

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in Coffea arabica**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	10-O-METHYLCAFESTOL	Seed	--	--		
0	2,3,5-TRIMETHYLPHENOL	Seed	--	--		Jim Duke's personal files.
0	2-ETHYLPHENOL	Seed	--	--		Jim Duke's personal files.
0	2-METHOXY-4-ETHYLPHENOL	Seed	--	--		Jim Duke's personal files.
0	24-METHYLENE-CYCLOARTENOL	Seed	--	--		
0	24-METHYLENEPHENOL	Seed	--	--		
2	3,4-DICAFFEOYL-QUINIC-ACID	Seed	--	--		
3	3,5-DICAFFEOYL-QUINIC-ACID	Seed	--	--		
0	4,5-DICAFFEOYL-QUINIC-ACID	Seed	--	--		
0	4-ETHYLPHENOL	Seed	--	--		Jim Duke's personal files.
0	4-METHOXY-4-VINYLPHENOL	Seed	--	--		Jim Duke's personal files.
0	5-AVENASTEROL	Seed	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-STIGMASTEROL	Seed	--	--		
6	ACETALDEHYDE	Seed	--	--		
11	ADENINE	Seed	--	--		
0	ALLANTOIC-ACID	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	ALLANTOIN	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
32	ALPHA-TOCOPHEROL	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ARABINOGLACTOSE	Seed	--	--		
0	ARABINOSE	Seed	--	--		
0	ARACHIDIC-ACID	Seed	--	--		
0	ASH	Seed	37400	37400	-0.31521697993801695	
2	ASPARAGINE	Seed	--	--		
3	ASPARTIC-ACID	Seed	--	--		
0	ATRACTYLIGENIN	Seed	--	--		
53	BETA-CAROTENE	Leaf	20	25	-1.0290654853904624	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
47	BETA-SITOSTEROL	Seed	520	530	-0.42759619083407946	
0	BETA-TOCOPHEROL	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CAFESTEROL	Seed	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	CAFESTOL	Seed	--	6000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
102	CAFFEIC-ACID	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
102	CAFFEIC-ACID	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
62	CAFFEINE	Seed	600	32000	0.32954849831842203	
0	CAFFEOL	Seed	--	--		
0	CAFFEOYL-3-QUINIC-ACID	Seed	--	--		
0	CAFFETANNIC-ACID	Seed	84600	84600		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CAHWEOL	Seed	--	--		
28	CALCIUM	Leaf	19000	20406	0.1345247907090656	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Seed	1200	1281	-0.5262569010113829	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CAMOESTANOL	Seed	--	--		
0	CAMPESTANOL	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CAMPESTEROL	Seed	110	120	-0.3742741742761247	
0	CAPRINIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Leaf	666000	712000	0.7964570524747036	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CARBOHYDRATES	Seed	600000	728000	0.8131126460843718	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CARNAUBIC-ACID	Seed	--	--		
1	CELLULOSE	Seed	--	--		
77	CHLOROGENIC-ACID	Seed	50000	100000	2.099473455662158	
0	CHOLESTANOL	Seed	--	--		
1	CHOLESTEROL	Seed	--	--		
20	CHOLINE	Seed	300	300	-1.291686985764833	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
23	CITRIC-ACID	Seed	--	--		
1	CITROSTADIENOL	Seed	--	--		
0	COFFEASTEROL	Seed	--	--		
7	CYANIDIN	Plant	--	--		
3	CYCLOEUCALENOL	Seed	--	--		
13	CYSTEINE	Seed	--	--		
2	CYSTINE	Seed	--	--		
0	DATURIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DEXTRINS	Seed	8700	8700		
0	DIHYDROLANASTEROL	Seed	--	--		
0	DIHYDROSITOSTEROL	Seed	--	--		
0	DIMETHYL-5-ALPHA-CHOLEST-7-EN-3-BETA-OL	Seed	--	--		
0	DIMETHYL-5-ALPHA-CHOLEST-8-EN-3-BETA-OL	Seed	--	--		
0	ENT-16-KAUREN-19-OL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	EO	Seed	1000	2000	-0.5252163822922106	
76	EUGENOL	Seed	--	--		Jim Duke's personal files.
0	FAT	Leaf	55000	59000	0.05057198773678454	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	74000	170000	-0.5024405631299633	
15	FIBER	Seed	229000	244000	0.8624290700798181	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Leaf	175000	187000	0.3149049121779396	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FUFURYL-ALCOHOL	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	FURFURALDEHYDE	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GALACTAN	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GALACTOMANNAN	Seed	--	--		
0	GAMMA-SITOSTEROL	Seed	--	--		
14	GAMMA-TOCOPHEROL	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	GLUCOGALACTOMANNAN	Seed	--	--		
8	GLUTAMIC-ACID	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
18	GUAIACOL	Seed	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GUANOSINE	Seed	--	--		
0	HEMICELLULOSE	Seed	--	--		
0	HOMOCCELLULOSE	Seed	--	--		
0	HYDROGEN-SULFIDE	Seed	--	--		
0	HYPOXANTHINE	Seed	--	--		
6	IRON	Leaf	966	1032	1.6952709840911955	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Seed	29	31	-0.5565954591757142	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	ISOCHLOROGENIC-ACID	Seed	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	ISOEUGENOL	Seed	--	--		Jim Duke's personal files.
0	KAHWEOL	Seed	--	3000		
0	L-ASPARAGINE	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	L-ASPARTIC-ACID	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	LANOSTEROL	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	LIGNOCERIC-ACID	Seed	--	--		
27	LINOLEIC-ACID	Seed	--	--		
0	LINOLENIC-ACID	Seed	33300	72000	0.6770794300897944	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	M-CRESOL	Seed	--	--		Jim Duke's personal files.
0	MANNAN	Seed	--	--		
3	MANNOSE	Seed	--	--		
15	METHIONINE	Seed	--	--		
0	METHYL-1-5-ALPHA-STIGMAST-7-EN-3-BETA-OL	Seed	--	--		
6	MYRISTIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	N-NONACOSANE	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
39	NIACIN	Leaf	52	56	-0.5047983115442195	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Seed	13	14	-0.8646782329499472	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NITROGEN	Seed	16000	23000	-0.08890229552415746	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	O-CRESOL	Seed	--	--		Jim Duke's personal files.
0	O-XYLENOL	Seed	--	--		Jim Duke's personal files.
0	OBTUSIFOLIOL	Seed	--	--		
18	OLEIC-ACID	Seed	5920	12800	-0.8738766959416714	
9	OXALIC-ACID	Fruit	154	154	-0.2978571100852865	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
25	P-COUMARIC-ACID	Plant	--	--		
8	P-CRESOL	Seed	--	--		Jim Duke's personal files.
0	P-XYLENOL	Seed	--	--		Jim Duke's personal files.
13	PALMITIC-ACID	Seed	23680	23680	-0.21100581460020332	
24	PECTIN	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PENTOSANE	Seed	--	--		
0	PENTOSANS	Seed	--	--		
4	PHOSPHORUS	Leaf	1700	1816	-0.580562542862247	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Seed	1780	1900	-0.9125797887501755	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PHYTATE	Seed	7	370	-1.5315645120943797	
2	PHYTOSTEROLS	Seed	920	940	-0.39269135400530825	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	POLYAMINES	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PROTEIN	Leaf	99000	99000	-1.1257384013756186	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Seed	98700	140000	-0.8343645955506414	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	PUTRESCINE	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
1	RAFFINOSE	Seed	--	--		
0	RHAMNOSE	Seed	--	--		
15	RIBOFLAVIN	Leaf	2	2	-0.16848655199175794	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	RIBOFLAVIN	Seed	1	1	-0.9674166926890354	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SACCHAROSE	Seed	--	--		
7	SALICYLATES	Seed	--	10	-0.2865247216874145	
44	SCOPOLETIN	Seed	--	--		
9	SINAPIC-ACID	Plant	--	--		
1	SPERMIDINE	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
1	SPERMINE	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
10	SQUALENE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	STACHYOSE	Seed	--	--		
8	STEARIC-ACID	Seed	5920	12800	-0.28767350524597596	
12	STIGMASTEROL	Seed	240	270	-0.18717042991843028	
0	SUGAR	Seed	4300	4300	-0.9041931273600093	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
41	TANNIC-ACID	Seed	--	--		
35	TANNIN	Seed	90000	90000	0.12467231877609526	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TETRACOSIC-ACID	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
21	THEOBROMINE	Leaf	--	--		
21	THEOBROMINE	Seed	18	20	-0.49992618078868906	
36	THEOPHYLLINE	Seed	--	5	-0.8086779488341806	
36	THEOPHYLLINE	Leaf	--	--		
31	THIAMIN	Seed	2	2	-1.0937002421726418	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	TRIGONELLINE	Seed	3000	13000	2.6975560988319325	
0	WATER	Seed	60000	100000	-0.4896816688601282	
0	WAX	Seed	10000	14000	1.2675004445952587	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	XANTHINE	Seed	--	--		
0	XYLAN	Seed	--	--		