

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Carica papaya*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	OLEIC-ACID	Seed Oil	743000.0	755000.0	2.266462351347825	Jim Duke's personal files.
18	OLEIC-ACID	Seed	193545.0	202400.0	0.6847466271086402	--
13	PALMITIC-ACID	Seed Oil	162000.0	190000.0	0.05419140224469152	Jim Duke's personal files.
15	FIBER	Seed		170000.0	0.27811243148773734	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	FIBER	Leaf	18000.0	145000.0	-0.20447325046745057	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
25	PAPAIN	Latex Exudate	51000.0	135000.0		--
15	FIBER	Fruit	5000.0	92198.0	-0.46690178925800363	--
8	STEARIC-ACID	Seed Oil		50000.0	-0.5312228391740013	Jim Duke's personal files.
13	PALMITIC-ACID	Seed	28791.0	30107.0	-0.07839595078720965	--
14	POTASSIUM	Leaf	6520.0	28978.0	-0.060322902844285126	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Leaf	3440.0	23800.0	0.36642881915355097	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	FUMARIC-ACID	Fruit	3150.0	23333.0	1.4090927316950586	--
15	MALIC-ACID	Fruit	3150.0	23333.0	0.567329421438877	--
6	TARTARIC-ACID	Fruit	3150.0	23333.0	-0.24237898104354536	--
1	BEHENIC-ACID	Seed Oil		16000.0	0.29658976365227746	Jim Duke's personal files.
8	STEARIC-ACID	Seed	12650.0	13282.0	-0.2772157419739704	--
4	PHOSPHORUS	Leaf	1420.0	6311.0	0.24645891872875847	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Leaf	1400.0	6222.0	0.13340221850054146	--
27	LINOLEIC-ACID	Seed		5389.0	-0.871660128625913	--
14	POTASSIUM	Fruit	690.0	5110.0	-1.1330381120971724	--
20	BENZYL-ISOTHIOCYANATE	Seed	2000.0	5000.0	-1.0	Jim Duke's personal files.
112	ASCORBIC-ACID	Fruit	640.0	4741.0	0.010292117056281466	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Latex Exudate		4400.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	ASPARTIC-ACID	Fruit	490.0	4387.0	-0.7582452723944939	USDA's Ag Handbook 8 and sequelae)
17	CARPAIN	Leaf	150.0	4000.0		--
27	LINOLEIC-ACID	Seed Oil		4000.0	-1.5223259403119926	Jim Duke's personal files.
7	LAURIC-ACID	Seed Oil		4000.0	-0.7012763853261376	Jim Duke's personal files.
6	MYRISTIC-ACID	Seed Oil		4000.0	-0.5619514869490164	Jim Duke's personal files.
13	MUFA	Fruit	380.0	3402.0	-0.2044785517519125	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Fruit	320.0	2865.0	-0.320933619156033	--
4	PUFA	Fruit	310.0	2775.0	-0.6408686079046128	USDA's Ag Handbook 8 and sequelae)
15	ALPHA-LINOLENIC-ACID	Fruit	250.0	2238.0	-0.1389637310912248	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Fruit	250.0	2238.0	-0.48599361292492554	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Fruit	200.0	1790.0	-0.01827100523355692	--
12	GLYCINE	Fruit	180.0	1611.0	-0.7711938117552699	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Fruit	180.0	1611.0	-0.4683286447061981	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Fruit	160.0	1432.0	-0.7800180381461054	USDA's Ag Handbook 8 and sequelae)
1	SERINE	Fruit	150.0	1343.0	-0.8120190151666494	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Fruit	170.0	1260.0	-0.5941134018186989	--
3	ALANINE	Fruit	140.0	1253.0	-0.9646875161658541	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Fruit	159.0	1180.0	-0.6175808503755033	--
4	THREONINE	Fruit	110.0	985.0	-0.8449765955821991	USDA's Ag Handbook 8 and sequelae)
14	SULFUR	Fruit	300.0	900.0	-0.35813249886374227	--
3	VALINE	Fruit	100.0	895.0	-0.7341136385803058	USDA's Ag Handbook 8 and sequelae)
14	ARGININE	Fruit	100.0	895.0	-0.9108448929638525	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	110.0	815.0	-0.608799543813469	--
7	PHENYLALANINE	Fruit	90.0	806.0	-0.8738816258110772	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Fruit	80.0	716.0	-0.8775495343550369	USDA's Ag Handbook 8 and sequelae)
29	TRYPTOPHAN	Fruit	40.0	716.0	-0.18868896426915321	--
1	SODIUM	Leaf	160.0	711.0	-0.521006410073194	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	MYRISTIC-ACID	Fruit	70.0	627.0	-0.23956447622829535	--
27	LINOLEIC-ACID	Fruit	60.0	537.0	-0.347823614663473	--
53	BETA-CAROTENE	Leaf	116.0	514.0	1.1005033579469683	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	TYROSINE	Fruit	50.0	448.0	-0.8166172460051626	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Fruit	50.0	448.0	-0.8866430953186365	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Fruit	60.0	444.0	-0.14184676510350971	--
24	BENZALDEHYDE	Fruit		300.0	-0.06377099858893052	--
20	BENZYL-ISOTHIOCYANATE	Fruit	0.001	291.0		--
20	CHOLINE	Leaf		200.0	-0.47726562792110133	Jim Duke's personal files.
17	CARPAININE	Fruit		200.0		Jim Duke's personal files.
8	STEARIC-ACID	Fruit	20.0	179.0	-0.2673505228936131	--
15	METHIONINE	Fruit	10.0	179.0	-0.9599249017247726	--
21	NICOTINE	Leaf		102.8	-0.7499661778472884	Jim Duke's personal files.
39	NIACIN	Leaf	21.0	93.0	-0.05474550834730091	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	LAURIC-ACID	Fruit	10.0	90.0	-0.4444146432555388	--
6	IRON	Leaf	8.0	38.0	-0.824258114808842	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Fruit	4.0	30.0	-0.41038049882634875	--
15	RIBOFLAVIN	Leaf	5.0	21.0	-0.07942432526480918	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	PANTOTHENIC-ACID	Fruit	2.0	19.0	0.05712424299404392	USDA's Ag Handbook 8 and sequelae)
4	BORON	Fruit	5.0	15.0	-0.5018987122156774	--
2	COBALT	Fruit	2.0	14.0	1.1597144135765933	--
4	SILICON	Fruit	1.2	10.0	-0.5759531928031193	--
7	SALICYLATES	Fruit	0.8	8.0	-0.31380232713014544	--
12	COPPER	Fruit	0.1	5.0	-0.6085448044834153	--
31	THIAMIN	Leaf	1.0	4.0	-0.8971070751644596	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Fruit	0.4	3.0	-0.5155879913303996	--
15	RIBOFLAVIN	Fruit	0.4	3.0	-0.4303249009534089	--
31	THIAMIN	Fruit	0.2	2.6	-0.34980129918184183	USDA's Ag Handbook 8 and sequelae)
2	MYOSMINE	Leaf		1.4		Jim Duke's personal files.
14	MANGANESE	Fruit	0.1	1.0	-0.3969436204051225	--
24	CHROMIUM	Fruit	0.1	1.0	-0.3671750908546996	--
60	SELENIUM	Fruit	0.1	1.0	-0.13821084305127834	--
1	TOLUENE	Fruit		0.005	-0.707116857507301	Jim Duke's personal files.
53	LINALOOL	Fruit		0.0	-0.5857755812776223	--
9	BENZYL-ALCOHOL	Fruit		0.0	-0.7177394965097122	Jim Duke's personal files.
47	BETA-SITOSTEROL	Fruit				Jim Duke's personal files.
24	ETHANOL	Fruit				Jim Duke's personal files.
11	GAMMA-TERPINENE	Fruit				--
1	CAPROIC-ACID	Fruit				Jim Duke's personal files.
2	N-HEXACOSANE	Seed Oil				Jim Duke's personal files.
4	CARPOSIDE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
47	BETA-SITOSTEROL	Flower				Jim Duke's personal files.
7	CYCLOARTENOL	Seed Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	BETA-CAROTENE	Fruit				--
2	NEOXANTHIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	METHANOL	Fruit				Jim Duke's personal files.
2	GAMMA-CAROTENE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CAMPESTEROL	Seed Oil				Jim Duke's personal files.
18	OLEIC-ACID	Flower				Jim Duke's personal files.
3	N-HENTRIACONTANE	Seed Oil				Jim Duke's personal files.
17	CARPAIN	Seed				--
14	SUCROSE	Leaf				Jim Duke's personal files.
47	BETA-SITOSTEROL	Seed Oil				Jim Duke's personal files.
2	ISOAMYL-ACETATE	Fruit				--
2	CRYPTOXANTHIN	Pericarp				Jim Duke's personal files.
3	N-ACETYL-HEXOSAMIDASE	Latex Exudate				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	LYCOPENE	Pericarp				Jim Duke's personal files.
102	CAFFEIC-ACID	Leaf				Jim Duke's personal files.
8	4-TERPINEOL	Fruit				--
18	OLEIC-ACID	Leaf				Jim Duke's personal files.
7	GLUCOSE	Leaf				Jim Duke's personal files.
17	CARPAIN	Root				--
14	SUCROSE	Bark				Jim Duke's personal files.
4	CHYMOPAPAIN	Latex Exudate				--
47	BETA-SITOSTEROL	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	MYRISTIC-ACID	Seed				--
27	LINOLEIC-ACID	Flower				Jim Duke's personal files.
2	ISOBUTYL-ALCOHOL	Fruit				Jim Duke's personal files.
25	PAPAIN	Fruit				--
7	GLUCOSE	Bark				Jim Duke's personal files.
3	STYRENE	Fruit				Jim Duke's personal files.
1	BEHENIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	PYRIDINE	Fruit				Jim Duke's personal files.
27	LINOLEIC-ACID	Leaf				Jim Duke's personal files.
3	ISOBUTYL-ACETATE	Fruit				Jim Duke's personal files.
5	OCTANOIC-ACID	Fruit				Jim Duke's personal files.
7	GLUCOSE	Fruit				Jim Duke's personal files.
17	CARPAIN	Bark				--
12	STIGMASTEROL	Seed Oil				Jim Duke's personal files.
1	CHOLESTEROL	Seed Oil				Jim Duke's personal files.
2	PRUNASIN	Leaf				Jim Duke's personal files.
22	MYRCENE	Fruit				--
1	ETHYL-BUTYRATE	Fruit				--
1	ANTHERAXANTHIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	N-NONACOSANE	Seed Oil				Jim Duke's personal files.
8	GENTISIC-ACID	Leaf				Jim Duke's personal files.
8	STEARIC-ACID	Flower				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	LYCOPENE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	HEXANAL	Fruit				--
2	ISOPROPYL-ALCOHOL	Fruit				Jim Duke's personal files.
2	MYOSMINE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	LIGNOCERIC-ACID	Seed Oil				Jim Duke's personal files.
1	ETHYL-BENZOATE	Fruit				--
10	XYLITOL	Bark				Jim Duke's personal files.
9	TERPINOLENE	Fruit				--
8	STEARIC-ACID	Leaf				Jim Duke's personal files.
1	GALACTOSE	Bark				Jim Duke's personal files.
17	CARPAININE	Plant				Jim Duke's personal files.
24	PECTIN	Fruit				Jim Duke's personal files.
7	LAURIC-ACID	Flower				Jim Duke's personal files.
6	ETHYL-ACETATE	Fruit				--
31	CARYOPHYLLENE	Fruit				--
2	VIOLAXANTHIN	Leaf				Jim Duke's personal files.
1	MYRISTOLEIC-ACID	Fruit				Jim Duke's personal files.
2	BUTYL-ALCOHOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	FRUCTOSE	Leaf				Jim Duke's personal files.
8	GLUTAMIC-ACID	Fruit				USDA's Ag Handbook 8 and sequelae)
1	EPSILON-CAROTENE	Pericarp				Jim Duke's personal files.
2	PALMITOLEIC-ACID	Flower				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
21	METHYL-SALICYLATE	Fruit				--
7	LAURIC-ACID	Leaf				Jim Duke's personal files.
1	EPSILON-CAROTENE	Fruit				--
77	ZINC	Fruit				--
15	5-HYDROXYTRYPTAMINE	Plant				Jim Duke's personal files.
1	MYRISTOLEIC-ACID	Flower				Jim Duke's personal files.
10	SQUALENE	Seed Oil				Jim Duke's personal files.
8	FRUCTOSE	Bark				Jim Duke's personal files.
21	NICOTINE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	GERMACRENE-D	Fruit				--
53	BETA-CAROTENE	Pericarp				Jim Duke's personal files.
13	ALPHA-TERPINENE	Fruit				--
13	PALMITIC-ACID	Flower				Jim Duke's personal files.
3	METHYL-ACETATE	Fruit				--
5	ZEAXANTHIN	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	MYRISTIC-ACID	Flower				Jim Duke's personal files.
14	SUCROSE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
47	BETA-SITOSTEROL	Seed				Jim Duke's personal files.
7	LAURIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	FRUCTOSE	Fruit				Jim Duke's personal files.
3	BETA-PHELLANDRENE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GERANYL-ACETONE	Fruit				--
53	BETA-CAROTENE	Seed Oil				Jim Duke's personal files.
11	ALPHA-PHELLANDRENE	Fruit				--
13	PALMITIC-ACID	Leaf				Jim Duke's personal files.
1	HEXYL-ACETATE	Fruit				Jim Duke's personal files.
23	CITRIC-ACID	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	VIOLAXANTHIN	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
32	ALPHA-TOCOPHEROL	Leaf				Jim Duke's personal files.
6	MYRISTIC-ACID	Leaf				Jim Duke's personal files.