

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cucurbita pepo

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-CIS-ABSCISIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(+)-DEHYDROVOMIFOLIOL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(+)-DEHYDROVOMIFOLIOL	Seed		0.5		--
0	(+)-TRANS-2-ABSCISIC-ACID	Seed		0.05		--
0	(+)-TRANS-ABSCISIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(+)-VOMIFOLIOL	Plant				--
0	(+)-VOMIFOLIOL	Seed				--
0	1-O-FERULOYL-BETA-D-GLUCOSE	Fruit				--
0	1-O-P-COUMAROYL-BETA-D-GLUCOSE	Fruit				--
0	2,4-METHYLENE-CHOLESTEROL	Seed				--
0	2-CARBOXYARABINITOL	Leaf				--
0	22-DIHYDRO-SPINASTEROL	Seed				--
0	22-DIHYDROBRASSICASTEROL	Seed				--
0	24-BETA-ETHYL-25(27)-DEHYDROLATHOSTEROL	Seed				--
0	24-ETHYL-5-ALPHA-CHOLESTA-5,22-DIEN-3-BETA-OL	Seed				--
0	24-ETHYL-5-ALPHA-CHOLESTA-7,22,25-TRIEN-3-BETA-OL	Seed				--
0	24-ETHYL-5-ALPHA-CHOLESTA-7,25-DIEN-3-BETA-OL	Seed				--
0	24-METHYL-CHOLEST-7-EN-3-BETA-OL	Seed				--
0	24-METHYL-LATHOSTEROL	Seed				--
0	24ALPHA-ETHYLLATHOSTEROL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	25(27)-DEHYDRO-CHONDRILLASTEROL	Seed				--
0	25(27)-DEHYDRO-FUNGISTEROL	Seed				--
0	25(27)-DEHYDRO-PORIFERASTEROL	Seed				--
0	5-ALPHA-STIGMASTA-7,25-DIEN-3-BETA-OL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
1	7BETA,12ALPHA-DIHYDROXYKAURENOLIDE	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	9,10-DIHYDROXY-OCTADEC-12-ENOIC-ACID	Seed		0.5		--
0	ABSCISIC-ACID	Seed		0.03	-1.1527176372041539	--
11	ADENINE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
28	ADENOSINE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
3	ALANINE	Seed	11580.0	24420.0	3.0321935802284528	--
3	ALANINE	Fruit	280.0	3333.0	-0.14718903027260638	USDA's Ag Handbook 8 and sequelae)
0	ALPHA-AMINO-ADIPIC-ACID	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ALPHA-AMINO-BUTYRIC-ACID	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ALPHA-KETO-BETA-METHYL-BUTYRIC-ACID	Juice		100.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-KETO-BETA-METHYL-VALERAINIC-ACID	Juice		180.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	ALPHA-LINOLENIC-ACID	Seed	1810.0	2750.0	-0.27664797897567234	--
15	ALPHA-LINOLENIC-ACID	Fruit	30.0	357.0	-0.9907958760065699	USDA's Ag Handbook 8 and sequelae)
15	ALPHA-LINOLENIC-ACID	Flower	20.0	410.0		USDA's Ag Handbook 8 and sequelae)
2	ALPHA-SPINASTEROL	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ALPHA-SPINASTEROL	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ALPHA-SPINASTERYL-BETA-D-GLUCOSIDE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
32	ALPHA-TOCOPHEROL	Fruit	10.0	119.0	0.7100689146464441	USDA's Ag Handbook 8 and sequelae)
32	ALPHA-TOCOPHEROL	Stem				--
32	ALPHA-TOCOPHEROL	Leaf				--
5	ALUMINUM	Seed		11.0	-0.34533998793343856	--
0	APIGENIN-7-O-BETA-D-GLUCOSYL-6-C-GLUCOSIDE	Shoot				--
0	ARACHIDIC-ACID	Seed	200.0	3445.0	-0.31855492120796164	--
14	ARGININE	Seed	40330.0	81280.0	2.3983290974128795	--
14	ARGININE	Fruit	370.0	6429.0	0.5652801717537763	--
0	ASCORBATE-OXIDASE	Fruit				--
112	ASCORBIC-ACID	Fruit	90.0	1071.0	-0.21789744626053537	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Flower	280.0	5773.0	0.9425150784106588	USDA's Ag Handbook 8 and sequelae)
0	ASH	Seed	47530.0	70000.0	0.6653137568970965	--
0	ASH	Fruit	7500.0	95238.0	0.9988933412124088	--
0	ASH	Flower	4800.0	98970.0	0.6935813306629863	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Seed	24770.0	41080.0	1.6415504064239652	--
3	ASPARTIC-ACID	Fruit	1020.0	12143.0	0.26070734221460257	USDA's Ag Handbook 8 and sequelae)
0	AUROXANTHIN	Flower				--
0	AVENASTEROL	Seed				--
0	BETA-AMINO-ISOBUTYRIC-ACID	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
53	BETA-CAROTENE	Flower	12.0	240.0	3.0920238881774016	--
53	BETA-CAROTENE	Seed	2.0	2.5	-0.27303542142102893	--
53	BETA-CAROTENE	Fruit	9.6	114.0	0.06955931690572935	USDA's Ag Handbook 8 and sequelae)
2	BETA-CRYPTOXANTHIN	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-HYDROXYBUTYRIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-PYRAZOALANINE	Seed				--
47	BETA-SITOSTEROL	Fruit		120.0	-0.6365753174526275	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
47	BETA-SITOSTEROL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-TOCOPHEROL	Seed				--
4	BORON	Fruit		1.0	-0.7837717353775396	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
102	CAFFEIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	CALCIUM	Seed	240.0	2960.0	-0.21789520636618454	--
28	CALCIUM	Fruit	210.0	2500.0	-0.31297715768782586	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Flower	390.0	8041.0	0.6281259672638968	USDA's Ag Handbook 8 and sequelae)
2	CAMPESTEROL	Seed				--
0	CARBOHYDRATES	Flower	32800.0	676290.0	0.08007862121719332	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Seed	60000.0	191341.0	-1.319678638609645	--
0	CARBOHYDRATES	Fruit	65000.0	773809.0	-0.04851627057819577	USDA's Ag Handbook 8 and sequelae)
0	CHLOROPHYLL-B	Plant				--
1	CHOLESTEROL	Plant				--
0	CHONDRILLASTEROL	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	CHROMIUM	Seed		17.0	1.7942136570807767	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CLEROSTEROL	Seed				--
2	COBALT	Seed		143.0	5.996171444060427	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CODECARBOXYLASE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CODISTEROL	Seed				--
12	COPPER	Seed	14.0	25.0	0.9238769354282156	--
2	CRYPTOXANTHIN	Seed				--
2	CRYPTOXANTHIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CUCURBIC-ACID	Plant				--
2	CUCURBIC-ACID	Seed		1.2		--
0	CUCURBIC-ACID-3-O-BETA-D-GLUCOSIDE	Seed		7.0		--
0	CUCURBIC-ACID-3-O-BETA-D-GLUCOSIDE-METHYL-ESTER	Seed		1.0		--
0	CUCURBIC-ACID-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CUCURBIC-ACID-METHYL-ESTER	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CUCURBIC-ACID-METHYL-ESTER-3-O-BETA-D-GLUCOSIDE	Seed				--
0	CUCURBITA-RIBOSOMAL-INACTIVATING-PROTEIN(MW-30000)	Seed				--
4	CUCURBITACIN-D	Seed				--
6	CUCURBITACIN-I	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CUCURBITAXANTHIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	CUCURBITIN	Seed	16600.0	66300.0		--
0	CUCURBITOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CUCUROIC-ACID-3-O-BETA-D-GLUCOSIDE	Seed				--
2	CYSTINE	Seed	3010.0	3234.0	0.05846459641621995	USDA's Ag Handbook 8 and sequelae)
2	CYSTINE	Fruit	30.0	700.0	-0.3455775263586415	--
0	DEHYDROASCORBIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-5-STEROLS	Seed				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	DELTA-7,22,25(27)-STIGMASTATRIEN-3-BETA-OL	Seed				--
0	DELTA-7,22,25(27)-STIGMASTATRIEN-3-BETA-OL-GLYCOSIDE	Seed				--
0	DELTA-7,25(27)-STIGMASTADIEN-3-BETA-OL	Seed				--
0	DELTA-7,25(27)-STIGMASTADIEN-3-BETA-OL-GYLCSIDE	Seed				--
0	DELTA-7-ERGOSTENOL	Seed				--
0	DELTA-8-STEROLS	Seed				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	DELTA-HYDROXYLYSINE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DL-CITRULLIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EDESTINE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EICOSADIENOIC-ACID	Seed	500.0	3095.0	-1.0	--
0	ETHYL-ASPARAGINE	Seed				--
0	FAT	Seed	300000.0	520000.0	1.3411346315870767	--
0	FAT	Fruit	1000.0	11905.0	-0.5503226574053797	USDA's Ag Handbook 8 and sequelae)
0	FAT	Flower	700.0	14430.0	-0.682532632511201	USDA's Ag Handbook 8 and sequelae)
61	FERULIC-ACID	Plant				--
15	FIBER	Seed	19690.0	26538.0	-0.8546880226433043	--
15	FIBER	Fruit	11000.0	130952.0	-0.10120041632692214	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Flower	6300.0	130000.0	-0.01946664238399821	USDA's Ag Handbook 8 and sequelae)
0	FIXED-OIL	Seed				--
0	FLAVOXANTHIN	Juice				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FLAVOXANTHIN	Flower				--
22	GABA	Seed				--
0	GADOLEIC-ACID	Seed	2740.0	6055.0	0.17833510249533263	--
22	GAMMA-AMINOBUTYRIC-ACID	Seed				--
14	GAMMA-TOCOPHEROL	Seed				--
0	GIBBERELLIN-A-29	Seed		1.0		--
0	GIBBERELLIN-A39	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	GIBBERELLIN-A39	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GIBBERELLIN-A48	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	GIBBERELLIN-A48	Seed		0.5		--
0	GIBBERELLIN-A49	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	GIBBERELLIN-A49	Seed		0.06		--
8	GLUTAMIC-ACID	Seed	43150.0	101820.0	2.535958532664187	--
8	GLUTAMIC-ACID	Fruit	1840.0	35000.0	1.6935719269179679	--
7	GLUTATHIONE	Root				--
0	GLUTINOL	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
12	GLYCINE	Seed	17960.0	39220.0	4.087033113761383	--
12	GLYCINE	Fruit	270.0	8000.0	1.700314241568018	--
0	GLYOXALIC-ACID	Juice		200.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GUANOSINE	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	HISTIDINE	Seed	6810.0	9615.0	0.9280525151100297	--
7	HISTIDINE	Fruit	140.0	1905.0	0.1348886330666263	--
0	HYDROXYBRENZTRAUBEN-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	IRON	Seed	86.0	200.0	0.2286303167080437	--
6	IRON	Flower	7.0	144.0	-0.15678269834846398	USDA's Ag Handbook 8 and sequelae)
0	ISOFUCOSTEROL	Seed				--
3	ISOLEUCINE	Fruit	310.0	3690.0	0.015676544764510515	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Seed	12640.0	19825.0	1.1909618444245489	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISORHAMNETIN-3-O-RUTINOSIDE-4'-O-RHAMNOSIDE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
75	KAEMPFEROL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	KILOCALORIES	Seed	2730.0	5980.0	0.877506538168353	--
0	KILOCALORIES	Fruit	220.0	3095.0	-0.8589758015879105	--
0	KILOCALORIES	Flower	150.0	3092.0	-0.6127486372028212	USDA's Ag Handbook 8 and sequelae)
7	LAURIC-ACID	Seed	440.0	472.0	-0.5080982546591932	USDA's Ag Handbook 8 and sequelae)
7	LAURIC-ACID	Fruit	10.0	119.0	-0.4440571804777033	USDA's Ag Handbook 8 and sequelae)
7	LAURIC-ACID	Flower	10.0	205.0	1.0	USDA's Ag Handbook 8 and sequelae)
20	LECITHIN	Seed		4000.0	-0.6301994798460713	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LEUCINE	Seed	20790.0	35835.0	1.7950676234415441	--
2	LEUCINE	Fruit	460.0	5476.0	0.07968869127701686	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Flower	20.0	410.0	-1.6272593881283386	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed	33025.0	260000.0	1.309872196741342	--
27	LINOLEIC-ACID	Fruit	20.0	238.0	-0.35204205108428127	USDA's Ag Handbook 8 and sequelae)
21	LUPEOL	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	LUTEIN	Flower				--
4	LYSINE	Seed	15580.0	21120.0	1.221995231537649	--
4	LYSINE	Fruit	470.0	6429.0	0.5994486783586378	--
0	M-CARBOXYPHENYLALANINE	Seed				--
65	MAGNESIUM	Seed	5140.0	8500.0	2.194307935408216	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	120.0	1429.0	-0.32448187054974087	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Flower	240.0	4950.0	1.5450101513045418	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Seed	40.0	100.0	0.5789731987465522	--
18	MANNITOL	Fruit	150000.0	200000.0	1.0000000000000002	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	METHIONINE	Seed	5195.0	7885.0	0.9218941593170248	--
15	METHIONINE	Fruit	110.0	1310.0	0.43282328158125916	--
13	MUFA	Seed	142580.0	153180.0	0.31654088954333737	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Fruit	130.0	1548.0	-0.23146990776316503	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Flower	90.0	1855.0	0.9258200997725515	USDA's Ag Handbook 8 and sequelae)
0	MUTATOXANTHIN	Flower				--
6	MYRISTIC-ACID	Seed	200.0	559.0	-0.28868542415273796	--
6	MYRISTIC-ACID	Fruit	60.0	714.0	-0.23546018231743712	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Flower	50.0	1030.0	1.0	USDA's Ag Handbook 8 and sequelae)
2	NEOXANTHIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN	Flower	7.0	142.0	0.4676432168231639	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Seed	14.0	22.0	-0.6252053381989392	--
39	NIACIN	Fruit	6.0	71.0	0.1377183481002988	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Seed	70000.0	234570.0	0.949202915624086	--
18	OLEIC-ACID	Fruit	60.0	714.0	-0.4752421241865289	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Flower	40.0	825.0	-0.5618910849321588	USDA's Ag Handbook 8 and sequelae)
5	ORNITHINE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	OXALIC-ACID	Juice		400.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OXYCEROTIC-ACID	Seed				--
0	OXYCEROTINIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	PALMITIC-ACID	Fruit	370.0	4405.0	-0.29695907602866173	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Flower	260.0	5360.0	1.5550797314583331	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Seed	44800.0	64530.0	0.6318622321962477	--
2	PALMITOLEIC-ACID	Seed	990.0	1064.0	-0.2729267504653296	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Fruit	60.0	714.0	-0.21493257540335348	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Flower	50.0	1030.0		USDA's Ag Handbook 8 and sequelae)
24	PECTIN	Seed		30000.0	-0.08222588577632582	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	PEPONIN	Seed				--
7	PHENYLALANINE	Seed	12220.0	22845.0	1.3499663619426168	--
7	PHENYLALANINE	Fruit	300.0	3810.0	0.16793014424265534	--
3	PHEOPHYTIN-A	Plant				--
0	PHOSPHOLIPIDS	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Seed	10600.0	12982.0	2.015938641351039	--
4	PHOSPHORUS	Fruit	440.0	5238.0	0.6141634764064872	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Flower	490.0	10100.0	2.686824447078974	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	PHYTIC-ACID	Seed	15000.0	22000.0	0.3298576936665281	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PHYTOSTEROLS	Fruit	120.0	1428.0	0.621756970445516	USDA's Ag Handbook 8 and sequelae)
0	PLASTOCYANIN	Plant				--
14	POTASSIUM	Seed	5540.0	25000.0	1.0931328980431534	--
14	POTASSIUM	Fruit	3400.0	40476.0	1.9959201140166747	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Flower	1730.0	35670.0	1.6822865837086274	USDA's Ag Handbook 8 and sequelae)
0	PROLINE	Seed	10000.0	10743.0	-0.11647292737143848	USDA's Ag Handbook 8 and sequelae)
0	PROLINE	Fruit	260.0	17100.0	3.5944692903421607	--
0	PROTEIN	Seed	86000.0	510000.0	2.4569770193242495	--
0	PROTEIN	Fruit	10000.0	140000.0	0.4088853346010846	--
0	PROTEINASE-INHIBITOR	Seed				--
4	PUFA	Seed	209040.0	224581.0	0.9047155639598008	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Fruit	50.0	595.0	-0.7969298370757578	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Flower	40.0	825.0	-1.0752762105747442	USDA's Ag Handbook 8 and sequelae)
176	QUERCETIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RHAMNAZIN-3-RUTINOSIDE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
15	RIBOFLAVIN	Seed	2.7	4.9	0.5272746510341323	--
15	RIBOFLAVIN	Fruit	1.1	13.1	1.732758201315725	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Flower	0.7	15.0	2.063147597581711	USDA's Ag Handbook 8 and sequelae)
7	SALICYLATES	Fruit	1.0	12.0	-0.3023324705158085	--
34	SALICYLIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SCHOTTENOL	Seed				--
60	SELENIUM	Seed	0.08	0.4	-0.2598134032604234	--
1	SERINE	Seed	11480.0	19825.0	1.772899923635598	--
1	SERINE	Fruit	440.0	6100.0	0.8674481392454163	--
0	SFA	Seed	86740.0	93180.0	0.3371201440997354	USDA's Ag Handbook 8 and sequelae)
0	SFA	Fruit	520.0	6190.0	-0.2432713408404038	USDA's Ag Handbook 8 and sequelae)
0	SFA	Flower	360.0	7425.0	1.3802107188371535	USDA's Ag Handbook 8 and sequelae)
4	SILICON	Seed				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	SODIUM	Seed	180.0	193.0	-0.4093447105551685	--
1	SODIUM	Fruit	10.0	119.0	-0.17266615010321906	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Flower	50.0	1030.0	-0.014204700953778359	USDA's Ag Handbook 8 and sequelae)
0	SPINASTEROL	Seed				--
10	SQUALENE	Seed				--
8	STEARIC-ACID	Seed	22670.0	30710.0	0.10091267774493513	--
8	STEARIC-ACID	Fruit	30.0	357.0	-0.2555459149836314	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Flower	20.0	410.0	0.8880673443552061	USDA's Ag Handbook 8 and sequelae)
0	STEROIDS	Seed		10000.0	1.0	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	STIGMAST-7-ENOL	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	STIGMAST-7-ENYL-D-GLUCOSIDE	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
12	STIGMASTEROL	Seed				--
14	SUCROSE	Seed		14000.0	-0.4987245937681623	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	THIAMIN	Flower	0.4	8.6	0.9634191805054287	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Seed	1.9	3.7	-0.6881088248838246	--
31	THIAMIN	Fruit	0.5	5.9	0.07261616317741888	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Seed	6205.0	9701.0	0.3497572127196895	--
4	THREONINE	Fruit	250.0	3452.0	0.18053609503349416	--
4	TIN	Seed		23.0	2.787245020652214	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	TRIGONELLINE	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
29	TRYPTOPHAN	Seed	4310.0	4630.0	0.44501745215638666	USDA's Ag Handbook 8 and sequelae)
29	TRYPTOPHAN	Fruit	120.0	1800.0	1.3326475370102935	--
8	TYROSINE	Seed	9275.0	12235.0	1.041001842799917	--
8	TYROSINE	Fruit	130.0	5000.0	1.0696133056017336	--
0	UREASE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	VALINE	Seed	19720.0	22725.0	1.3194683797013413	--
3	VALINE	Fruit	350.0	4165.0	-0.059422351858102324	USDA's Ag Handbook 8 and sequelae)
2	VIOLAXANTHIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VOMIFOLIOL	Seed		0.16		--
0	WATER	Seed	65200.0	73110.0	-0.5928698155574392	--
0	WATER	Fruit		916000.0	0.6323183096832936	USDA's Ag Handbook 8 and sequelae)
3	XANTHOPHYLL	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	ZEAXANTHIN	Flower				--
77	ZINC	Seed	75.0	200.0	4.396731781476845	--