

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Eriobotrya japonica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WATER	Fruit	865000.0	886000.0	0.5018755015736748	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	350000.0	450000.0	0.9724195926436688	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CARBOHYDRATES	Fruit	102000.0	919000.0	0.7278946208977922	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Fruit	5000.0	71000.0	-0.66693630707276	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Fruit	4000.0	44000.0	-0.327932470205319	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Fruit	2600.0	27632.0	0.8595648729318401	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Fruit	2000.0	50000.0	-0.2593561116439818	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Fruit	2000.0	56000.0	-0.7171711920861981	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	KILOCALORIES	Fruit	400.0	3700.0	0.05991469824355707	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Fruit	180.0	2381.0	-0.3404376421043665	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Fruit	140.0	2667.0	-0.16675151955051457	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Fruit	40.0	351.0	-0.1506658506572727	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
47	BETA-SITOSTEROL	Fruit	20.0	150.0	-0.5971588891273873	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
6	IRON	Fruit	20.0	67.0	-0.26171724059735857	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Fruit	20.0	150.0	-1.0246670818297896	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
89	URSOLIC-ACID	Leaf	13.7	955.6	-0.39428056659544786	--
6	MASLINIC-ACID	Leaf	12.0	90.0	-0.5100739140245585	--
112	ASCORBIC-ACID	Fruit	10.0	840.0	-0.23226033158102166	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Fruit	2.6	68.0	-0.019357854301927577	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Fruit	2.0	25.0	-0.4772218216222814	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	SALICYLATES	Fruit	2.0	20.0	-0.27939275728713464	--
15	RIBOFLAVIN	Fruit	0.4	4.2	-0.17332492840658087	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	THIAMIN	Fruit	0.2	1.8	-0.4522055324810564	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
65	MAGNESIUM	Leaf		2480.0	-0.6354777022063127	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	NEROLIDOL-3-O-[ALPHA-L-RHAMNOPYRANOSYL-(1,2)-BETA-D-GLUCOPYRANOSIDE]	Leaf				Jim Duke's personal files.
8	AMYGDALIN	Seed		14000.0	-0.8358359394440793	--
0	GIBBERELLIN-A-44	Seed				Jim Duke's personal files.
2	AUCUPARIN	Bark				Jim Duke's personal files.
7	SUCCINIC-ACID	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	CAMPESTEROL	Fruit				Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-GUANIDINOPROPIONIC-ACID	Shoot				Jim Duke's personal files.
18	OLEIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	23-TRANS-P-COUMAROYL-TORMENTIC-ACID	Leaf		20.0		Jim Duke's personal files.
28	CALCIUM	Leaf		21900.0	0.23660629291768703	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	GIBBERELLIN-METHYL-ESTER	Seed				Jim Duke's personal files.
27	LINOLEIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	NEROLIDOL-3-O-[ALPHA-L-RHAMNOPYRANOSYL(1,4)-ALPHA-L-RHAMNOPYRANOSYL(1,2)-[ALPHA-L-RHAMNOPYRANOSYL(1,6)]-BETA-D-GLUCOPYRA	Leaf		40.0		Jim Duke's personal files.
8	AMYGDALIN	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	GIBBERELLIN-A-35	Seed				Jim Duke's personal files.
1	L-ARGININE	Stem				Jim Duke's personal files.
1	SODIUM	Leaf		63.0	-0.636095668285742	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	DL-LACTIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-GUANIDINOBTYRIC-ACID	Stem				Jim Duke's personal files.
64	OLEANOLIC-ACID	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	23-CIS-P-COUMAROYL-TORMENTIC-ACID	Leaf		7.5		Jim Duke's personal files.
0	GIBBERELLIN-GA-9	Seed				Jim Duke's personal files.
1	LEVULOSE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	NEROLIDOL-3-O-ALPHA-L-RHAMNOPYRANOSYL(1,4)-ALPHA-L-RHAMNOPYRANOSYL(1,2)-[ALPHA-L-(4-TRANS-FERULOYL)-RHAMNOPYRANOSYL(1,6)	Leaf		20.0		Jim Duke's personal files.
0	GIBBERELLIN-A-29	Seed				Jim Duke's personal files.
1	L-ARGININE	Shoot				Jim Duke's personal files.
0	AUCAPARIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	D-SORBITOL	Leaf		2000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GAMMA-GUANIDINOBUTYRIC-ACID	Shoot				Jim Duke's personal files.
0	NITROGEN	Seed		26000.0	0.1597754541937655	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	TORMENTIC-ACID	Leaf				Jim Duke's personal files.
102	CAFFEIC-ACID	Plant				--
0	GIBBERELLIN-GA-50	Seed				Jim Duke's personal files.
0	LEUCOPELARGONIDIN-3-O-ALPHA-L-RHAMNO-BETA-D-GLUCOPYRENOSIDE	Plant				--
0	MASLINIC-ACID-METHYL-ESTER	Leaf		100.0		Jim Duke's personal files.
0	GIBBERELLIN-A-20	Seed				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-ALPHA-ACETYL-L-ARGININE	Stem				Jim Duke's personal files.
0	VOMIFOLIOL-9-O-BETA-D-APIOFURANOSYL-(1,6)-BETA-D-GLUCOPYRANOSIDE	Leaf		5.2		Jim Duke's personal files.
0	D-(+)-TARTARIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-GUANIDINOBUTRAMIDE	Stem				Jim Duke's personal files.
87	RUTIN	Leaf		10500.0	-0.35268150298219647	Jim Duke's personal files.
0	DEHYDRO-GIBBERELLIN-GA-35	Seed				Jim Duke's personal files.
0	GIBBERELLIN-A-19	Seed				Jim Duke's personal files.
0	N-ALPHA-ACETYL-L-ARGININE	Shoot				Jim Duke's personal files.
176	QUERCETIN	Plant				--
0	2ALPHA-HYDROXYURSOLIC-ACID	Leaf		12.1		Jim Duke's personal files.
7	CYANIDIN	Plant				--
0	GAMMA-GUANIDINOBUTRAMIDE	Shoot				Jim Duke's personal files.
0	GIBBERELLIN-A-9	Seed				Jim Duke's personal files.
0	NEO-BETA-CAROTENE-U	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	3-O-TRANS-P-COUMAROYL-ROTUNDIC-ACID	Leaf		9.0		Jim Duke's personal files.
24	BENZALDEHYDE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	GIBBERELLIN-GA-35	Seed				Jim Duke's personal files.
0	LOQUATOSIDE	Pericarp				Jim Duke's personal files.
0	GIBBERELLIN-A-15	Seed				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Leaf		28.0	-0.35493160662883855	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
75	KAEMPFEROL	Plant				--
0	3BETA,6BETA,19ALPHA-TRIHYDROXY-URS-12-EN-28-OIC-ACID	Leaf		5.0		Jim Duke's personal files.
2	CRYPTOXANTHIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GUANIDINOACETIC-ACID	Stem				Jim Duke's personal files.
0	1-BETA-HYDROXY-EUSCAPHIC-ACID	Leaf				Jim Duke's personal files.
0	NEO-BETA-CAROTENE-B	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ROSEOSIDE	Leaf		5.5	-1.0	Jim Duke's personal files.
0	DEHYDRO-GIBBERELLIN-GA-25	Seed				Jim Duke's personal files.
6	IRON	Leaf		200.0	-0.41363063591366483	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	LOQUATIFOLIN-A	Leaf		800.0		Jim Duke's personal files.
14	POTASSIUM	Leaf		15500.0	-0.6554812506655916	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	3-BETA-6-ALPHA-19-ALPHA-TRIHYDROXY-URS-12-EN-28-OIC-ACID	Leaf		13.6		Jim Duke's personal files.
12	COPPER	Leaf		7.0	-0.568480004325441	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GUANIDINOACETIC-ACID	Shoot				Jim Duke's personal files.
0	EUSCAPHIC-ACID	Leaf		88.0	1.0	Jim Duke's personal files.
0	NEO-BETA-CAROTENE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	NEROLIDOL-3-O-[ALPHA-L-RHAMNOPYRANOSYL-(1,2)-D-GLUCOPYRANOSIDE]	Leaf		7.5		Jim Duke's personal files.
0	ASCORBIC-ACID-OXIDASE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GIBBERELLIN-GA-24	Seed				Jim Duke's personal files.
30	HYPEROSIDE	Shoot				Jim Duke's personal files.
0	3,6,19-TRIHYDROXY-URS-12-EN-28-OIC-ACID	Leaf		25.0		Jim Duke's personal files.
23	CITRIC-ACID	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	METHYL-GUANIDINE	Stem				Jim Duke's personal files.
0	CREATINE	Stem				Jim Duke's personal files.
1	MERCURY	Leaf		0.02	-0.6073252476761057	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	NEROLIDOL-3-O-[ALPHA-L-RHAMNOPYRANOSYL-(1,4)-ALPHA-L-RHAMNOPYRANOSYL-(1,2)-BETA-D-GLUCOPYRANOSIDE]	Leaf		37.0		Jim Duke's personal files.
0	GIBBERELLIN-GA-15	Seed				Jim Duke's personal files.
15	FIBER	Seed		42900.0	-0.7254908761481202	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GUANIDINOSUCCINIC-ACID	Stem				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-ALPHA-3-BETA-19-ALPHA-23-TETRAHYDROXY-URS-12-EN-28-OIC-ACID	Leaf		25.0		Jim Duke's personal files.
0	CERYL-PALMITATE	Seed		600.0		--
0	METHYL-GUANIDINE	Shoot				Jim Duke's personal files.
0	CREATINE	Shoot				Jim Duke's personal files.
14	MANGANESE	Leaf		224.0	-0.08749518887396016	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	NEROLIDOL-3-O-[ALPHA-L-RHAMNOPYRANOSYL-(1,4)-ALPHA-L-RHAMNOPYRANOSYL-(1,6)-BETA-D-GLUCOPYRANOSIDE]	Leaf		36.0		Jim Duke's personal files.
2	ARSENIC	Leaf		0.28	0.6766860903511981	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	GIBBERELLIN-A-61	Seed				Jim Duke's personal files.
35	TANNIN	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	GUANIDINOSUCCINIC-ACID	Shoot				Jim Duke's personal files.
0	PENTOSANS	Seed		46000.0	-0.6806406574511674	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	2-ALPHA-3-ALPHA-19-ALPHA-TRIHYDROXY-URS-12-EN-28-OIC-ACID	Leaf		5.0		Jim Duke's personal files.
0	CERYL-ALCOHOL	Seed		200.0		--
6	GUANIDINE	Stem				Jim Duke's personal files.
15	MALIC-ACID	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NEROLIDOL-3-O-(ALPHA-L-RHAMNOPYRANOSYL-(1,4)-ALPHA-L-RHAMNOPYRANOSYL-(1,2)-[ALPHA-L-RHAMNOPYRANOSYL-(1,6)]-BETA-D-GLUCOP	Leaf				Jim Duke's personal files.
0	ARACHIDIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GIBBERELLIN-A50	Seed				Jim Duke's personal files.
7	ALPHA-CAROTENE	Fruit				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.
0	GAMMA-GUANIDINOPROPIONIC-ACID	Stem				Jim Duke's personal files.
13	PALMITIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	3-O-TRANS-CAFFELOYLTORMENTIC-ACID	Leaf		15.0		Jim Duke's personal files.
6	GUANIDINE	Shoot				Jim Duke's personal files.