

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Momordica charantia

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	(-)-MENTHOL	Seed Essent. Oil				Jim Duke's personal files.
0	10-ALPHA-CUCURBITA-5-24-DIEN-3-BETA-OL	Seed Oil				Jim Duke's personal files.
0	24-METHYLENE-CYCLOARTENOL	Seed Oil				Jim Duke's personal files.
0	3-O-(6'-O-PALMITOYL-BETA-D-GLUCOSYL)-STIGMASTA-5-25(27)-DIEN-3-BETA-OL	Fruit				Jim Duke's personal files.
0	3-O-(6'-O-STEAROYL-BETA-D-GLUCOSYL)-STIGMASTA-5-25(27)-DIEN-3-BETA-OL	Fruit				Jim Duke's personal files.
0	5-ALPHA-STIGMASTA-7,22,25-TRIEN-3-BETA-OL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	5-ALPHA-STIGMASTA-7,25-DIEN-3-BETA-OL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
15	5-HYDROXYTRYPTAMINE	Fruit				--
3	ALANINE	Fruit				Jim Duke's personal files.
3	ALANINE	Seed		157.7	-2.125486049794296	Jim Duke's personal files.
0	ALKALOIDS	Fruit		380.0	-0.7936657040244154	--
0	ALPHA-ALPHA-TREHALOSE	Seed				Jim Duke's personal files.
0	ALPHA-ELAEOSTEARIC-ACID	Cotyledon		658900.0		Jim Duke's personal files.
0	ALPHA-ELAEOSTEARIC-ACID	Seed				Jim Duke's personal files.
3	ALPHA-ELEOSTEARIC-ACID	Fruit				Jim Duke's personal files.
0	ALPHA-GLUCOSE	Seed				Jim Duke's personal files.
5	ALPHA-MOMORCHARIN	Seed		1000.0		Jim Duke's personal files.
2	ALPHA-SPINASTEROL	Fruit				Jim Duke's personal files.
14	ARGININE	Seed		323.0	-1.0296877540066676	Jim Duke's personal files.
112	ASCORBIC-ACID	Leaf	1700.0	12412.0	0.7077553417408794	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Fruit	570.0	36447.0	1.9816758485339367	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ASCORBIGEN	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	ASH	Leaf	21000.0	149000.0	0.5311761696488266	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Fruit	4000.0	142000.0	2.2098115775509815	--
2	ASPARAGINE	Seed				Jim Duke's personal files.
3	ASPARTIC-ACID	Seed		90.0	-1.9973581997884697	Jim Duke's personal files.
2	BETA-ALANINE	Fruit				Jim Duke's personal files.
9	BETA-AMYRIN	Seed Oil				Jim Duke's personal files.
53	BETA-CAROTENE	Leaf	51.0	330.0	0.299193200126749	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Fruit		18.0	-0.11600695344068511	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Pericarp				Jim Duke's personal files.
0	BETA-GLUCOSE	Seed				Jim Duke's personal files.
3	BETA-MOMORCHARIN	Seed		800.0		Jim Duke's personal files.
47	BETA-SITOSTEROL	Tissue Culture				Jim Duke's personal files.
47	BETA-SITOSTEROL	Fruit				--
6	BETA-SITOSTEROL-D-GLUCOSIDE	Fruit				--
0	BITTER-GOURD-INHIBITOR-BG-I-A	Seed				Jim Duke's personal files.
0	CALCEOLARIOSIDE-E	Shoot				Jim Duke's personal files.
28	CALCIUM	Leaf	2640.0	18701.0	0.018026155323724542	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Fruit	130.0	4333.0	0.11000660647619885	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	CAPRIC-ACID	Seed Oil				Jim Duke's personal files.
0	CARBOHYDRATES	Leaf	70000.0	618000.0	0.04891123369604642	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Fruit	47000.0	763000.0	-0.10631754838442307	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	CHARANTIN	Fruit	350.0	1500.0		Jim Duke's personal files.
4	CHARANTIN	Seed				Jim Duke's personal files.
0	CHARINE	Fruit				Jim Duke's personal files.
1	CHOLESTEROL	Fruit				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
5	CITRULLINE	Fruit		41.2	-0.6424999385015843	Jim Duke's personal files.
12	COPPER	Fruit		30.0	1.3371913013407486	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
2	CRYPTOXANTHIN	Fruit				--
2	CRYPTOXANTHIN	Pericarp				Jim Duke's personal files.
8	CUCURBITACIN-B	Seed				Jim Duke's personal files.
2	CUCURBITACIN-K	Seed				Jim Duke's personal files.
7	CYCLOARTENOL	Seed Oil				Jim Duke's personal files.
0	D-GALACTURONIC-ACID	Fruit		600.0		Jim Duke's personal files.
1	DELTA-CAROTENE	Pericarp				Jim Duke's personal files.
7	DIOSGENIN	Fruit		1.69	-0.9999999999999999	Jim Duke's personal files.
7	DIOSGENIN	Tissue Culture		13.66	-0.7079113310670192	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ELASTEROL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
1	ETHYLENE	Fruit				Jim Duke's personal files.
0	FAT	Seed	10000.0	496000.0	1.2147180468064798	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Leaf	4000.0	39000.0	-0.34796376834774073	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Leaf	5000.0	104000.0	-0.7114852663831885	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Fruit	10000.0	257800.0	1.0957982871246397	--
0	FLAVOCHROME	Fruit				--
3	FLUORIDE	Fruit	0.2	0.5	-1.000378143329832	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	FLUORINE	Fruit		4.8	3.406078801481963	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
22	GABA	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GALACTURONIC-ACID	Fruit				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
22	GAMMA-AMINOBUTYRIC-ACID	Fruit				Jim Duke's personal files.
22	GAMMA-AMINOBUTYRIC-ACID	Seed				Jim Duke's personal files.
2	GAMMA-CAROTENE	Pericarp				Jim Duke's personal files.
8	GENTISIC-ACID	Leaf				Jim Duke's personal files.
8	GLUTAMIC-ACID	Seed		212.0	-1.7509729163492929	Jim Duke's personal files.
8	GLUTAMIC-ACID	Fruit				Jim Duke's personal files.
12	GLYCINE	Seed		38.2	-1.5779725996145	Jim Duke's personal files.
0	HEXADECAN-1-OL	Seed Essent. Oil				Jim Duke's personal files.
7	HISTIDINE	Seed		43.6	-1.6164825787870483	Jim Duke's personal files.
19	INULIN	Fruit		10000.0		Jim Duke's personal files.
19	INULIN	Tissue Culture		19000.0		Jim Duke's personal files.
12	IODINE	Fruit		0.41	-0.28853494377145755	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
6	IRON	Leaf	50.0	357.0	-0.015676844638709195	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Fruit	2.0	560.0	1.6938808861430978	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ISOLEUCINE	Seed		38.4	-1.3338385078210488	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	KILOCALORIES	Fruit	440.0	3020.0	-0.9728878470215635	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	LANOSTEROL	Fruit				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
7	LAURIC-ACID	Seed Oil				Jim Duke's personal files.
7	LAURIC-ACID	Fruit				Jim Duke's personal files.
0	LEAD	Fruit		5.0	-0.19464499204524094	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	LECTIN	Seed				Jim Duke's personal files.
0	LECTIN-INHIBITOR	Seed				Jim Duke's personal files.
2	LEUCINE	Seed		41.6	-1.6310343336304725	Jim Duke's personal files.
27	LINOLEIC-ACID	Cotyledon	72200.0	103900.0	-1.5560256104086498	Jim Duke's personal files.
27	LINOLEIC-ACID	Fruit				Jim Duke's personal files.
27	LINOLEIC-ACID	Seed	770.0	38192.0	-0.5906007679972597	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
27	LINOLEIC-ACID	Seed Oil				Jim Duke's personal files.
0	LINOLENIC-ACID	Fruit				Jim Duke's personal files.
0	LINOLENIC-ACID	Seed Oil				Jim Duke's personal files.
0	LINOLENIC-ACID	Cotyledon		99600.0	-1.2718406017227397	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	LUTEIN	Fruit				--
15	LUTEIN	Pericarp				Jim Duke's personal files.
16	LYCOPENE	Fruit		231.0	-0.286475816300021	Jim Duke's personal files.
16	LYCOPENE	Pericarp				Jim Duke's personal files.
16	LYCOPENE	Seed				Jim Duke's personal files.
4	LYSINE	Seed		149.0	-1.618638546276612	Jim Duke's personal files.
65	MAGNESIUM	Fruit	195.0	3800.0	0.7734288840240365	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
14	MANGANESE	Fruit		10.0	-0.33759879445260416	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	MAP-30	Seed				Jim Duke's personal files.
0	MOMORCHARASIDE-A	Seed				Jim Duke's personal files.
0	MOMORCHARASIDE-B	Seed				Jim Duke's personal files.
0	MOMORCHARIN-I	Seed				Jim Duke's personal files.
0	MOMORCHARIN-II	Seed				Jim Duke's personal files.
0	MOMORDICA-AGGLUTININ	Seed				Jim Duke's personal files.
0	MOMORDICA-ANTI-HIV-PROTEIN-MAP-30	Seed				Jim Duke's personal files.
0	MOMORDICA-CHARANTHIA-INHIBITOR-PROTEIN	Seed				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	MOMORDICA-CHARANTIA-CYTOSTATIC-FACTOR	Fruit				Jim Duke's personal files.
0	MOMORDICA-CHARANTIA-LECTIN	Seed		160.0		Jim Duke's personal files.
0	MOMORDICA-CHARANTIA-STEROID-GLYCOSIDE	Fruit				Jim Duke's personal files.
0	MOMORDICA-CHARANTIA-TRITERPENE-GLYCOSIDE	Cotyledon				Jim Duke's personal files.
0	MOMORDICA-CUCURBITANE-3	Leaf		204.7		Jim Duke's personal files.
0	MOMORDICA-CUCURBITANE-6	Leaf		200.0		Jim Duke's personal files.
0	MOMORDICA-ELASTASE-INHIBITOR-MCEI-I	Seed				Jim Duke's personal files.
0	MOMORDICA-PROTEIN-MAP-30	Seed				Jim Duke's personal files.
0	MOMORDICA-PROTEIN-MAP-30	Fruit				Jim Duke's personal files.
0	MOMORDICA-TRYPSIN-INHIBITOR-MCTI-I	Seed				Jim Duke's personal files.
0	MOMORDICA-TRYPSIN-INHIBITOR-MCTI-II	Seed				Jim Duke's personal files.
0	MOMORDICIN	Fruit				--
0	MOMORDICIN-8	Leaf		440.4		Jim Duke's personal files.
0	MOMORDICIN-II	Leaf		1919.0		Jim Duke's personal files.
0	MOMORDICINE	Plant				Jim Duke's personal files.
0	MOMORDICINE	Leaf		80.0		Jim Duke's personal files.
0	MOMORDICINE-I	Shoot		700.0		Jim Duke's personal files.
0	MOMORDICINE-II	Shoot		700.0		Jim Duke's personal files.
0	MOMORDICINE-II	Leaf				Jim Duke's personal files.
0	MOMORDICINE-III	Shoot		1200.0		Jim Duke's personal files.
0	MOMORDICOSIDE-A	Seed		1287.4		Jim Duke's personal files.
0	MOMORDICOSIDE-B	Seed		89.8		Jim Duke's personal files.
0	MOMORDICOSIDE-C	Seed		114.1		Jim Duke's personal files.
0	MOMORDICOSIDE-D	Seed		22.8		Jim Duke's personal files.
0	MOMORDICOSIDE-E	Fruit		10.4		Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MOMORDICOSIDE-E	Seed		36.5		Jim Duke's personal files.
0	MOMORDICOSIDE-E-1	Fruit		756.0		Jim Duke's personal files.
0	MOMORDICOSIDE-EX	Fruit		12.6		Jim Duke's personal files.
0	MOMORDICOSIDE-F'	Fruit		6.0		Jim Duke's personal files.
0	MOMORDICOSIDE-F-1	Fruit		434.0		Jim Duke's personal files.
0	MOMORDICOSIDE-F-2	Fruit		40.0		Jim Duke's personal files.
0	MOMORDICOSIDE-G	Fruit		123.6		Jim Duke's personal files.
0	MOMORDICOSIDE-H	Fruit		74.0		Jim Duke's personal files.
0	MOMORDICOSIDE-I	Fruit		81.8		Jim Duke's personal files.
0	MOMORDICOSIDE-J	Fruit		8.0		Jim Duke's personal files.
0	MOMORDICOSIDE-K	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
0	MOMORDICOSIDE-K	Fruit				Jim Duke's personal files.
0	MOMORDICOSIDE-L	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
0	MOMORDICOSIDE-L	Fruit		36.0		Jim Duke's personal files.
0	MOMORDIN	Seed				Jim Duke's personal files.
0	MOMORDIN-2	Seed				Jim Duke's personal files.
0	MOMORDIN-A	Seed				Jim Duke's personal files.
0	MOMORDIN-B	Seed				Jim Duke's personal files.
0	MULTIFLORENOL	Seed Oil				Jim Duke's personal files.
0	MUTACHROME	Fruit				--
0	MUTATOCHROME	Pericarp				Jim Duke's personal files.
0	MYCOSE	Seed				Jim Duke's personal files.
6	MYRISTIC-ACID	Seed Oil				Jim Duke's personal files.
6	MYRISTIC-ACID	Fruit				Jim Duke's personal files.
11	NEROLIDOL	Seed Essent. Oil				Jim Duke's personal files.
39	NIACIN	Leaf	15.0	103.0	0.06689038440862302	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Fruit	3.0	50.0	-0.14301520764261824	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	NICKEL	Fruit		10.0	2.26174523862035	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	NITROGEN	Fruit		33800.0	1.3447002784284676	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
18	OLEIC-ACID	Cotyledon		155800.0	-1.4748334919931014	Jim Duke's personal files.
18	OLEIC-ACID	Fruit				Jim Duke's personal files.
18	OLEIC-ACID	Seed	1580.0	77376.0	-0.34302406034411387	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	ORNITHINE	Seed		63.2		Jim Duke's personal files.
0	OXALATE	Fruit	185.0	1444.0		=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	OXALIC-ACID	Fruit		5.0	-0.30607332554046784	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.
16	P-CYMENE	Seed Essent. Oil				Jim Duke's personal files.
0	P-INSULIN	Fruit				Jim Duke's personal files.
0	P-INSULIN	Seed				Jim Duke's personal files.
13	PALMITIC-ACID	Cotyledon	27100.0	519500.0	0.5807660362186364	Jim Duke's personal files.
13	PALMITIC-ACID	Seed Oil				Jim Duke's personal files.
13	PALMITIC-ACID	Fruit				Jim Duke's personal files.
2	PALMITOLEIC-ACID	Fruit				Jim Duke's personal files.
24	PECTIN	Fruit				--
0	PENTADECAN-1-OL	Seed Essent. Oil				Jim Duke's personal files.
0	PEROXIDASE	Fruit				--
0	PETROSELINIC-ACID	Seed Oil				Jim Duke's personal files.
7	PHENYLALANINE	Fruit				Jim Duke's personal files.
4	PHOSPHORUS	Leaf	540.0	33467.0	5.2428092659958	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Fruit	320.0	8333.0	1.5542381214811356	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PHYTOFLUENE	Pericarp				Jim Duke's personal files.
0	PHYTOFLUENE	Seed				--
2	PIPECOLIC-ACID	Fruit				--
0	POLYPEPTIDE-P	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
14	POTASSIUM	Leaf	5100.0	33117.0	0.12244608377334268	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Fruit	2700.0	45000.0	2.3961747940748954	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROLINE	Fruit				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTEIN	Leaf	51000.0	371000.0	1.587724412005609	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Fruit	9000.0	181000.0	0.9585081631032106	--
15	RIBOFLAVIN	Leaf	4.6	31.0	-0.0325494690927309	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Fruit	0.4	9.0	0.8546749617807301	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	RIBOSOME-INACTIVATING-PROTEIN	Seed				Jim Duke's personal files.
57	ROSMARINIC-ACID	Shoot				Jim Duke's personal files.
1	RUBIXANTHIN	Fruit				--
1	RUBIXANTHIN	Pericarp				Jim Duke's personal files.
1	SERINE	Seed		39.9	-2.018924594647529	Jim Duke's personal files.
1	SODIUM	Leaf	190.0	1234.0	-0.4281180118553505	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Fruit	20.0	333.0	-0.15237277044187197	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
10	SQUALENE	Seed Essent. Oil				Jim Duke's personal files.
8	STEARIC-ACID	Cotyledon	121200.0	241800.0	1.7319277911844766	Jim Duke's personal files.
8	STEARIC-ACID	Fruit				Jim Duke's personal files.
8	STEARIC-ACID	Seed Oil				Jim Duke's personal files.
8	STEARIC-ACID	Seed	29800.0	147800.0	2.641368075087524	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	STIGMAST-5-ENE-3-BETA-25-DIOL	Fruit				Jim Duke's personal files.
0	STIGMASTA-5,25-DIEN-3-BETA-OL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	STIGMASTA-5,25-DIEN-3-BETA-OL	Fruit				Jim Duke's personal files.
0	STIGMASTA-5-25-DIENE-3-BETA-D-GLUCOSIDE	Fruit				Jim Duke's personal files.
0	STIGMASTA-7,22-DIEN-3BETA-OL	Fruit				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	STIGMASTA-7-22-25-TRIEN-3-BETA-OL	Fruit				Jim Duke's personal files.
12	STIGMASTEROL	Fruit				--
12	STIGMASTEROL	Tissue Culture				Jim Duke's personal files.
0	SUGARS	Fruit	35000.0	45000.0	-0.6984481426660107	--
2	TARAXEROL	Seed Oil				Jim Duke's personal files.
31	THIAMIN	Leaf	1.3	8.0	-0.06349209547044472	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	THIAMIN	Fruit	0.2	12.0	0.8534484420839309	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	THREONINE	Seed		17.8	-1.8163214935569654	Jim Duke's personal files.
0	TITANIUM	Fruit		100.0	1.5069124362997597	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	TREHALOSE	Seed		3960.0		Jim Duke's personal files.
0	TRYPSIN-INHIBITOR-MCI-3	Seed				Jim Duke's personal files.
8	TYROSINE	Seed		517.0	-1.673500116845535	Jim Duke's personal files.
0	UREASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	V-INSULIN	Fruit				Jim Duke's personal files.
20	VERBASCOSIDE	Shoot				Jim Duke's personal files.
0	VICINE	Seed		4000.0		Jim Duke's personal files.
0	WATER	Leaf	801000.0	846000.0	0.19138892173962024	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	WATER	Fruit	795000.0	934000.0	0.710583994549065	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	ZEATIN	Seed				Jim Duke's personal files.
0	ZEATIN-RIBOSIDE	Seed				Jim Duke's personal files.
5	ZEAXANTHIN	Pericarp				Jim Duke's personal files.
5	ZEAXANTHIN	Fruit				--
0	ZEINOXANTHIN	Pericarp				Jim Duke's personal files.
0	ZEINOXANTHIN	Fruit				--