCAROSIDE-E	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	LINOLEIC-ACID	Plant				--
41	TANNIC-ACID	Plant				--
6	CHRYSOPHANIC-ACID	Plant				--
58	EMODIN	Bark				--
0	BICASCAROSIDE-AC	Bark				--
0	CASCAROSIDE-D	Bark				--
0	TANNINS	Bark				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	SYRINGIN-ACID	Plant				--
0	CHRYSALOIN	Bark				--
0	PHYSCION-ANTHRONE	Bark				--
0	CHRYSOPHANOL-8-O-BETA-D-GLUCOSIDE	Bark				--
0	BICASCAROSIDE-AB	Bark				--
0	CASCAROSIDE-C	Bark				--
0	RESINS	Bark				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ISOEMODIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PHYSCION-ANTHRONE	Tissue Culture				--
0	CHRYSOPHANIC-ACID-PHYSCION-DIANTHRONE	Tissue Culture				--
0	BICASCAROSIDE-AA	Bark				--
0	CASCAROSIDE-B	Bark				--
6	CHRYSOPHANIC-ACID	Bark				--
4	SILICON	Bark				--
0	CASCAROSIDES	Bark	40000.0	65000.0		--

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0	PHYSCION-8-GLUCOSIDE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.