

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Frangula purshiana*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	1,6,8-TRIHIDROXY-3-METHYL-9-GLUCOSYL-ANTHRAQUINONE	Plant				--
0	10-HYDROXYALOIN-A	Bark				--
0	10-HYDROXYALOIN-B	Bark				--
0	11-DEOXYBARBALOIN	Bark				--
24	ALOE-EMODIN	Tissue Culture				--
24	ALOE-EMODIN	Bark				--
0	ALOE-EMODIN-8-MONO-BETA-GLUCOSIDE	Bark				--
0	ALOE-EMODIN-8-O-BETA-D-GLUCOSIDE	Bark				--
0	ALOE-EMODIN-DIMER	Bark		1300.0		--
12	ALOIN	Plant				--
5	ALUMINUM	Bark	27.0	99.0	-0.42073897270651045	--
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.
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.
112	ASCORBIC-ACID	Bark		0.0	-1.0104899665727316	--
0	ASH	Bark	18559.0	67000.0	-0.3419190329694244	--
6	BARBALOIN	Bark				--
53	BETA-CAROTENE	Bark	13.0	46.0	2.1374028017190314	--
0	BICASCAROSIDE-AA	Bark				--
0	BICASCAROSIDE-AB	Bark				--
0	BICASCAROSIDE-AC	Bark				--
0	BICASCAROSIDE-AD	Bark				--
0	BICASCAROSIDE-BB	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BICASCAROSIDE-BC	Bark				--
0	BICASCAROSIDE-BD	Bark				--
0	BICASCAROSIDE-CC	Bark				--
0	BICASCAROSIDE-CD	Bark				--
0	BICASCAROSIDE-DD	Bark				--
28	CALCIUM	Bark	4100.0	14800.0	-0.3701186348289897	--
0	CARBOHYDRATES	Bark	224093.0	809000.0	0.33938102144232346	--
1	CASANTHRANOL	Bark				--
0	CASCARIN	Plant				--
1	CASCAROSIDE-A	Bark				--
0	CASCAROSIDE-B	Bark				--
0	CASCAROSIDE-C	Bark				--
0	CASCAROSIDE-D	Bark				--
0	CASCAROSIDE-E	Bark				--
0	CASCAROSIDE-F	Bark				--
0	CASCAROSIDES	Bark	40000.0	65000.0		--
0	CASSIAMIN-C	Bark		120.0		--
24	CHROMIUM	Bark	0.2	0.6	-0.5240392018021011	--
0	CHRYSALOIN	Bark				--
6	CHRYSOPHANIC-ACID	Plant				--
6	CHRYSOPHANIC-ACID	Bark				--
6	CHRYSOPHANIC-ACID	Tissue Culture				--
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.
0	CHRYSOPHANIC-ACID-ANTHRONE	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CHRY SOPHANIC-ACID-DIANTHRONE	Tissue Culture				--
0	CHRY SOPHANIC-ACID-DIMER	Bark		840.0		--
0	CHRY SOPHANIC-ACID-PHYSCION-DIANTHRONE	Tissue Culture				--
10	CHRY SOPHANOL	Bark				--
0	CHRY SOPHANOL-8-O-BETA-D-GLUCOSIDE	Bark				--
2	COBALT	Bark	3.2	11.6	-0.18574693845267193	--
0	DEOXYBARBALOIN	Bark				--
58	EMODIN	Bl				--
58	EMODIN	Tissue Culture				--
58	EMODIN	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.
0	EMODIN-ANTHRONE	Tissue Culture				--
0	EMODIN-ANTHRONE	Bark				--
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.
0	FAT	Bark	8864.0	32000.0	0.9470044614826844	--
15	FIBER	Bark		310000.0	1.4973444643886513	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Bark		310000.0	2.339823678190987	--
0	FIBER(DIETARY)	Bark		560000.0	1.1932784648463484	--
1	FRANGULAEMODIN	Bark				--
1	FRANGULIN	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	IRON	Bark	6.4	23.0	-0.8041825931162928	--
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	KILOCALORIES	Bark		2370.0	-0.7511810552670951	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
27	LINOLEIC-ACID	Plant				--
65	MAGNESIUM	Bark	440.0	1590.0	-0.10911131301072557	--
15	MALIC-ACID	Plant				--
14	MANGANESE	Bark	0.4	1.4	-0.6672097230657966	--
6	MYRISTIC-ACID	Plant				--
39	NIACIN	Bark	8.0	29.0	-0.5491524863663554	--
0	OXANTHRONE	Plant				--
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.
4	PHOSPHORUS	Bark	158.0	570.0	-0.5349997224798418	--
5	PHYSCION	Tissue Culture				--
5	PHYSCION	Bark				--
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.
0	PHYSCION-ANTHRONE	Bark				--
0	PHYSCION-ANTHRONE	Tissue Culture				--
14	POTASSIUM	Bark	1103.0	3980.0	-0.43722012313816594	--
0	PROTEIN	Bark	25207.0	91000.0	0.43752942985999416	--

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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.
0	PURSHIANIN	Plant				--
0	QUEBRACHOL	Plant				--
0	RESIN	Plant				--
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	RHAMNOL	Plant				--
0	RHAMNUSTOXIN	Plant				--
15	RIBOFLAVIN	Bark		0.0	-1.033653783963848	--
60	SELENIUM	Bark	0.3	1.1	-0.4642594780283318	--
4	SILICON	Bark				--
1	SODIUM	Bark	26.0	93.0	-0.408100271312514	--
0	SUGARS	Bark	13850.0	50000.0	-0.5773502691896257	--
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.
0	SYRINGIN-ACID	Plant				--
41	TANNIC-ACID	Plant				--
35	TANNIN	Plant				--
0	TANNINS	Bark				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
31	THIAMIN	Bark		0.0	-0.6585046078685182	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

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0	THIAMINE	Bark		0.0	-0.7500000000000002	--
4	TIN	Bark	1.4	5.1	-0.9625249451887514	--
0	WATER	Bark		723000.0	0.24192319620065653	--
77	ZINC	Bark				--