

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Theobroma cacao

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	STEARIC-ACID	Seed	111300.0	215450.0	4.109143355899089	--
13	PALMITIC-ACID	Seed	89040.0	180500.0	3.024699622330506	--
21	THEOBROMINE	Seed	10000.0	35000.0	2.234049191141325	--
36	THEOPHYLLINE	Seed	0.0	4739.0	1.7330040388042545	--
16	ACETIC-ACID	Seed	1520.0	7100.0	1.3864579714312821	--
62	CAFFEINE	Testa	130.0	723.0	1.364120501373702	--
62	CAFFEINE	Petiole	51.0	252.0	1.3383130789607725	--
21	THEOBROMINE	Petiole	174.0	223.0	1.2182825031280367	--
36	THEOPHYLLINE	Testa	130.0	257.0	1.0617119603565899	--
21	THEOBROMINE	Testa	936.0	13000.0	1.0376929371594854	--
1	CHOLESTEROL	Oil	0.0	2800.0	1.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
30	POLYPHENOLS	Seed	78000.0	100000.0	1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	CATECHINS	Seed	30000.0	40000.0	1.0	--
30	ANTHOCYANINS	Seed		4000.0	1.0	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
18	OLEIC-ACID	Seed	122430.0	227100.0	0.8877951296368191	--
12	COPPER	Seed		24.0	0.8331720560940928	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	PHOSPHORUS	Fruit	500.0	5000.0	0.5418734067690828	J Cell Biochem VOL. 22=1995
9	OXALIC-ACID	Seed	1520.0	5000.0	0.3447985152060364	--
11	PANTOTHENIC-ACID	Seed	13.0	20.0	0.34109708334068634	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Seed	17.0	50.0	0.21294979342958875	--
36	THEOPHYLLINE	Petiole	58.0	188.0	0.1867718419094071	--
15	RIBOFLAVIN	Seed	1.0	4.0	0.18234587940570884	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	PHOSPHORUS	Seed	3600.0	5571.0	0.05751506388486866	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ALANINE	Seed		10400.0	0.051822040311835675	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
23	CITRIC-ACID	Seed	4500.0	7500.0	0.007355725552878182	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
31	THIAMIN	Fruit	1.8	4.2	-0.14499283258341247	J Cell Biochem VOL. 22=1995
14	SUCROSE	Seed	18000.0	37000.0	-0.17153022515909322	--
28	CALCIUM	Fruit	1300.0	3095.0	-0.1756747356051228	J Cell Biochem VOL. 22=1995
39	NIACIN	Fruit	19.0	45.0	-0.20985653043855088	J Cell Biochem VOL. 22=1995
1	CELLULOSE	Seed		90000.0	-0.23884916161035874	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Fruit	1.6	3.8	-0.25899158592219057	J Cell Biochem VOL. 22=1995
112	ASCORBIC-ACID	Fruit	30.0	70.0	-0.2801366159826427	J Cell Biochem VOL. 22=1995
112	ASCORBIC-ACID	Seed		31.0	-0.3198458318942361	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SERINE	Seed		8800.0	-0.3400469562928065	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	SALICYLATES	Seed		0.0	-0.3401776874861938	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	FIBER	Seed	59000.0	89000.0	-0.36147740264683753	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Fruit	43000.0	102380.0	-0.3708195428012696	J Cell Biochem VOL. 22=1995
27	LINOLEIC-ACID	Plant	10700.0	12230.0	-0.39147043061187325	--
62	CAFFEINE	Seed	500.0	12900.0	-0.4658272368460845	--
8	TYROSINE	Seed		5700.0	-0.4728461096051886	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	GLUCOSE	Seed	1000.0	3000.0	-0.5077819441641488	--
6	IRON	Seed	36.0	37.0	-0.5287176209786577	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Seed	800.0	1100.0	-0.5594989895943375	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	LINALOOL	Seed		5.0	-0.5895891599202989	--
8	FRUCTOSE	Seed		2000.0	-0.5987994606248948	--
3	ISOLEUCINE	Seed		5600.0	-0.624169861411402	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
27	LINOLEIC-ACID	Seed	7420.0	29115.0	-0.6683734051471023	--
7	PHENYLALANINE	Seed		5600.0	-0.7093928366416996	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	VALINE	Seed		5700.0	-0.7773276247624422	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
31	THIAMIN	Seed	1.0	3.0	-0.8551170555321612	--
5	STARCH	Seed	50000.0	90000.0	-0.891522967457591	--
2	LEUCINE	Plant		4500.0	-0.9511481830727361	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHOSPHATIDYL-CHOLINE	Seed	92.0	1328.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	NICOTINAMIDE	Seed		21.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	ARGININE	Seed		800.0	-1.009489821300081	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	PHYLLOQUINONE	Seed		0.02	-1.1351915229662497	--
43	PYRIDOXINE	Seed		1.0	-1.1536599429026273	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	GLUTAMIC-ACID	Seed		10200.0	-1.3295703563860357	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	HISTIDINE	Seed		800.0	-1.4153953454644674	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	GLYCINE	Seed		900.0	-1.4533713326030981	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	THREONINE	Seed		1400.0	-1.5071309379745554	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	LYSINE	Seed		800.0	-1.5304571248204542	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
24	VANILLIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	RAFFINOSE	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	DIACETYL	Plant				--
75	KAEMPFEROL	Leaf				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
1	CATALASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
38	(-)-EPICATECHIN	Leaf				--
2	PHENYLACETIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
44	QUERCITRIN	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	CYANIDIN	Plant				--
4	ISOVITEXIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	CAMPESTEROL	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
36	THEOPHYLLINE	Plant				--
24	PECTIN	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	STIGMASTEROL	Seed				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
5	STARCH	Hb		60000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	TRYPTAMINE	Seed				--
8	GENTISIC-ACID	Leaf				--
9	VALERIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	QUERCETIN-3-O-GALACTOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
1	N-NONACOSANE	Seed				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
57	COUMARIN	Seed				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
4	ISOPROPYL-ACETATE	Plant				--
11	TYRAMINE	Seed				--
1	STACHYOSE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
26	SEROTONIN	Seed				--
8	FRUCTOSE	Plant				--
176	QUERCETIN	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	N-BUTYLACETATE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	VALERIANIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	APIGENIN-7-O-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	SINAPIC-ACID	Plant				--
13	P-HYDROXY-BENZOIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	FORMIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	MANNOSE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	ISOBUTYL-ACETATE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	AMYLASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
25	P-COUMARIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	(-)-SALSOLINOL	Seed	0.007	40.0		--
43	PROTOCATECHUIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	CHRYSOERIOL-7-O-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
11	TYRAMINE	Plant				--
1	THEOSTEROL	Testa				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.

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6	EPIGALLOCATECHIN	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	SALSOLINOL	Seed				--
34	PROANTHOCYANIDINS	Plant				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
3	AMYL-BUTYRATE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	PROPIONIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LUTEOLIN-7-O-GLUCOSIDE	Plant				J.S. Glasby Dict.Pl's Containing 2ndary Metabolite. 1991.
1	CHOLESTEROL	Plant				--
15	TRIGONELLINE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
26	SEROTONIN	Plant				--
6	TARTARIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
40	EPICATECHIN	Leaf				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
4	RUTOSIDE	Leaf				--
61	FERULIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	AMYL-ALCOHOL	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
78	LUTEOLIN	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
77	CHLOROGENIC-ACID	Leaf				--
4	GLYCOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
102	CAFFEIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
25	OPCS	Seed		80000.0		--
6	SYRINGIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	XYLOSE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
87	RUTIN	Leaf				--
2	NONANOIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
30	ESCULETIN	Seed				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
1	CELLULOSE	Plant				--
4	PHENYLETHYLAMINE	Seed				--
4	BIOTIN	Sprout Seedling				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	FURFURAL	Exocarp		90000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	SUCROSE	Plant				--
18	VITEXIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
11	NICOTINIC-ACID	Plant				--
5	ERGOSTEROL	Seed				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
22	CATECHOL	Plant				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. I'ORSTROM, Paris. 569 pp.
20	LECITHIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	GLYCERIN	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
47	BETA-SITOSTEROL	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	BEHENIC-ACID	Plant				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
12	STIGMASTEROL	Plant				--
1	VERBASCOSSE	Seed				--

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20	DOPAMINE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
5	24-METHYLENE-CYCLOARTANOL	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	LACTIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
53	BETA-CAROTENE	Plant				--
8	STEARIC-ACID	Plant				--