

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cocos nucifera

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,3-DIPHENYLUREA?	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2,3,5-TRIMETHYLPYRAZINE	Endosperm				Jim Duke's personal files.
0	2-(3-METHYL-BUT-2-ENYL-AMINO)-PURIN-6-ONE	Juice				Jim Duke's personal files.
0	24-METHYLENE-CYCLOARTENOL	Seed Oil				Jim Duke's personal files.
0	ACETOIN	Endosperm				Jim Duke's personal files.
0	ACETOSYRINGONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ACETOVANILLONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ALANINE	Seed	1700.0	3205.0	-1.4776910288536462	USDA's Ag Handbook 8 and sequelae)
3	ALANINE	Leaf				Jim Duke's personal files.
3	ALANINE	Endosperm				Jim Duke's personal files.
10	ALPHA-AMYRIN	Seed Oil				Jim Duke's personal files.
23	ALPHA-TERPINEOL	Fruit				Jim Duke's personal files.
32	ALPHA-TOCOPHEROL	Seed	7.0	13.0	-0.6896654823517182	--
32	ALPHA-TOCOPHEROL	Seed Oil				Jim Duke's personal files.
32	ALPHA-TOCOPHEROL	Oil		18.0	-0.6737505559360731	--
5	ALUMINUM	Seed		7.2	-0.3516653417103102	--
5	ALUMINUM	Leaf				Jim Duke's personal files.
0	ANTIMONY	Seed		0.1	-0.16686477174992723	Furr, A.K., et al. 1979
14	ARGININE	Leaf				Jim Duke's personal files.
14	ARGININE	Endosperm				Jim Duke's personal files.
14	ARGININE	Seed	5460.0	10300.0	-0.6072249141458423	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ARSENIC	Seed		0.02	-0.6237689826185465	Furr, A.K., et al. 1979
112	ASCORBIC-ACID	Seed	20.0	88.0	-0.2856259499860121	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	9000.0	22000.0	-0.7784124813877332	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ASPARTIC-ACID	Leaf				Jim Duke's personal files.
3	ASPARTIC-ACID	Endosperm				Jim Duke's personal files.
3	ASPARTIC-ACID	Seed	3250.0	6130.0	-1.4611540528862226	USDA's Ag Handbook 8 and sequelae)
0	BARIUM	Seed		0.1	-0.27939450847576075	Furr, A.K., et al. 1979
9	BETA-AMYRIN	Seed Oil				Jim Duke's personal files.
47	BETA-SITOSTEROL	Seed Oil				Jim Duke's personal files.
47	BETA-SITOSTEROL	Fruit		270.0	-0.43949317582642705	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
4	BORON	Seed	3.0	5.2	-0.8970628189505873	--
0	BROMINE	Seed		4.0	-0.36819583850065973	Furr, A.K., et al. 1979
0	BUTANE-2,3-DIOL	Endosperm				Jim Duke's personal files.
0	BUTANE-2,3-DIONE	Endosperm				Jim Duke's personal files.
0	BUTYROIN	Fruit				Jim Duke's personal files.
3	CADMIUM	Seed		0.03	-0.33359741952043553	Furr, A.K., et al. 1979
28	CALCIUM	Seed	71.0	476.0	-0.6741015491289437	--
0	CALCIUM-OXIDE	Leaf		2700.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	CAMPESTEROL	Fruit		30.0	-0.4046460894399287	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
2	CAMPESTEROL	Seed Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CAPRIC-ACID	Seed	2628.0	69743.0	2.633904573975057	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	CAPROIC-ACID	Seed	117.0	3600.0	-0.34501465200156417	--
1	CAPROIC-ACID	Endosperm				Jim Duke's personal files.
5	CAPRYLIC-ACID	Seed	3154.0	68305.0	1.9870944275459317	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CARBOHYDRATES	Seed	94000.0	331000.0	-0.7646455579586512	--
1	CELLULOSE	Hull Husk		266000.0	-1.1355499479153377	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CESIUM	Seed		0.1	-0.3427209689454117	Furr, A.K., et al. 1979
7	CHLORINE	Seed		1007.0	1.3276510863378361	Furr, A.K., et al. 1979
24	CHROMIUM	Seed		0.2	-0.6533762381344975	Furr, A.K., et al. 1979
23	CITRIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COBALT	Seed		0.2	-0.19726970453812753	Furr, A.K., et al. 1979
12	COPPER	Seed	3.2	33.0	1.6495159701011972	--
7	CYCLOARTENOL	Seed Oil				Jim Duke's personal files.
2	CYSTINE	Seed	660.0	1245.0	-1.3252475351434945	USDA's Ag Handbook 8 and sequelae)
0	D-GALACTOSE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	D-GALACTURONIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	D-SORBITOL	Endosperm		15000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	DECANOIC-ACID	Seed	4100.0	50330.0	1.0	--
3	DECANOIC-ACID	Endosperm				Jim Duke's personal files.
1	DELTA-DECALACTONE	Endosperm				Jim Duke's personal files.
1	DELTA-DODECALACTONE	Endosperm				Jim Duke's personal files.
0	DELTA-OCTALACTONE	Endosperm				Jim Duke's personal files.
0	DIHYDRO-PHASEIC-ACID	Resin, Exudate, Sap				Jim Duke's personal files.
0	EHTYL-LACTATE	Fruit				Jim Duke's personal files.
0	EUROPIUM	Seed		0.1	1.4740366676721104	Furr, A.K., et al. 1979
0	FAT	Seed	58400.0	719000.0	2.3893388137261935	--
61	FERULIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	FIBER	Seed	30000.0	115000.0	-0.15617696206043077	--
0	FLUORINE	Seed		2.7	1.3555425831264722	Furr, A.K., et al. 1979
8	FRUCTOSE	Resin, Exudate, Sap		2100.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	FRUCTOSE	Root				Jim Duke's personal files.
8	FRUCTOSE	Juice		22200.0		Jim Duke's personal files.
0	FUCOSTEROL	Pollen Or Spore				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
22	GABA	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GALACTITOL	Endosperm				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GALACTOMANNAN	Seed		16000.0	-1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	GAMMA-NONALACTONE	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
14	GAMMA-TOCOPHEROL	Oil				--
8	GENTISIC-ACID	Leaf				Jim Duke's personal files.
7	GLUCOSE	Resin, Exudate, Sap		2400.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	GLUCOSE	Root				Jim Duke's personal files.
7	GLUCOSE	Juice		19700.0		Jim Duke's personal files.
8	GLUTAMIC-ACID	Leaf				Jim Duke's personal files.
8	GLUTAMIC-ACID	Endosperm				Jim Duke's personal files.
8	GLUTAMIC-ACID	Seed	7610.0	14355.0	-1.154267228968401	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Seed	1580.0	2980.0	-1.1526395672471974	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Leaf				Jim Duke's personal files.
12	GLYCINE	Endosperm				Jim Duke's personal files.
3	GOLD	Plant				--
0	HEPTAN-2-OL	Fruit				Jim Duke's personal files.
2	HEXANOIC-ACID	Seed	585.0	7190.0		--
7	HISTIDINE	Leaf				Jim Duke's personal files.
7	HISTIDINE	Seed	770.0	1455.0	-1.2412650733514448	USDA's Ag Handbook 8 and sequelae)
0	HYDROXYPHASEIC-ACID	Resin, Exudate, Sap				Jim Duke's personal files.
1	HYDROXYPROLINE	Endosperm				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	INOSITOL	Resin, Exudate, Sap		690.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
12	IODINE	Seed		0.3	-0.2504859725466935	Furr, A.K., et al. 1979
6	IRON	Seed	20.0	50.0	-0.4683156382183686	--
3	ISOLEUCINE	Seed	1310.0	2470.0	-1.0235626374582578	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Endosperm				Jim Duke's personal files.
0	KILOCALORIES	Seed	2960.0	7050.0	1.714930755646975	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	L-RHAMNOSE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	LACTOSE	Root				Jim Duke's personal files.
0	LANTHANUM	Seed		0.03	-0.1663780661615404	Furr, A.K., et al. 1979
7	LAURIC-ACID	Endosperm				Jim Duke's personal files.
7	LAURIC-ACID	Seed	25754.0	431400.0	3.356450956978854	--
0	LEAD	Seed		0.7	-0.5037706810794316	Furr, A.K., et al. 1979
2	LEUCINE	Leaf				Jim Duke's personal files.
2	LEUCINE	Seed	2470.0	4660.0	-1.1889665424024416	USDA's Ag Handbook 8 and sequelae)
13	LIGNIN	Hull Husk		294000.0	1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	LIGUSTRAZINE	Endosperm				Jim Duke's personal files.
60	LIMONENE	Fruit				Jim Duke's personal files.
0	LINAMARASE	Endosperm				Jim Duke's personal files.
27	LINOLEIC-ACID	Seed	584.0	18694.0	-0.7576615677270858	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LUTETIUM	Seed		0.01	0.06665021185544043	Furr, A.K., et al. 1979

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Seed	1470.0	2775.0	-1.2629328431370264	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Leaf				Jim Duke's personal files.
4	LYSINE	Endosperm				Jim Duke's personal files.
65	MAGNESIUM	Seed	300.0	770.0	-0.8597643812861001	Furr, A.K., et al. 1979
0	MAGNESIUM-OXIDE	Leaf		5700.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	MALIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	MANGANESE	Seed	9.0	281.0	2.833645212569222	--
0	MANNAN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
63	MENTHOL	Fruit				Jim Duke's personal files.
1	MERCURY	Seed		0.1	-0.12385851994600533	Furr, A.K., et al. 1979
0	MESO-INOSITOL	Endosperm		100.0		--
15	METHIONINE	Seed	620.0	1170.0	-0.8120468095481715	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Leaf				Jim Duke's personal files.
15	METHIONINE	Endosperm				Jim Duke's personal files.
0	METHOXYL	Hull Husk		56000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	MOLYBDENUM	Seed		0.03	-0.8557155877274645	Furr, A.K., et al. 1979
13	MUFA	Seed	14250.0	26880.0	-0.5971507316122795	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Seed	7650.0	133015.0	1.4452781690520207	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	MYRISTIC-ACID	Seed Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-DOCASANE	Seed Oil				Jim Duke's personal files.
0	N-DOTRIACONTANE	Seed Oil				Jim Duke's personal files.
0	N-EICOSANE	Seed Oil				Jim Duke's personal files.
0	N-HENEICOSANE	Seed Oil				Jim Duke's personal files.
3	N-HENTRIACONTANE	Seed Oil				Jim Duke's personal files.
0	N-HEPTACOSANE	Seed Oil				Jim Duke's personal files.
0	N-HEPTADECANE	Seed Oil				Jim Duke's personal files.
2	N-HEXACOSANE	Seed Oil				Jim Duke's personal files.
1	N-NONACOSANE	Seed Oil				Jim Duke's personal files.
0	N-NONADECANE	Seed Oil				Jim Duke's personal files.
0	N-OCTACOSANE	Seed Oil				Jim Duke's personal files.
0	N-OCTADECANE	Seed Oil				Jim Duke's personal files.
0	N-PENTACOSANE	Seed Oil				Jim Duke's personal files.
0	N-TETRACOSANE	Seed Oil				Jim Duke's personal files.
0	N-TRIACONTANE	Seed Oil				Jim Duke's personal files.
0	N-TRICOSANE	Seed Oil				Jim Duke's personal files.
39	NIACIN	Seed	5.0	10.0	-0.9844146803254511	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	NICKEL	Seed		2.1	-0.5073146937660691	Furr, A.K., et al. 1979
0	NITROGEN	Hull Husk		1100.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	OCTANOIC-ACID	Seed	4670.0	57520.0		--
5	OCTANOIC-ACID	Endosperm				Jim Duke's personal files.
18	OLEIC-ACID	Seed	2920.0	58958.0	-0.4944308344155307	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
25	P-COUMARIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	P-HYDROXY-BENZOIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	PALMITIC-ACID	Seed	4380.0	75495.0	0.858105760546874	--
24	PECTIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PENTOSANS	Hull Husk		277000.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	PHENYLALANINE	Leaf				Jim Duke's personal files.
7	PHENYLALANINE	Seed	1690.0	3190.0	-0.9971896280936104	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Seed	830.0	2400.0	-0.7804502800829126	--
0	PHOSPHORUS-OXIDE-(P2O5)	Leaf		1700.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	PHYLLOQUINONE	Oil		0.005	-1.0944932984058764	--
0	PHYTATE	Seed	2300.0	2370.0	-1.2776088102133165	--
2	PHYTOSTEROLS	Seed	470.0	885.0	-0.40781205023024353	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Seed	2560.0	11491.0	-0.09489587073970547	--
0	POTASSIUM-OXIDE-(K2O)	Leaf		52300.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	PROLINE	Leaf				Jim Duke's personal files.
0	PROLINE	Seed	1380.0	2605.0	-1.7152581345146969	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Seed	32000.0	77000.0	-1.3947822218671768	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PUFA	Seed	3660.0	26880.0	-0.601249593588963	USDA's Ag Handbook 8 and sequelae)
1	QUINIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	RAFFINOSE	Root				Jim Duke's personal files.
1	RAFFINOSE	Resin, Exudate, Sap		900.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Seed	0.2	0.7	-1.0823929498985099	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	RUBIDIUM	Seed		16.0	-0.02826125946521563	Furr, A.K., et al. 1979
7	SALICYLATES	Seed	2.0	3.0	-0.32408179774656004	--
0	SAMARIUM	Seed		0.04	-0.3314596066672648	Furr, A.K., et al. 1979
0	SCANDIUM	Seed		0.002	-0.6367962615099008	Furr, A.K., et al. 1979
0	SCYLLITOL	Leaf		3200.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SCYLLITOL	Endosperm		500.0		--
0	SCYLLITOL	Juice		500.0		--
60	SELENIUM	Seed		0.02	-0.2635767939811563	Furr, A.K., et al. 1979
1	SERINE	Seed	1720.0	3245.0	-1.4046655429596806	USDA's Ag Handbook 8 and sequelae)
1	SERINE	Leaf				Jim Duke's personal files.
1	SERINE	Endosperm				Jim Duke's personal files.
0	SFA	Seed	296980.0	560235.0	4.92625755934881	USDA's Ag Handbook 8 and sequelae)
14	SHIKIMIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	SILICON	Seed		370.0	-0.5747786449558462	Furr, A.K., et al. 1979
1	SODIUM	Seed	145.0	626.0	0.2780073375488779	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	SORBITOL	Endosperm				Jim Duke's personal files.
10	SQUALENE	Seed Oil				Jim Duke's personal files.
10	SQUALENE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	STEARIC-ACID	Seed	584.0	32710.0	0.14430588634246846	--
12	STIGMASTEROL	Seed Oil				Jim Duke's personal files.
0	STRONTIUM	Seed		2.8	-0.751622808700869	Furr, A.K., et al. 1979
7	SUCCINIC-ACID	Root				Jim Duke's personal files.
7	SUCCINIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Resin, Exudate, Sap		134000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Juice		4300.0		Jim Duke's personal files.
14	SULFUR	Seed	440.0	1370.0	-0.6588697590248107	--
4	SYRINGALDEHYDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	SYRINGIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
35	TANNIN	Plant				Jim Duke's personal files.
0	TANTALUM	Plant				--
31	THIAMIN	Seed	0.3	1.0	-1.3322834288131225	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	THORIUM	Plant				--
4	THREONINE	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	THREONINE	Seed	1210.0	2285.0	-1.3091612941527981	USDA's Ag Handbook 8 and sequelae)
4	TIN	Seed		1.5	-0.442152019568875	Furr, A.K., et al. 1979
0	TITANIUM	Seed		5.6	-0.45186158232568946	Furr, A.K., et al. 1979
2	TRIDECANOIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
29	TRYPTOPHAN	Seed	390.0	735.0	-0.8833088946354036	USDA's Ag Handbook 8 and sequelae)
0	TUNGSTEN	Seed		0.3	2.89737971498178	Furr, A.K., et al. 1979
8	TYROSINE	Seed	1030.0	1945.0	-1.3427005948815731	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Leaf				Jim Duke's personal files.
0	UNDECANOIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	URONIC-ANHYDRIDES	Hull Husk		35000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	VALINE	Leaf				Jim Duke's personal files.
3	VALINE	Seed	2020.0	3810.0	-1.0100996922183336	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Endosperm				Jim Duke's personal files.
16	VANADIUM	Seed		0.004	-0.5871182787387549	Furr, A.K., et al. 1979
24	VANILLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	VANILLIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VIT-E	Seed		2.0		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	WATER	Seed	363000.0	546000.0	1.2218063723076176	--
0	WATER	Leaf		84500.0	-3.6077208272203345	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	WATER	Hull Husk		80000.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	YTTERBIUM	Seed		0.1	-0.2826900050957917	Furr, A.K., et al. 1979
77	ZINC	Seed	9.0	25.0	-0.5715529290009757	--