

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Brassica oleracea var. capitata I.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
3	-METHOXYBRASSITIN	Leaf		30.0		Jim Duke's personal files.
0	1,2-DITHIACYCLOPENT-4-ENE-3-THIONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	1-CYANO-2,3-EPITHIOPROPANE	Plant				--
0	1-CYANO-2,3-EPITHIOPROPANE	Leaf				--
0	1-CYANO-2-HYDROXY-3-BUTENE	Plant				--
0	1-CYANO-2-HYDROXY-3-BUTENE	Leaf				--
0	1-CYANO-3,4-EPITHIOBUTANE	Plant				--
0	1-CYANO-3,4-EPITHIOBUTANE	Leaf				--
0	1-CYANO-3,4-EPITHIOPENTANE	Leaf				--
0	1-CYANO-3,4-EPITHIOPENTANE	Plant				--
0	1-CYANO-3-METHYL-SULFINYL-PROPANE	Leaf				--
0	1-CYANO-3-METHYL-SULFINYL-PROPANE	Plant				--
0	1-CYANO-3-METHYL-THIO-PROPANE	Leaf				Jim Duke's personal files.
0	1-CYANO-4-METHYL-SULFINYL-BUTANE	Plant				--
0	1-CYANO-4-METHYL-SULFINYL-BUTANE	Leaf				--
0	1-CYANO-4-METHYL-THIO-BUTANE	Leaf				Jim Duke's personal files.
0	1-METHOXY-3-INDOYL-METHYL	Plant				--
0	1-METHOXY-3-INDOYL-METHYL	Leaf				--
0	1-METHOXY-GLUCOBRASSICIN	Leaf				Jim Duke's personal files.
0	1-O-FERULOYL-BETA-D-GLUCOSE	Leaf				Jim Duke's personal files.
0	1-O-P-COUMAROYL-BETA-D-GLUCOSE	Leaf				Jim Duke's personal files.
0	1-O-SINAPOYL-BETA-D-GLUCOSE	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-HYDROXY-4-PENTENYLISOTHIOCYANATE	Leaf				--
0	2,4,5-TRITHISHEXANE	Leaf				Wealth of India.
0	2-BUTANONE	Leaf				Wealth of India.
0	2-HYDROXY-1-CYANO-BUT-3-ENE	Leaf				Jim Duke's personal files.
0	2-HYDROXY-3-BUTENYL-GLUCOSINOLATE	Leaf				--
0	2-METHOXY-PHENOL	Leaf				--
0	2-METHOXY-PHENOL	Plant				--
0	2-METHYL-THIO-PROPYL-GLUCOSINOLATE	Leaf				--
0	2-PHENETHYL-CYANIDE	Leaf				Wealth of India.
0	2-PHENYL-ETHYL-GLUCOSINOLATE	Leaf				USDA's Ag Handbook 8 and sequelae)
0	2-PROPENYL-GLUCOSINOLATE	Leaf				--
0	2-PROPENYL-GLUCOSINOLATE	Plant				--
0	3-(METHYLTHIO)-PROPYL-ISOTHIOCYANATE	Leaf				--
0	3-BUTENYL-GLUCOSINOLATE	Leaf				--
1	3-BUTENYL-ISOTHIOCYANATE	Leaf				--
0	3-HYDROXY-METHYL-INDOLE	Leaf				--
0	3-INDOYL-ACETONITRILE	Leaf				Wealth of India.
0	3-INDOYL-METHYL-GLUCOSINOLATE	Plant				--
0	3-INDOYL-METHYL-GLUCOSINOLATE	Leaf				--
0	3-METHYL-SULFINYL-PROPYL-GLUCOSINOLATE	Leaf				--
0	3-METHYL-SULFINYL-PROPYL-ISOTHIOCYANATE	Leaf				--
0	3-METHYL-THIO-PROPYL-CYANIDE	Leaf				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-O-(2-O-{BETA-D-GLUCOPYRANOSYL})-6-O-(4-O-{BETA-D-GLUCOPYRANOSYL})-5-O-BETA-D-GLUCOPYRANOSYL)...CYANIDIN	Leaf		16.0		Jim Duke's personal files.
0	3-O-(2-O-{BETA-D-GLUCOPYRANOSYL})-6-O-(4-O-{BETA-D-GLUCOPYRANOSYL})TRANS-FERULYL)...CYANIDIN	Leaf		0.5		Jim Duke's personal files.
0	3-O-(2-O-{BETA-D-GLUCOPYRANOSYL})-6-O-(4-O-{BETA-D-GLUCOPYRANOSYL})TRANS-P-COUMARYL)...CYANIDIN	Leaf		0.3		Jim Duke's personal files.
0	3-O-(6-O-{TRANS-FERULYL})-2-O-BETA-D-GLUCOPYRANOSYL)...CYANIDIN	Leaf		0.2		Jim Duke's personal files.
0	3-O-(6-O-{TRANS-P-COUMAROYL})-2-O-BETA-D-GLUCOPYRANOSYL)...CYANIDIN	Leaf		27.0		Jim Duke's personal files.
0	3-O-(6-O-{TRANS-SINAPL})-2-O-(BETA-D-GLUCOPYRANOSYL)-BETA-D-GLUCOPYRANOSYL5-O-(BETA-D-GLUCOPYRANOSYL)-CYANIDIN	Leaf		0.1		Jim Duke's personal files.
0	3-PENTANONE	Leaf				Wealth of India.
0	4-(METHYLTHIO)-BUTYL-ISOTHIOCYANATE	Leaf				--
0	4-CAFFOYLQUINIC-ACID	Plant				--
0	4-CAFFOYLQUINIC-ACID	Leaf				--
0	4-EPITHIOBUTANE	Leaf				Wealth of India.
1	4-HYDROXY-GLUCOBASSICIN	Leaf				Jim Duke's personal files.
0	4-HYDROXY-INDO-3-YL-METHYL-GLUCOSINOLATE	Seed				Jim Duke's personal files.
0	4-HYDROXY-INDOYL-3-YL-METHYL-GLUCOSINOLATE	Leaf				Jim Duke's personal files.
3	4-METHOXYBRASSININ	Leaf		1.0		Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4-METHYL-SULFINYL-BUTYL-GLUCOSINOLATE	Leaf				--
0	4-METHYL-SULFINYL-BUTYL-ISOTHIOCYANATE	Leaf				--
0	4-METHYL-THIO-BUTYL-CYANIDE	Leaf				Wealth of India.
0	4-METHYL-THIO-BUTYL-GLUCOSINOLATE	Leaf				--
0	4-P-COUMAROYLQUINIC-ACID	Plant				--
0	4-P-COUMAROYLQUINIC-ACID	Leaf				--
0	4-PENTENYL-CYANIDE	Leaf				--
1	4-PENTENYL-ISOTHIOCYANATE	Plant				--
1	4-PENTENYL-ISOTHIOCYANATE	Leaf				--
0	5-FERULOYLQUINIC-ACID	Plant				--
0	5-FERULOYLQUINIC-ACID	Leaf				--
0	5-P-COUMAROYLQUINIC-ACID	Plant				--
0	5-P-COUMAROYLQUINIC-ACID	Leaf				--
0	5-VINYLOXAZOLIDINE-2-THIONE	Plant				--
0	5-VINYLOXAZOLIDINE-2-THIONE	Leaf				--
6	ACETALDEHYDE	Leaf				Wealth of India.
3	ACETONE	Leaf				Wealth of India.
3	ALANINE	Leaf	420.0	5615.0	-1.623763228742012	USDA's Ag Handbook 8 and sequelae)
0	ALKYL-NITRILES	Leaf				--
0	ALLYL-CYANIDE	Leaf				--
0	ALLYL-CYANIDE	Plant				--
0	ALLYL-GLUCOSINOLATE	Seed				Jim Duke's personal files.
16	ALLYL-ISOTHIOCYANATE	Leaf		20.0		Jim Duke's personal files.
0	ALPHA-AMYLASE	Leaf				Wealth of India.
15	ALPHA-LINOLENIC-ACID	Leaf	460.0	6150.0	-0.16397504102874608	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	ALPHA-TERPINENE	Shoot		14.0	-0.4419839668650155	--
23	ALPHA-TERPINEOL	Shoot		3.6	-0.28212583849065603	--
0	ALPHA-THUJENE	Shoot		18.0	-0.23235009860030018	--
32	ALPHA-TOCOPHEROL	Leaf	0.4	170.0	-0.5547164006283091	--
5	ALUMINUM	Leaf	1.0	4350.0	3.88787055877884	--
5	ALUMINUM	Plant				--
0	AMMONIA	Leaf	3800.0	11060.0	0.15612858815626557	Jim Duke's personal files.
0	AMMONIA(NH3)	Leaf	3800.0	11060.0	1.0	--
0	ANILINE	Leaf	1.0	4.0	1.0000000000000002	Jim Duke's personal files.
1	ANTHERAXANTHIN	Leaf				Jim Duke's personal files.
0	ANTHOXANTHINS	Sprout Seedling				Jim Duke's personal files.
14	ARGININE	Leaf	690.0	9225.0	-0.6852151846414809	USDA's Ag Handbook 8 and sequelae)
2	ARSENIC	Leaf	0.004	0.007	-0.8279453340767596	--
112	ASCORBIC-ACID	Leaf	190.0	6774.0	0.18462078457948597	--
0	ASH	Leaf	6000.0	98072.0	-0.3661126680519266	--
3	ASPARTIC-ACID	Leaf	1190.0	15910.0	-0.7020365569499997	USDA's Ag Handbook 8 and sequelae)
0	BARIUM	Leaf	1.0	87.0	-0.8073788630571049	--
1	BENZOPHENONE	Leaf				--
0	BENZYL-AMINE	Leaf	2.8	3.3	-0.9021648104927832	Jim Duke's personal files.
0	BENZYL-GLUCOSINOLATE	Leaf				--
20	BENZYL-ISOTHIOCYANATE	Leaf				--
0	BETA-AMYLASE	Leaf				Wealth of India.
53	BETA-CAROTENE	Leaf	0.6	12.0	-1.085679790019065	--
47	BETA-SITOSTEROL	Leaf	70.0	700.0	-0.6989515844936766	--
4	BORON	Leaf	1.0	145.0	2.281522481918345	--
3	BRASSININ	Leaf		1.3		Jim Duke's personal files.
0	BROMINE	Leaf	0.2	37.0	-0.22008318704091276	ACTA AGRIC SCAND SUPPL 22: 1980

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BUTANEDIONE	Leaf				Wealth of India.
0	BUTENYL-CYANIDE	Leaf				--
0	BUTYL-CYANIDE	Leaf				--
0	BUTYL-GLUCOSINOLATE	Leaf				--
0	BUTYL-GLUCOSINOLATE	Plant				--
3	CADMIUM	Leaf	0.005	0.39	-0.7049760687664525	--
102	CAFFEIC-ACID	Leaf	0.5	77.0	-0.7052449652453338	--
0	CAFFEIC-ACID-4-O-BETA-GLUCOSIDE	Leaf				Jim Duke's personal files.
28	CALCIUM	Leaf	290.0	19500.0	0.07261994398817469	--
2	CAMPESTEROL	Leaf	20.0	200.0	0.2661820241306193	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	CARBOHYDRATES	Leaf	53700.0	717969.0	0.8439262119671483	USDA's Ag Handbook 8 and sequelae)
19	CARVONE	Plant				--
19	CARVONE	Leaf				--
7	CHLORINE	Leaf		120.0	-0.6424824717432082	Wealth of India.
77	CHLOROGENIC-ACID	Plant				--
77	CHLOROGENIC-ACID	Leaf				--
20	CHOLINE	Leaf		1200.0	-0.41570896085813536	Wealth of India.
24	CHROMIUM	Leaf	0.001	8.7	0.09697947030973238	--
0	CIS-HEXEN-1-OL	Leaf				Wealth of India.
23	CITRIC-ACID	Leaf				Jim Duke's personal files.
2	COBALT	Leaf	0.001	2.9	-0.28164862353295	--
12	COPPER	Leaf	0.3	87.0	1.6330864488132748	--
10	CROCETIN	Leaf				Jim Duke's personal files.
0	CYANIDIN-3,5-DIGLUCOSIDE	Sprout Seedling		229.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CYANIDIN-3-(DI-P-COUMAROYL)-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		229.0		Jim Duke's personal files.
0	CYANIDIN-3-(DIFERULYL)-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		214.0		Jim Duke's personal files.
0	CYANIDIN-3-(DISINAPYL)-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		257.0		Jim Duke's personal files.
0	CYANIDIN-3-(P-COUMAROYL)-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		200.0		Jim Duke's personal files.
0	CYANIDIN-3-FERULYL-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		243.0		Jim Duke's personal files.
0	CYANIDIN-3-MALONYL-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		171.0		Jim Duke's personal files.
0	CYANIDIN-3-SINAPYL-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		200.0		Jim Duke's personal files.
0	CYANIDIN-3-SOPHOROSIDE-5-GLUCOSIDE	Sprout Seedling		257.0		--
0	CYANIDIN-5-O-GLUCOSIDE-3-O-SOPHOROSIDE	Leaf				--
5	CYANIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
3	CYCLOBRASSININ	Leaf		4.3		Jim Duke's personal files.
2	CYSTINE	Leaf	100.0	1337.0	-1.3307804728746868	USDA's Ag Handbook 8 and sequelae)
0	DEHYDROASCORBIC-ACID	Shoot				Jim Duke's personal files.
0	DIINDOLYLMETHANE	Leaf				--
0	DIINDOLYLMETHANE	Plant				--
2	DIMETHYL-AMINE	Leaf	2.0	2.8	-1.0000000000000004	Jim Duke's personal files.
2	DIMETHYL-DISULFIDE	Leaf				Wealth of India.
0	DIMETHYL-TRISULFIDE	Leaf				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ERYTHRO-1-CYANO-2-HYDROXY-3,4-EPITHIOBUTANE	Leaf				--
0	ERYTHRO-1-CYANO-2-HYDROXY-3,4-EPITHIOBUTANE	Plant				--
0	ESTERASE	Leaf				Wealth of India.
0	ETHYL-AMINE	Leaf		1.3	-0.9999999999999999	Jim Duke's personal files.
0	ETHYL-METHYL-AMINE	Leaf		0.9		Jim Duke's personal files.
0	FAT	Leaf	1090.0	33559.0	-0.45638542079053585	USDA's Ag Handbook 8 and sequelae)
0	FAT	Seed		350000.0	0.44568382272451457	Wealth of India.
61	FERULIC-ACID	Leaf	4.0	20.0	0.7463143926113956	--
0	FERULIC-ACID-B-BETA-D-GLUCOSIDE	Leaf				Jim Duke's personal files.
15	FIBER	Leaf	6000.0	106960.0	-0.6748814720634182	USDA's Ag Handbook 8 and sequelae)
0	FLUORINE	Leaf	0.02	2.5	-0.6306780150359617	ACTA AGRIC SCAND SUPPL 22: 1980
15	FOLACIN	Leaf	0.45	9.0	-0.08866046072610245	USDA's Ag Handbook 8 and sequelae)
23	FOLIC-ACID	Leaf		0.133	-0.9999999999999999	Wealth of India.
7	FUMARIC-ACID	Leaf				Jim Duke's personal files.
11	GAMMA-TERPINENE	Shoot		14.0	-0.38466149952482603	--
1	GLUCOBRASSICANAPIN	Seed		0.1		--
1	GLUCOBRASSICIN	Leaf				--
1	GLUCOBRASSICIN	Plant				--
0	GLUCOERUCIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	GLUCOIBERIN	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GLUCOIBERVERIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	GLUCONAPIN	Seed		2.3		--
1	GLUCORAPHANIN	Leaf				Jim Duke's personal files.
8	GLUTAMIC-ACID	Leaf	2700.0	36099.0	-0.09866810879436606	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Leaf	270.0	3610.0	-1.8075432436080534	USDA's Ag Handbook 8 and sequelae)
2	GOITRIN	Leaf				--
2	GOITRIN	Plant				--
0	HEXACOSAN-1-OL	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	HEXOXIDASE	Leaf				Wealth of India.
18	HISTAMINE	Leaf				Wealth of India.
7	HISTIDINE	Leaf	250.0	3343.0	-1.0204275283909108	USDA's Ag Handbook 8 and sequelae)
0	HYDROXYDIMETHYLBENZOPHENONE	Leaf				--
3	INDOLE-3-ACETONITRILE	Plant				--
3	INDOLE-3-ACETONITRILE	Leaf				--
0	INDOLE-3-ALDEHYDE	Leaf				Wealth of India.
32	INDOLE-3-CARBINOL	Plant				--
32	INDOLE-3-CARBINOL	Leaf				--
0	INDOLE-3-CARBOXALDEHYDE	Shoot				Jim Duke's personal files.
0	INDOLE-3-CARBOXYLIC-ACID	Leaf				Wealth of India.
0	INDOYL-3,3'-DIMETHANE	Shoot				Jim Duke's personal files.
6	IRON	Leaf	4.0	151.0	-0.5378327745918356	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ISOLEUCINE	Leaf	610.0	8156.0	-1.0067475834172068	USDA's Ag Handbook 8 and sequelae)
1	ISOMENTHOL	Plant				--
1	ISOMENTHOL	Leaf				--
0	JASMONIC-ACID	Leaf				Jim Duke's personal files.
75	KAEMPFEROL	Leaf	100.0	300.0	0.7719941193159421	Jim Duke's personal files.
0	KAEMPFEROL-3-0-SOPHOROSIDE	Leaf				Jim Duke's personal files.
0	KAEMPFEROL-3-FERULOYL-SOPHOROSIDE	Leaf				Jim Duke's personal files.
0	KAEMPFEROL-3-SINAPOYL-SOPHOROSIDE	Leaf				Jim Duke's personal files.
0	KAEMPFEROL-3-SOPHOROSIDE-7-GLUCOSIDE	Leaf				Jim Duke's personal files.
1	KAEMPFEROL-7-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	KILOCALORIES	Leaf	240.0	3209.0	0.30774280957054606	USDA's Ag Handbook 8 and sequelae)
0	LANTHANUM	Leaf	6.7	20.3	0.2661910237598584	--
0	LEAD	Leaf	0.002	5.8	-0.5277415619793002	--
2	LEUCINE	Leaf	630.0	8423.0	-1.2459442303526156	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Leaf	350.0	4680.0	-0.5915925758908295	USDA's Ag Handbook 8 and sequelae)
11	LITHIUM	Leaf	0.28	1.4	-0.5009219035070377	--
15	LUTEIN	Leaf				Jim Duke's personal files.
4	LYSINE	Leaf	570.0	7621.0	-1.1945584518019292	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Leaf	100.0	2228.0	-0.7327834927036897	--
15	MALIC-ACID	Leaf				Jim Duke's personal files.
14	MANGANESE	Leaf	1.0	45.0	-0.3850752536362415	--
63	MENTHOL	Plant				--
63	MENTHOL	Leaf				--
1	MERCURY	Leaf	0.0	0.013	-0.7852856690881739	--
15	METHIONINE	Leaf	120.0	1604.0	-1.232498891016048	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	METHYL-AMINE	Leaf	3.4	22.7	-0.17805026197044863	Jim Duke's personal files.
0	METHYL-SULFINYL-ALKYL-ISOTHIOCYANATES	Leaf				--
0	METHYL-SULFONYL-ALKYL-ISOTHIOCYANATES	Leaf				--
0	MEVALONIC-ACID	Leaf				Wealth of India.
2	MOLYBDENUM	Leaf	0.1	8.7	2.9605996324651915	--
0	MONOBUTYLPHTHALATE	Leaf				--
0	MONOOCTYLPHTHALATE	Leaf				--
0	N-(1)-METHOXYBRASSININ	Leaf		63.0		Jim Duke's personal files.
0	N-BUTYL-ISOTHIOCYANATE	Leaf				Wealth of India.
0	N-HEXANAL	Leaf				Wealth of India.
0	N-METHYL-ANILINE	Leaf		0.3	-0.9999999999999999	Jim Duke's personal files.
0	N-METHYL-BETA-PHENETHYLAMINE	Leaf	0.5	2.0		Jim Duke's personal files.
0	N-METHYL-PHENETHYLAMINE	Leaf	0.5	3.7	1.3779456365238765	Jim Duke's personal files.
1	N-NONACOSANE	Leaf				Jim Duke's personal files.
0	N-PENTYL-AMINE	Leaf	0.6	1.4	1.4094277159494513	Jim Duke's personal files.
0	NAPOLEIFERIN	Seed		0.1		--
6	NARCOTINE	Leaf				Jim Duke's personal files.
2	NEO-CHLOROGENIC-ACID	Leaf				--
2	NEO-CHLOROGENIC-ACID	Plant				--
1	NEOGLUCOBRASSICIN	Leaf				--
1	NEOGLUCOBRASSICIN	Plant				--
2	NEOMENTHOL	Leaf				--
2	NEOMENTHOL	Plant				--
2	NEOXANTHIN	Leaf				Jim Duke's personal files.
39	NIACIN	Leaf	3.0	40.0	-0.6994157399536978	--
3	NICKEL	Leaf	0.02	8.7	-0.24617700855562716	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NITROGEN	Leaf	2100.0	37500.0	-0.31355959259454924	ACTA AGRIC SCAND SUPPL 22: 1980
0	NONACOSAN-15-ONE	Leaf				Jim Duke's personal files.
18	OLEIC-ACID	Leaf	130.0	1738.0	-0.4270491551154374	USDA's Ag Handbook 8 and sequelae)
0	OXALATE	Leaf	1000.0	13370.0	-0.6286842595909218	USDA's Ag Handbook 8 and sequelae)
9	OXALIC-ACID	Leaf	30.0	350.0	-0.46587265245095044	--
25	P-COUMARIC-ACID	Leaf	0.5	9.0	-0.34761449277437817	--
0	P-COUMARIC-ACID-O-BETA-D-GLUCOSIDE	Leaf				Jim Duke's personal files.
13	PALMITIC-ACID	Leaf	190.0	2540.0	-0.34161769750550813	USDA's Ag Handbook 8 and sequelae)
11	PANTOTHENIC-ACID	Leaf	1.4	19.0	-0.4522700715808781	USDA's Ag Handbook 8 and sequelae)
24	PECTIN	Leaf		45700.0	0.25679811036022554	Wealth of India.
0	PHENETHYL-CYANIDE	Leaf				Wealth of India.
3	PHENETHYLAMINE	Leaf	2.1	8.6	1.371596163583519	Jim Duke's personal files.
7	PHENYLALANINE	Leaf	390.0	5214.0	-1.3064553511172092	USDA's Ag Handbook 8 and sequelae)
0	PHENYLETHYL-ISOTHIOCYANATE	Leaf				USDA's Ag Handbook 8 and sequelae)
3	PHEOPHYTIN-A	Leaf				Jim Duke's personal files.
0	PHOSPHOLIPIDS	Leaf	80.0	2400.0	-1.0	--
4	PHOSPHORUS	Leaf	214.0	6500.0	0.2812324573807496	--
5	PHYLLOQUINONE	Flower	0.19	3.39		--
2	PHYTOSTEROLS	Leaf	110.0	1471.0	-0.32996654372555645	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Leaf	1140.0	42500.0	0.5367783866081342	--
1	PROGOITRIN	Seed		1.9		--
1	PROGOITRIN	Leaf				Jim Duke's personal files.
0	PROLINE	Leaf	2380.0	31821.0	2.980259571782197	USDA's Ag Handbook 8 and sequelae)
0	PROP-2-ENYL-ISOTHIOCYANATE	Leaf				Jim Duke's personal files.
0	PROP-2-ENYL-ISOTHIOCYANATE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROPENYL-CYANIDE	Leaf				--
0	PROPYL-GLUCOSINOLATE	Plant				--
0	PROPYL-GLUCOSINOLATE	Leaf				--
0	PROTEIN	Leaf	10780.0	179425.0	-0.3234213176764084	--
43	PROTocatechuic-acid	Plant				--
43	PROTocatechuic-acid	Leaf				--
176	QUERCETIN	Leaf	2.0	100.0	-0.35041307015361245	Jim Duke's personal files.
2	QUERCETIN-3'-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	QUERCETIN-3-SINAPoyl-SOPHOROSIDE	Leaf				Jim Duke's personal files.
0	QUERCETIN-3-SOPHOROSIDE	Leaf				Jim Duke's personal files.
0	QUERCETIN-3-SOPHOROSIDE-7-GLUCOSIDE	Leaf				Jim Duke's personal files.
1	QUINIC-ACID	Leaf				Jim Duke's personal files.
0	RHODANIDES	Leaf				--
15	RIBOFLAVIN	Leaf	0.0	4.0	-0.15911158075734227	--
0	RUBIDIUM	Leaf	0.4	27.5	-0.5034963105526798	ACTA AGRIC SCAND SUPPL 22: 1980
0	RUBROBRASSINCHLORIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	S-METHYL-CYSTEINE-SULFOXIDE	Leaf				--
0	S-METHYL-METHIONINE-SULFOXIDE	Leaf				--
7	SALICYLATES	Leaf	0.0	15.0	-0.5443718299803298	--
0	SEC-BUTYL-ISOTHIOCYANATE	Seed				Jim Duke's personal files.
60	SELENIUM	Leaf	0.003	0.25	-0.36333818399043666	--
1	SERINE	Leaf	710.0	9493.0	-0.28585718245130637	USDA's Ag Handbook 8 and sequelae)
4	SILICON	Leaf	1.0	25.0	-0.33883359710015254	ACTA AGRIC SCAND SUPPL 22: 1980

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SILVER	Leaf	0.07	0.58	1.325475517532498	USDA's Ag Handbook 8 and sequelae)
9	SINAPIC-ACID	Leaf	13.0	67.0	-0.361480599804423	--
7	SINIGRIN	Seed		44.7	-1.0000000000000002	Abstract (See species file)
1	SODIUM	Leaf	141.0	4510.0	0.15372212688586484	--
0	SPATHULENOL	Shoot		90.0	0.07721374848575883	--
2	SPIROBRASSININ	Leaf		35.0		Jim Duke's personal files.
8	STEARIC-ACID	Leaf	10.0	134.0	-0.5345445720779654	USDA's Ag Handbook 8 and sequelae)
0	STRONTIUM	Leaf	3.0	870.0	1.0343567408579153	--
7	SUCCINIC-ACID	Leaf				Jim Duke's personal files.
5	SULFORAPHANE	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
14	SULFUR	Leaf	385.0	8750.0	0.9153795091683222	--
23	TERPINEN-4-OL	Shoot		22.0	-0.15806106404222492	--
9	TERPINOLENE	Shoot		3.6	-0.7018653661292504	--
31	THIAMIN	Leaf	0.5	10.0	0.35331539437656273	--
0	THREO-1-CYANO-2-HYDROXY-3,4-EPITHIOBUTANE	Leaf				--
0	THREO-1-CYANO-2-HYDROXY-3,4-EPITHIOBUTANE	Plant				--
4	THREONINE	Leaf	420.0	5615.0	-1.3995320607979895	USDA's Ag Handbook 8 and sequelae)
0	TITANIUM	Leaf	0.35	203.0	0.17567539466645712	--
4	TRANS-2-HEXENAL	Leaf				Wealth of India.
0	TRANS-2-PENTENOL	Leaf				Wealth of India.
1	TRIACONTAN-1-OL	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRITHIONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
29	TRYPTOPHAN	Leaf	120.0	1604.0	-1.4381325171364434	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Leaf	210.0	2807.0	-1.443975437147642	USDA's Ag Handbook 8 and sequelae)
8	UBIQUINONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	VALINE	Leaf	520.0	6952.0	-1.6094709264199443	USDA's Ag Handbook 8 and sequelae)
16	VANADIUM	Leaf	0.48	14.5	1.31294741924759	USDA's Ag Handbook 8 and sequelae)
5	VERBENONE	Shoot		7.2	-0.24693408290616778	--
2	VIOLAXANTHIN	Leaf				Jim Duke's personal files.
0	VIT-B-6	Leaf	0.8	14.0	-0.1327208002557497	USDA's Ag Handbook 8 and sequelae)
0	VIT-U	Leaf	2.0	25.0		Jim Duke's personal files.
0	WATER	Leaf	891000.0	950000.0	0.7102430437249587	USDA's Ag Handbook 8 and sequelae)
0	YTTERBIUM	Leaf	0.19	8.7	0.4117051291548245	USDA's Ag Handbook 8 and sequelae)
0	YTTRIUM	Leaf	0.48	29.0	1.721486167978422	USDA's Ag Handbook 8 and sequelae)
77	ZINC	Leaf	2.0	41.0	-0.2751503815857314	--
0	ZIRCONIUM	Leaf	1.4	203.0	2.600745699031103	--