

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Crataegus laevigata*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
47	BETA-SITOSTEROL	Leaf	5100.0	6200.0	2.2672781336507843	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Flower	6500.0	7800.0	0.9253646230843826	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	CALCIUM	Fruit	1554.0	5570.0	0.3954571881842723	--
60	SELENIUM	Fruit	0.6	2.0	0.10976555089417979	--
53	BETA-CAROTENE	Fruit	1.4	5.0	-0.14113571921676207	--
1	SODIUM	Fruit	15.0	55.0	-0.17873519822623876	--
5	STARCH	Fruit	41850.0	180000.0	-0.18166262454346976	--
5	ALUMINUM	Fruit	8.0	29.0	-0.21508468192276714	--
24	CHROMIUM	Fruit	0.5	1.7	-0.26885440473667177	--
112	ASCORBIC-ACID	Leaf	166.4	1800.0	-0.27690303367535113	--
112	ASCORBIC-ACID	Fruit	24.0	85.0	-0.2792039610917021	--
2	COBALT	Fruit	0.6	2.0	-0.29299669899909336	--
15	FIBER	Fruit		108000.0	-0.31778652128419577	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	TIN	Fruit	3.6	13.0	-0.3261703903199725	--
14	MANGANESE	Fruit	0.4	1.4	-0.39430607258501055	--
4	PHOSPHORUS	Fruit	405.0	1450.0	-0.5364028420241324	--
65	MAGNESIUM	Fruit	262.0	940.0	-0.5509172813412117	--
14	POTASSIUM	Fruit	3069.0	11000.0	-0.6119284601203993	--
8	AMYGDALIN	Leaf		1500.0	-0.7071067811865472	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Plant		10000.0	-0.707106781186548	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	TYRAMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	CADMIUM	Flower				--
27	LINOLEIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
18	VITEXIN	Branches				--
77	ZINC	Flower				--
1	TRIMETHYLAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
40	EPICATECHIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
176	QUERCETIN	Flower				--
102	CAFFEIC-ACID	Shoot				--
44	QUERCITRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Plant				--
30	HYPEROSIDE	Shoot				--
1	TRIMETHYLAMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
33	AESCULIN	Shoot				--
7	LAURIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
18	VITEXIN	Flower				--
1	VITEXIN-2'-O-RHAMNOSIDE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
29	ESCULIN	Bark				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
20	CHOLINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PROCYANIDIN-B-2	Fruit				--
102	CAFFEIC-ACID	Flower				--
11	PROCYANIDIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
102	CAFFEIC-ACID	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
30	HYPEROSIDE	Flower				--
1	GUANINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
5	SAPONINS	Fruit				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	IRON	Fruit				--
89	URSOLIC-ACID	Shoot				--
1	VITEXIN-2"-O-ALPHA-L-RHAMNOSIDE	Plant				--
33	AESCULIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
20	CHOLINE	Fruit				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
11	PROCYANIDIN	Leaf				--
31	THIAMIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	BETA-PHENETHYLAMINE	Flower				--
4	PROCYANIDIN-B-4	Flower				--
30	(+)-CATECHIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
30	HYPEROSIDE	Branches				--
2	DIMETHYL-AMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
78	LUTEOLIN	Fruit				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
30	HYPEROSIDE	Fruit				--
89	URSOLIC-ACID	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
87	RUTIN	Plant				--
18	VITEXIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
77	CHLOROGENIC-ACID	Leaf				--
13	PALMITIC-ACID	Bark				--
6	TARTARIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
1	BETA-PHENETHYLAMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PROCYANIDIN-B-2	Flower				--
30	(+)-CATECHIN	Bud				--
28	ADENOSINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	EPINEPHRINE	Flower				--
20	CHOLINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
101	APIGENIN	Fruit				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	GUANINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	TYRAMINE	Flower				--
9	OXALIC-ACID	Bark				--
4	SPIRAEOSIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
101	APIGENIN	Bud				--
14	MANGANESE	Flower				--
24	PECTIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	(+)-CATECHIN	Tissue Culture				--
11	ADENINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	EPINEPHRINE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
40	EPICATECHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
38	(-)-EPICATECHIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	GLUCOSE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
6	TARTARIC-ACID	Bark				--
102	CAFFEIC-ACID	Leaf				--
6	MASLINIC-ACID	Shoot				--
11	SORBITOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
176	QUERCETIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
101	APIGENIN	Leaf				--
3	CYNAROSIDE	Leaf				--
13	PALMITIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
30	(+)-CATECHIN	Leaf				--
19	ACETYL-CHOLINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
20	DOPAMINE	Shoot				--
43	CATECHIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
38	(-)-EPICATECHIN	Bud				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SUCROSE	Bark				--
78	LUTEOLIN	Bud				--
6	PYCNOGENOL	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
15	5-HYDROXYTRYPTAMINE	Shoot				--
3	CYNAROSIDE	Flower				--
9	OXALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	(+)-CATECHIN	Flower				--
77	CHLOROGENIC-ACID	Bud				--
77	ZINC	Fruit				--
38	(-)-EPICATECHIN	Shoot				--
29	ESCULIN	Fruit				--
8	STEARIC-ACID	Bark				--
78	LUTEOLIN	Leaf				--
4	SILICON	Fruit				--
34	PROANTHOCYANIDINS	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
11	ADENINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	COPPER	Fruit				--
39	NIACIN	Fruit				--
18	VITEXIN	Bark				--
77	CHLOROGENIC-ACID	Bark				--
18	VITEXIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
38	(-)-EPICATECHIN	Leaf				--
2	DIMETHYL-AMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
87	RUTIN	Bud				--
21	LUPEOL	Bark				--
25	OPC	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
1	BETA-PHENETHYLAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	ADENOSINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	COPPER	Flower				--
18	VITEXIN	Leaf				--
77	CHLOROGENIC-ACID	Shoot				--
89	URSOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
38	(-)-EPICATECHIN	Flower				--
87	RUTIN	Flower				--
77	CHLOROGENIC-ACID	Flower				--
87	RUTIN	Leaf				--
64	OLEANOLIC-ACID	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
30	HYPEROSIDE	Bark				--

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19	ACETYL-CHOLINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	CADMIUM	Fruit				--
18	VITEXIN	Shoot				--
77	CHLOROGENIC-ACID	Fruit				--
11	TYRAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
38	(-)-EPICATECHIN	Fruit				--
23	CITRIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
176	QUERCETIN	Shoot				--
102	CAFFEIC-ACID	Bud				--
15	RIBOFLAVIN	Fruit				--
30	HYPEROSIDE	Leaf				--