

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Crataegus laevigata*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	(+)-CATECHIN	Bud				--
30	(+)-CATECHIN	Tissue Culture				--
30	(+)-CATECHIN	Leaf				--
30	(+)-CATECHIN	Flower				--
38	(-)-EPICATECHIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
38	(-)-EPICATECHIN	Bud				--
38	(-)-EPICATECHIN	Shoot				--
38	(-)-EPICATECHIN	Leaf				--
38	(-)-EPICATECHIN	Flower				--
38	(-)-EPICATECHIN	Fruit				--
15	5-HYDROXYTRYPTAMINE	Shoot				--
19	ACETYL-CHOLINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
11	ADENINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
11	ADENINE	Leaf				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	ADENOSINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	ADENOSINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
33	AESCULIN	Shoot				--
33	AESCULIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ALUMINUM	Fruit	8.0	29.0	-0.21508468192276714	--
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.
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.
101	APIGENIN	Bud				--
101	APIGENIN	Leaf				--
112	ASCORBIC-ACID	Leaf	166.4	1800.0	-0.27690303367535113	--
112	ASCORBIC-ACID	Fruit	24.0	85.0	-0.2792039610917021	--
53	BETA-CAROTENE	Fruit	1.4	5.0	-0.14113571921676207	--
1	BETA-PHENETHYLAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	BETA-PHENETHYLAMINE	Flower				--
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
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.
3	CADMIUM	Fruit				--
3	CADMIUM	Flower				--
102	CAFFEIC-ACID	Leaf				--
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.
102	CAFFEIC-ACID	Bud				--
102	CAFFEIC-ACID	Shoot				--
102	CAFFEIC-ACID	Flower				--
28	CALCIUM	Fruit	1554.0	5570.0	0.3954571881842723	--
43	CATECHIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	CHLOROGENIC-ACID	Plant				--
77	CHLOROGENIC-ACID	Fruit				--
77	CHLOROGENIC-ACID	Flower				--
77	CHLOROGENIC-ACID	Bud				--
77	CHLOROGENIC-ACID	Leaf				--
77	CHLOROGENIC-ACID	Bark				--
77	CHLOROGENIC-ACID	Shoot				--
20	CHOLINE	Leaf				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
20	CHOLINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
20	CHOLINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	CHROMIUM	Fruit	0.5	1.7	-0.26885440473667177	--
23	CITRIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	COBALT	Fruit	0.6	2.0	-0.29299669899909336	--
12	COPPER	Fruit				--
12	COPPER	Flower				--
3	CYNAROSIDE	Leaf				--
3	CYNAROSIDE	Flower				--
2	DIMETHYL-AMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
20	DOPAMINE	Shoot				--
40	EPICATECHIN	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.
11	EPINEPHRINE	Flower				--
11	EPINEPHRINE	Leaf				--

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.
29	ESCULIN	Fruit				--
15	FIBER	Fruit		108000.0	-0.31778652128419577	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
7	GLUCOSE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	GUANINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	GUANINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Bark				--
30	HYPEROSIDE	Leaf				--
30	HYPEROSIDE	Shoot				--
30	HYPEROSIDE	Flower				--
30	HYPEROSIDE	Branches				--
30	HYPEROSIDE	Fruit				--
30	HYPEROSIDE	Plant		10000.0	-0.707106781186548	--
6	IRON	Fruit				--
7	LAURIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
27	LINOLEIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
21	LUPEOL	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
78	LUTEOLIN	Bud				--
78	LUTEOLIN	Leaf				--
65	MAGNESIUM	Fruit	262.0	940.0	-0.5509172813412117	--
14	MANGANESE	Fruit	0.4	1.4	-0.39430607258501055	--
14	MANGANESE	Flower				--
6	MASLINIC-ACID	Shoot				--
39	NIACIN	Fruit				--
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.
25	OPC	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
9	OXALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	OXALIC-ACID	Bark				--
13	PALMITIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
13	PALMITIC-ACID	Bark				--
24	PECTIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Fruit	405.0	1450.0	-0.5364028420241324	--
14	POTASSIUM	Fruit	3069.0	11000.0	-0.6119284601203993	--

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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	PROCYANIDIN	Leaf				--
11	PROCYANIDIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	PROCYANIDIN-B-2	Flower				--
1	PROCYANIDIN-B-2	Fruit				--
4	PROCYANIDIN-B-4	Flower				--
6	PYCNOGENOL	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
176	QUERCETIN	Shoot				--
176	QUERCETIN	Flower				--
176	QUERCETIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
44	QUERCITRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Fruit				--
87	RUTIN	Flower				--
87	RUTIN	Plant				--
87	RUTIN	Leaf				--
87	RUTIN	Bud				--
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.
60	SELENIUM	Fruit	0.6	2.0	0.10976555089417979	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	SILICON	Fruit				--
1	SODIUM	Fruit	15.0	55.0	-0.17873519822623876	--
11	SORBITOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	SPIRAEOSIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
5	STARCH	Fruit	41850.0	180000.0	-0.18166262454346976	--
8	STEARIC-ACID	Bark				--
14	SUCROSE	Bark				--
6	TARTARIC-ACID	Bark				--
6	TARTARIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
31	THIAMIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	TIN	Fruit	3.6	13.0	-0.3261703903199725	--
1	TRIMETHYLAMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	TRIMETHYLAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	TYRAMINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
11	TYRAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
11	TYRAMINE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
89	URSOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
89	URSOLIC-ACID	Shoot				--
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.
18	VITEXIN	Fruit				--
18	VITEXIN	Flower				--
18	VITEXIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
18	VITEXIN	Bark				--
18	VITEXIN	Leaf				--
18	VITEXIN	Shoot				--
18	VITEXIN	Branches				--
1	VITEXIN-2"-O-ALPHA-L-RHAMNOSIDE	Plant				--
1	VITEXIN-2'-O-RHAMNOSIDE	Flower				--
77	ZINC	Flower				--
77	ZINC	Fruit				--