

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Hibiscus sabdariffa

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	FIBER	Flower	10000.0	374600.0	2.971685757852178	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
23	CITRIC-ACID	Fruit	37400.0	170000.0	2.131164153919124	--
60	SELENIUM	Flower	1.6	14.3	1.7265796092320822	--
53	BETA-CAROTENE	Leaf	41.0	555.0	1.2790561648525607	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	CHROMIUM	Flower	0.6	5.4	1.1789575691255427	--
15	MALIC-ACID	Flower	6233.0	56667.0	1.0	--
32	ALPHA-TOCOPHEROL	Seed		500.0	0.8571112050632521	--
14	SULFUR	Seed		4000.0	0.8287417461896122	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	THIAMIN	Leaf	0.0	12.0	0.7701228842235702	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
5	ALUMINIUM	Flower	14.0	125.0	0.46945991962978617	--
39	NIACIN	Leaf	12.0	132.0	0.4196344734008024	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	GAMMA-TOCOPHEROL	Seed		1490.0	0.4109961537087907	--
28	CALCIUM	Seed	3200.0	6000.0	0.3404249554690761	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.
4	PHOSPHORUS	Leaf	480.0	6458.0	0.2735050043469738	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
15	RIBOFLAVIN	Leaf	1.0	31.0	-0.0325494690927309	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Fruit	540.0	3750.0	-0.05132528273853201	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Leaf	15.0	333.0	-0.07651054521577247	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Seed		120000.0	-0.11669610810150641	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Leaf	2130.0	14792.0	-0.24906661049521867	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	COBALT	Flower	0.6	5.0	-0.2767916858148855	--
14	MANGANESE	Flower	2.0	15.1	-0.3393278990760618	--
1	SODIUM	Flower	42.0	382.0	-0.3952249147727747	--
4	SILICON	Flower	1.0	9.1	-0.45868138661471586	--
53	BETA-CAROTENE	Flower	1.0	9.0	-0.4832859262086817	--
24	PECTIN	Fruit		10200.0	-0.5091471100383528	--
15	FIBER	Leaf	13000.0	114000.0	-0.5878237990866672	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Flower	374.0	3400.0	-0.6558141831778627	--
31	THIAMIN	Flower	0.0	3.0	-0.6757315085489463	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Flower	22.0	200.0	-0.7732197962345587	--
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.
4	TIN	Flower	1.0	10.0	-0.8082238591204874	--
39	NIACIN	Flower	1.3	12.0	-0.8122224292191794	--
4	DELTA-TOCOPHEROL	Seed		10.0	-1.0	--
14	POTASSIUM	Flower	1034.0	9400.0	-1.0124925447320965	--
6	IRON	Flower	0.7	6.0	-1.063209446177288	--
4	PHOSPHORUS	Flower	110.0	1000.0	-1.1392165553859557	--
12	COPPER	Flower	5.6	6.2	-1.2821653170679421	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	RIBOFLAVIN	Flower	0.1	0.5	-1.3399966931295562	--
65	MAGNESIUM	Flower	44.0	400.0	-1.7433560491071525	--
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)
2	(E)-2-HEXENAL	Calyx				--
16	ACETIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
15	MALIC-ACID	Stem		6000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	CAPRYLIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
16	ACETIC-ACID	Calyx				--
93	TOCOPHEROL	Seed				--
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.
24	ETHANOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
5	HEXANAL	Calyx				--
2	CAMPESTEROL	Seed				--
3	XYLOSE	Calyx				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
24	BENZALDEHYDE	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

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18	OLEIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	ERGOSTEROL	Seed				--
1	GALACTOSE	Flower				--
43	PROTocatechuic-ACID	Flower				--
4	CALCIUM-OXALATE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	PHYTOSTEROLS	Calyx				--
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				--
6	FURFURAL	Calyx				--
6	PROPIONIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
3	MANNOSE	Calyx				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	GLYCOLIC-ACID	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Calyx		2400.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
9	DELPHINIDIN	Calyx				--
76	EUGENOL	Calyx				--
6	PROPIONIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
27	LINOLEIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
13	FORMIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
23	ALPHA-TERPINEOL	Calyx				--
4	STERCULIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	MYRISTIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
23	CITRIC-ACID	Flower	6233.0	56667.0		--
2	ISOPROPYL-ALCOHOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
13	FORMIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
44	SCOPOLETIN	Root Bark				--
30	ANTHOCYANINS	Calyx	10000.0	20000.0		--
8	STEARIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	MUCILAGE	Calyx	15000.0	650000.0		--
2	CLEOMISCOSIN-C	Root Bark				--
6	BUTYRIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
6	TARTARIC-ACID	Flower	6233.0	56667.0		--
2	ISOPROPYL-ALCOHOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
34	PROANTHOCYANIDINS	Flower				--
7	ANISALDEHYDE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
2	METHANOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
4	CLEOMISCOSIN-A	Root Bark				--
47	BETA-SITOSTEROL	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	GOSSYPETIN	Flower				--
2	ISOPROPYL-ALCOHOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
21	METHYL-SALICYLATE	Calyx				--
7	ANISALDEHYDE	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	METHANOL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
1	CHOLESTEROL	Seed				--
67	1,8-CINEOLE	Calyx				--
77	ZINC	Flower				--
3	ISOAMYL-ALCOHOL	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
24	PECTIN	Calyx		31900.0		--
53	LINALOOL	Calyx				--
2	METHANOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
31	CARYOPHYLLENE	Calyx				--
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)
60	LIMONENE	Calyx				--
16	ACETIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
5	CAPRYLIC-ACID	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
1	DELTA-5-AVENASTEROL	Seed				--