

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Bixa orellana*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	ARGININE	Seed		14260.0	-0.4395439633741807	--
112	ASCORBIC-ACID	Fruit	20.0	130.0	-0.2764059964188801	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Fruit	0.9	113.0	0.0676263349229542	--
3	BIXIN	Seed		130000.0		--
28	CALCIUM	Seed	970.0	1640.0	-0.46032369768938997	--
28	CALCIUM	Fruit	70.0	450.0	-0.7860359228467187	--
1	CELLULOSE	Plant		123300.0	-1.4847190579938083	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
10	CROCETIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CRYPTOXANTHIN	Seed				--
7	CYANIDIN	Plant				--
51	ELLAGIC-ACID	Plant				--
15	FIBER	Seed	158000.0	163000.0	0.2228392359452432	--
15	FIBER	Fruit	5000.0	32000.0	-1.0349590542553007	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	HISTIDINE	Seed	3620.0	3930.0	-0.5832919077335342	--
6	IRON	Seed	42.0	56.0	-0.4404378000213121	--
6	IRON	Fruit	8.0	56.0	-0.3053512758796	--
3	ISOLEUCINE	Seed	5870.0	6380.0	-0.5246406712144218	--
2	LEUCINE	Seed	6340.0	8140.0	-0.8558650541221829	--
13	LIGNIN	Plant		88200.0	-0.9356977799809222	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
15	LUTEIN	Seed				--
7	LUTEOLIN-7-GLUCOSIDE	Leaf				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Seed	10130.0	14250.0	0.29141709727681386	--
15	METHIONINE	Seed	1280.0	1660.0	-0.6855194715371594	--
3	MUCILAGE	Seed		44000.0	-0.9660399853095324	Wealth of India.
6	MYRISTIC-ACID	Seed	85.0	540.0	-0.2889341505846919	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
39	NIACIN	Fruit	3.0	19.0	-0.5574314089774005	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	NORBIXIN	Seed				--
18	OLEIC-ACID	Seed	365.0	5960.0	-0.9301055120263978	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
13	PALMITIC-ACID	Seed	660.0	4225.0	-0.6124255906203983	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
24	PECTIN	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	PHENYLALANINE	Seed	4510.0	4650.0	-0.8228397046414154	--
4	PHOSPHORUS	Seed	2820.0	3490.0	-0.4924079511882795	--
4	PHOSPHORUS	Fruit	100.0	641.0	-0.7821283308336285	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Fruit	0.5	3.0	-0.4303249009534089	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Seed		5.0	0.565600070103957	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
34	SALICYLIC-ACID	Plant				--
5	SAPONINS	Seed		475.0	-0.49914143402450717	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	STEARIC-ACID	Seed	200.0	1275.0	-0.5377268697892619	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
31	THIAMIN	Seed		2.3	-1.0221252861804977	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
4	THREONINE	Seed	4360.0	7600.0	-0.12022495865829007	--
29	TRYPTOPHAN	Seed	1340.0	1680.0	-0.5610320274420169	--
3	VALINE	Seed	7620.0	7730.0	-0.5273131819394478	--
5	ZEAXANTHIN	Seed				--