

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Hibiscus sabdariffa

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	MUCILAGE	Calyx	15000.0	650000.0		--
15	FIBER	Flower	10000.0	374600.0	2.971685757852178	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	HIBISCUS-ACID	Flower		230000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	CITRIC-ACID	Fruit	37400.0	170000.0	2.131164153919124	--
1	CELLULOSE	Seed		168000.0	0.5783739206201094	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	FIBER	Seed		120000.0	-0.11669610810150641	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Leaf	13000.0	114000.0	-0.5878237990866672	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	STARCH	Seed		111000.0	-0.8064850823445846	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	MALIC-ACID	Flower	6233.0	56667.0	1.0	--
23	CITRIC-ACID	Flower	6233.0	56667.0		--
6	TARTARIC-ACID	Flower	6233.0	56667.0		--
24	PECTIN	Calyx		31900.0		--
30	ANTHOCYANINS	Calyx	10000.0	20000.0		--
28	CALCIUM	Leaf	2130.0	14792.0	-0.24906661049521867	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	MALIC-ACID	Leaf		12500.0	0.2822875522116279	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
24	PECTIN	Fruit		10200.0	-0.5091471100383528	--
14	POTASSIUM	Flower	1034.0	9400.0	-1.0124925447320965	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Leaf	480.0	6458.0	0.2735050043469738	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	MALIC-ACID	Stem		6000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
28	CALCIUM	Seed	3200.0	6000.0	0.3404249554690761	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Seed		6000.0	0.17088218232138022	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	SULFUR	Seed		4000.0	0.8287417461896122	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Fruit	540.0	3750.0	-0.05132528273853201	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Flower	374.0	3400.0	-0.6558141831778627	--
14	SUCROSE	Calyx		2400.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	GAMMA-TOCOPHEROL	Seed		1490.0	0.4109961537087907	--
4	PHOSPHORUS	Flower	110.0	1000.0	-1.1392165553859557	--
53	BETA-CAROTENE	Leaf	41.0	555.0	1.2790561648525607	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
32	ALPHA-TOCOPHEROL	Seed		500.0	0.8571112050632521	--
65	MAGNESIUM	Flower	44.0	400.0	-1.7433560491071525	--
1	SODIUM	Flower	42.0	382.0	-0.3952249147727747	--
6	IRON	Leaf	15.0	333.0	-0.07651054521577247	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Flower	22.0	200.0	-0.7732197962345587	--
39	NIACIN	Leaf	12.0	132.0	0.4196344734008024	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	ALUMINUM	Flower	14.0	125.0	0.46945991962978617	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	RIBOFLAVIN	Leaf	1.0	31.0	-0.0325494690927309	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	MANGANESE	Flower	2.0	15.1	-0.3393278990760618	--
60	SELENIUM	Flower	1.6	14.3	1.7265796092320822	--
31	THIAMIN	Leaf	0.0	12.0	0.7701228842235702	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Flower	1.3	12.0	-0.8122224292191794	--
4	TIN	Flower	1.0	10.0	-0.8082238591204874	--
4	DELTA-TOCOPHEROL	Seed		10.0	-1.0	--
4	SILICON	Flower	1.0	9.1	-0.45868138661471586	--
53	BETA-CAROTENE	Flower	1.0	9.0	-0.4832859262086817	--
12	COPPER	Flower	5.6	6.2	-1.2821653170679421	--
6	IRON	Flower	0.7	6.0	-1.063209446177288	--
24	CHROMIUM	Flower	0.6	5.4	1.1789575691255427	--
2	COBALT	Flower	0.6	5.0	-0.2767916858148855	--
31	THIAMIN	Flower	0.0	3.0	-0.6757315085489463	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Flower	0.1	0.5	-1.3399966931295562	--
7	ANISALDEHYDE	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
31	CARYOPHYLLENE	Calyx				--
2	METHANOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
1	CHOLESTEROL	Seed				--
60	LIMONENE	Calyx				--
3	ISOAMYL-ALCOHOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
1	DELTA-5-AVENASTEROL	Seed				--
2	METHANOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	(E)-2-HEXENAL	Calyx				--

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3	ISOAMYL-ALCOHOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
2	PALMITOLEIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	ETHANOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
16	ACETIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
16	ACETIC-ACID	Calyx				--
5	CAPRYLIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
93	TOCOPHEROL	Seed				--
5	HEXANAL	Calyx				--
3	ISOAMYL-ALCOHOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
9	BENZYL-ALCOHOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
13	PALMITIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	ETHANOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
16	ACETIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
3	XYLOSE	Calyx				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
5	CAPRYLIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
6	TARTARIC-ACID	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	GALACTOSE	Flower				--
43	PROTocatechuic-ACID	Flower				--
9	BENZYL-ALCOHOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
9	OXALIC-ACID	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

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24	ETHANOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	PHYTOSTEROLS	Calyx				--
2	CAMPESTEROL	Seed				--
6	FURFURAL	Calyx				--
6	PROPIONIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
24	BENZALDEHYDE	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
18	OLEIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	ERGOSTEROL	Seed				--
3	MANNOSE	Calyx				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	CALCIUM-OXALATE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
76	EUGENOL	Calyx				--
6	PROPIONIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	HIBISCIN-CHLORIDE	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	ASPARTIC-ACID	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	DELPHINIDIN-3-GLUCOSIDE	Calyx				--
23	ALPHA-TERPINEOL	Calyx				--
4	STERCULIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	GLYCOLIC-ACID	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	DELPHINIDIN	Calyx				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
44	SCOPOLETIN	Root Bark				--
8	STEARIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
27	LINOLEIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CLEOMISCOSIN-C	Root Bark				--
13	FORMIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
6	MYRISTIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
34	PROANTHOCYANIDINS	Flower				--
2	ISOPROPYL-ALCOHOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
4	CLEOMISCOSIN-A	Root Bark				--
13	FORMIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
7	GOSSYPETIN	Flower				--
6	BUTYRIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
21	METHYL-SALICYLATE	Calyx				--
2	ISOPROPYL-ALCOHOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
67	1,8-CINEOLE	Calyx				--
7	ANISALDEHYDE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
2	METHANOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
77	ZINC	Flower				--
47	BETA-SITOSTEROL	Seed				--
53	LINALOOL	Calyx				--
2	ISOPROPYL-ALCOHOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)