

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Linum usitatissimum*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Seed	85.0	155.0	3.1191728559254055	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
18	VITEXIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
12	VICENIN-2	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VICENIN-1	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	VANADIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	VALINE	Seed		0.284	-1.4793036444616081	--
8	TYROSINE	Seed		0.133	-1.7932335597859743	--
29	TRYPTOPHAN	Seed		0.089	-1.1339383282290112	--
0	TRANS-SINAPIC-ACID	Seed		290.0		--
0	TRANS-LINOLEIC-ACID-METHYL-ESTER	Seed		4.3		--
2	TRANS-FERULIC-ACID	Seed		375.0	-0.47614826602151417	--
0	TRANS-CAFFEIC-ACID	Seed		55.0		--
93	TOCOPHEROL	Seed		47.0	-0.4002735595606585	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	TITANIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	TIN	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
4	THREONINE	Seed		0.195	-1.8202596354546852	--
31	THIAMIN	Seed		1.8	-1.141416879500738	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	SULFUR	Seed	608.0	4200.0	0.9418680963960322	--
14	SUCROSE	Seed		388.0	-0.6923667566162774	--
0	STRONTIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	STIGMASTEROL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Seed Oil		81000.0	-0.2772564234419937	--
8	STEARIC-ACID	Seed	13595.0	16545.0	-0.20641972214709475	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
5	STARCH	Seed	2000.0	39000.0	-1.0980435455891777	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
10	SQUALENE	Seed Oil				--
10	SQUALENE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	SODIUM	Seed	400.0	1014.0	0.8939255700301022	--
0	SINAPIC-ACID-GLUCOSE-ESTER	Seed				--
0	SINAPIC-ACID-ESTER	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	SINAPIC-ACID	Seed				--
3	SILVER	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	SILICA	Seed	322.0	608.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	SERINE	Seed		0.248	-2.0265239206958663	--
3	SECOISOLARICRESINOL	Plant				Stitt, Paul. Why George should eat broccoli.
3	SECOISOLARICRESINOL	Seed				--
15	RIBOFLAVIN	Seed		1.7	-0.6991387592002618	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RHAMNOGALACTURONAN	Seed				Abstract (See species file)
1	RAFFINOSE	Seed				--
0	PROTEIN	Seed	160000.0	341000.0	0.9536344979354476	--
0	PROTEIN	Hay	76000.0	78000.0	-1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROLINE	Seed		0.191	-2.226996902840283	--
14	POTASSIUM	Seed	7964.0	15009.0	0.21448936936526888	--
14	POTASSIUM	Hay		17400.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	POLYSACCHARIDES	Seed				--
1	PHYTOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PHYTIN	Seed	24000.0	64000.0	1.6398847943395507	--
9	PHYTIC-ACID	Seed	18000.0	33000.0	1.1694904127352321	--
4	PHOSPHORUS	Seed	3961.0	20335.0	3.9590351958118073	--
4	PHOSPHORUS	Hay		1110.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PHOSPHOLIPIDS	Seed	360.0	4050.0	-0.5954216753452876	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHOSPHATIDYL-SERINE	Seed	160.0	2025.0		Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
2	PHOSPHATIDYL-CHOLINE	Seed	160.0	2025.0	1.0	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
0	PHOSPHATIDES	Seed		7000.0	-0.09878698384821892	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
7	PHENYLALANINE	Seed		0.239	-1.3781037282174438	--
0	PHENOLIC-ACIDS	Seed	810.0	103400.0		--
0	PHENOLIC-ACID-ESTERS	Seed	739.0	5420.0		--
0	PEROXIDASE	Root				--
0	PEROXIDASE	Cotyledon				--
0	PEROXIDASE	Hypocotyl				--
0	PENTOSSES	Seed	4010.0	4977.0	-1.4142135623730951	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PENTOSANS	Seed	79000.0	99000.0	0.42471142796963834	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
0	PELARGONIDIN-3-O-BETA-D-RUTINOSIDE	Flower				--
0	PELARGONIDIN-3-O-BETA-D-GLUCOSYL-RUTINOSIDE	Flower				--
24	PECTIN	Seed	53900.0	100000.0	2.5314122594852875	--
11	PANTOTHENIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Seed	19005.0	22515.0	-0.23504354469855987	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
13	PALMITIC-ACID	Seed Oil		90000.0	-0.6107337786717688	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	P-HYDROXY-BENZOIC-ACID	Sprout Seedling				Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
0	P-COUMARIC-ACID-ESTER	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
25	P-COUMARIC-ACID	Seed		60.0	-0.364755663014079	--
4	ORIENTIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OLEORESIN	Seed	520.0	5850.0	-1.0	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
18	OLEIC-ACID	Flower				--
18	OLEIC-ACID	Seed Oil		283000.0	-0.1995525939212177	--
18	OLEIC-ACID	Seed	16.0	120000.0	0.007370246204918166	--
1	O-GLYCOFLAVONE-C-GLYCOSIDE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
33	NORDIHYDROGUAIARETIC-ACID	Seed				--
2	NICOTINAMIDE	Seed		38.0	1.0	--
3	NICKEL	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
39	NIACIN	Seed		15.0	-0.8347441211060711	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NH3	Seed		3000.0	-1.4101609728096458	--
1	NEOLINUSTATIN	Seed	19.0	4540.0		--
6	MYRISTIC-ACID	Seed				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
3	MUCILAGE	Seed	20000.0	84000.0	-0.7141062298500116	--
2	MOLYBDENUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	METHYL-LINAMARIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	METHIONINE	Seed		0.09	-1.1141398667164637	--
0	MANNURONIC-ACID	Seed	4500.0	9000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
14	MANGANESE	Seed	50.0	70.0	0.2052706550190378	--
14	MANGANESE	Hay		8.1	-1.0000000000000002	--
15	MALIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
65	MAGNESIUM	Seed	3715.0	7002.0	1.6024579573476614	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
65	MAGNESIUM	Hay		3100.0	-1.0	--
4	LYSINE	Seed		2.5	-1.63848275248756	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	LYSINE	Plant		0.209	-1.2551253944019245	--
78	LUTEOLIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LUCENIN-2	Leaf				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
0	LUCENIN-1	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LOTAUSTRALIN	Seed				--
11	LITHIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LIPASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	LINUSTATIN	Seed	4.8	5380.0		--
0	LINUSITAMARIN	Seed		5.0		--
0	LINUM-GALACTANS	Tissue Culture				--
0	LINOLENIC-ACID	Seed Oil	210000.0	553000.0	0.9417924041354631	--
0	LINOLENIC-ACID	Seed	108000.0	228000.0	3.4004528622626684	--
27	LINOLEIC-ACID	Flower				--
27	LINOLEIC-ACID	Sprout Seedling				--
27	LINOLEIC-ACID	Seed	30000.0	100000.0	-0.06102368779923489	--
27	LINOLEIC-ACID	Seed Oil		182000.0	-0.8223368361797175	--
0	LINOCINNAMARIN	Seed		30.0		--
0	LINOCAFFEIN	Seed				--
0	LININ	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LINEIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LINASE	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
2	LINAMARIN	Seed	0.0	320.0		--
0	LINAMARASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	LIGNIN	Seed	52000.0	72000.0	0.4935473881578569	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
10	LIGNANS	Seed	525.0	675.0	-1.0	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
10	LIGNANS	Plant				--
0	LIGNANDIGLUCOSIDE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LEUCINE	Seed		0.316	-1.6349859893322434	--
20	LECITHIN	Seed		8800.0	-0.4991948044159543	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LEAD	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	L-RHAMNOSE	Seed	3900.0	17800.0		--
0	L-GALACTOSE	Seed	2400.0	7200.0		--
0	L-ARABINOSE	Seed	2700.0	7200.0	-1.0	--
0	L-ARABANOFURANOSE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	ISOVITEXIN	Leaf				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
4	ISOORIENTIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ISOLEUCINE	Seed		4.0	-1.3382280003117872	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	ISOLEUCINE	Plant		0.237	-1.4141272939903209	--
0	ISOFUCOSTEROL	Seed				Endo, S., Ishizaki, T., Kimata, M. 1993. Fatty Acid and Sterol Compositions in the Seeds of Perilla frutescens and Linum Usitatissimum. Takyo Gakugei Daigaku Kiyo Dai-4-Bumon, 45: 27-32.
6	IRON	Seed	29.0	549.0	1.8501912385034966	--
7	HISTIDINE	Seed		0.108	-1.6280448288553528	--
0	HEXADECANOIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	HETEROSIDE	Sprout Seedling				Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
9	HCN	Shoot		1280.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
9	HCN	Seed	0.08	600.0	-0.3812623601747087	--
9	HCN	Root		670.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
9	HCN	Hull Husk		460.0		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
9	HCN	Flower		6920.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	GLYCINE	Seed		0.352	-1.5834447610833413	--
8	GLUTAMIC-ACID	Seed		1.153	-1.7598687378912001	--
4	GLUCURONIC-ACID	Seed				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
7	GLUCOSE	Seed	111000.0	146000.0	3.201211441889907	--
11	GERANYL-GERANIOL	Seed				--
0	GENTIOBIOSE	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		573.0	0.7575983644124141	--
14	GAMMA-TOCOPHEROL	Seed Oil				--
20	GAMMA-LINOLENIC-ACID	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	GALACTURONIC-ACID	Seed	9000.0	48489.0		--
0	FUCOSE	Seed	4000.0	5000.0		Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
0	FLAVONOIDS	Tissue Culture				--
15	FIBER	Seed	48000.0	126000.0	-0.06931908335079716	--
15	FIBER	Hay	365000.0	462000.0	1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FERULIC-ACID-ESTER	Seed				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
0	FERULIC-ACID-ESTER	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
61	FERULIC-ACID	Seed				--
0	FATTY-ACIDS	Seed Oil				Upadhy, G. S., Narayanaswamy, G., Kartha, A. R. S. 1974. Note on the Comparative Development of Fatty Acids in Ripening Seeds of 6 Dicot Species Producing C16-C18 Acid Fats. Indian J. Agr. Sci. 44: 620.
0	FAT	Seed	40000.0	450000.0	0.9724195926436688	--
0	FAT	Hay	33000.0	61000.0	1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ERUCIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	EICOSANOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DICROTALIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DIASTASE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	DELTA-TOCOPHEROL	Seed Oil				--
1	DELTA-5-AVENASTEROL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELPHINIDIN-3-TRIGLUCOSIDE	Flower				--
0	DELPHINIDIN-3-O-BETA-D-RUTINOSIDE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	DELPHINIDIN-3-O-BETA-D-GLUCOSIDE	Flower				--
0	DELPHINIDIN-3-GLUCOSYL-RUTINOSIDE	Flower				--
0	DELPHINIDIN-3-DIGLUCOSIDE	Flower				--
0	DELPHINIDIN-3-O-BETA-D-RUTINOSIDE	Flower				--
0	DELPHINIDIN-3-O-BETA-D-GLUCOSIDE	Flower				--
9	DELPHINIDIN	Flower				Abstract (See species file)
5	DAUCOSTEROL	Seed		3.0	-0.8762395152008512	--
0	D-XYLOSE	Seed	5400.0	16200.0		--
0	D-XYLOPYRANOSE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	CYSTEINE	Seed		0.09	-1.10002836803819	--
0	CYCLOLINOPEPTIDE-B	Seed		2.0		--
0	CYCLOLINOPEPTIDE-A	Seed Oil				--
0	CYCLOLINOPEPTIDE	Seed				--
7	CYCLOARTENOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CYANOGENIC-GLYCOSIDES	Seed	3310.0	8350.0		Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
0	CYANIDIN-3-TRIGLUCOSIDE	Flower				--
0	CYANIDIN-3-O-BETA-D-GLUCOSYL-RUTINOSIDE	Flower				--
0	CYANIDIN-3-GLUCOSYL-RUTINOSIDE	Flower				--
0	CYANIDIN-3,5-DIGLUCOSIDE	Cotyledon				--
7	CYANIDIN	Flower				Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	COPPER	Seed	17.0	23.0	0.7424671767599702	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
5	CONIFERYL-ALDEHYDE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	COLININ	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	COBALT	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CIS-LINOLEIC-ACID-METHYL-ESTER	Seed		4.3		--
0	CIS-12-OXOPHYTODIENOIC-ACID	Seed				--
0	CHRYSANTHEMIN	Flower				--
24	CHROMIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
20	CHOLINE	Seed	910.0	1180.0	-0.46342254709086045	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	CHOLESTEROL	Seed				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
77	CHLOROGENIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	CHLORINE	Seed	42.0	78.0	-0.5791204881302392	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CERYL-CEROTATE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CERYL-ALCOHOL	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CEROTIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	CELLULOSE	Seed	93000.0	147000.0	0.3583523215580603	--
0	CAROTENES	Seed	0.321	1.07		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CARBOHYDRATES	Seed	299000.0	397000.0	-0.5023482242890303	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Hay	801000.0	817000.0	1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CAMPESTEROL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CALLISTEPHIN	Flower				--
28	CALCIUM	Seed	1820.0	7400.0	0.5975460826300514	--
28	CALCIUM	Hay		7200.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CAFFEIC-ACID-ESTER	Sprout Seedling				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
3	CADMIUM	Seed	0.075	2.8	1.0827489707798146	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
47	BETA-SITOSTEROL	Seed		19.0	-0.6236819715213897	--
0	BETA-HYDROXY-BETA-METHYL-GLUTARIC-ACID-MONOMETHYLESTER	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-HYDROXY-BETA-METHYL-GLUTARIC-ACID	Seed				--
53	BETA-CAROTENE	Seed	0.0	0.321	-0.4092431063494038	--
0	BARIUM	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	AUXINE-ESTER	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ASPARTIC-ACID	Seed		0.557	-2.0052985487141943	--
0	ASH	Hay	62000.0	72000.0	-1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	26000.0	49000.0	0.03368352764748354	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ARSENIC	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	ARGININE	Seed		0.554	-1.0433413024542735	--
101	APIGENIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	AMMONIA(NH3)	Seed		3000.0	-0.3519642461737174	--
0	AMMONIA	Seed		3000.0	-1.1097957592672159	--
32	ALPHA-TOCOPHEROL	Oil		5.0	-0.6929583568728471	--
32	ALPHA-TOCOPHEROL	Seed Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	ALPHA-LINOLENIC-ACID	Flower				--
15	ALPHA-LINOLENIC-ACID	Sprout Seedling				--
15	ALPHA-LINOLENIC-ACID	Seed	108000.0	254600.0	4.689859301771256	--
0	ALPHA-CEPHALINE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ALANINE	Seed		0.254	-2.158955919799553	--
16	ACETIC-ACID	Seed	3105.0	3853.0	-0.45177356521117334	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	24-METHYLENE-CYCLOARTENOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.