

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for LINOLEIC-ACID

Plant	Part	Low PPM	High PPM	StdDev	Reference
Abelmoschus esculentus	Seed	32575.0	89760.0	-0.1487610244098318	--
Abrus precatorius	Seed		3325.0	-0.8893446855364865	Wealth of India.
Abutilon theophrasti	Seed		93175.0	-0.11950096537416886	Wealth of India.
Acacia farnesiana	Seed	12800.0	50000.0	-0.48942865171816513	--
Acanthopanax gracilistylis	Plant				--
Achillea millefolium	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Acrocomia totai	Fruit		0.0	-0.3553998700413126	--
Adonis vernalis	Plant				--
Aesculus hippocastanum	Leaf				Jim Duke's personal files.
Aesculus hippocastanum	Seed		6415.0	-0.8628692587662965	--
Ageratum conyzoides	Seed		140135.0	0.2828569767384904	Wealth of India.
Akebia quinata	Seed				--
Aleurites moluccana	Seed	201600.0	334650.0	1.949480807872305	--
Alliaria petiolata	Seed		48400.0	-0.5031376105635709	--
Allium cepa	Seed Oil	575000.0	590600.0	0.7844920848789769	--
Allium sativum var. sativum	Bulb	1200.0	7800.0		--
Allium cepa	Bulb				Osman, S. A. 1980. Chemical and Biological Studies of Onion and Garlic in an Attempt to Isolate a Hypoclycaemic Extract. Abstr. 4th Asian Symp. Med. Plants Spices Bangkok, Thailand, September 15-19: 117.
Allium cepa	Seed	103500.0	106200.0	-0.00790147227328753	Wealth of India.
Allium ampeloprasum	Plant				--
Allium schoenoprasum	Leaf	2220.0	27750.0	3.3074762915888694	USDA's Ag Handbook 8 and sequelae)
Aloe vera	Juice				Yamaguchi, I., Mega, N., Sanada, H. 1993. Components of the Gel of Aloe vera (L.) Burm. F. Biosci Biotech Biochem 57(8): 1350-1352.
Althaea officinalis	Seed	67710.0	91000.0	-0.13813658130464232	Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Amphicarpaea bracteata	Seed	27400.0	93600.0	-0.11585952318085796	--
Anacardium occidentale	Seed	76600.0	77925.0	-0.2501644793694426	--
Anamirta cocculus	Seed	3432.0	5616.0	-0.8697151700897211	--
Ananas comosus	Fruit	840.0	6222.0	-0.26761688873606465	USDA's Ag Handbook 8 and sequelae)
Anethum graveolens	Plant				--
Anethum graveolens	Fruit	9600.0	10397.0	-0.2087139721578888	--
Anethum graveolens	Seed	9600.0	10397.0	-0.828751087439793	USDA's Ag Handbook 8 and sequelae)
Angelica archangelica	Fruit				--
Angelica sinensis	Root				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Annona reticulata	Plant				--
Annona cherimola	Seed	68400.0	88200.0	-0.16212725928410243	--
Annona cherimola	Fruit	350.0	5300.0	-0.28062491007380796	--
Anthriscus cerefolium	Seed		68900.0	-0.3274915753568095	--
Apium graveolens	Pt	690.0	12875.0		USDA's Ag Handbook 8 and sequelae)
Apium graveolens	Leaf	60.0	1132.0	-1.1912413119904384	USDA's Ag Handbook 8 and sequelae)
Apium graveolens	Seed	178000.0	46560.0	-0.5189029132357875	--
Aquilegia vulgaris	Seed		64560.0	-0.36467712622497267	--
Arachis hypogaea	Seed	155300.0	183655.0	0.6557406573335274	--
Arctium lappa	Fruit	103500.0	124200.0	1.3968737201405899	Wealth of India.
Areca catechu	Seed				--
Argemone mexicana	Seed	96000.0	188600.0	0.6981099082651095	--
Artemisia capillaris	Essential Oil				--
Artocarpus altilis	Seed	22900.0	52365.0	-0.46916509692479974	USDA's Ag Handbook 8 and sequelae)
Asclepias syriaca	Seed	48230.0	168540.0	0.5262338367408347	--
Asimina triloba	Fruit	480.0	6018.0	-0.27049501927066294	--
Asparagus officinalis	Shoot	910.0	11742.0	1.4142135623730951	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Astragalus membranaceus</i>	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
<i>Azadirachta indica</i>	Fruit		47250.0	0.3112259523104981	--
<i>Bactris gasipaes</i>	Seed		16000.0	-0.7807440271830377	--
<i>Bactris gasipaes</i>	Fruit	400.0	2450.0	-0.32083408666010765	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Balanites aegyptiacus</i>	Seed	120000.0	220000.0	0.9671482256061977	--
<i>Benincasa hispida</i>	Fruit	870.0	22305.0	-0.040710156442219765	--
<i>Bertholletia excelsa</i>	Seed	140225.0	314300.0	1.7751199875573003	--
<i>Beta vulgaris</i>	Root	460.0	3628.0	0.18872562307250482	USDA's Ag Handbook 8 and sequelae)
<i>Bidens pilosa</i>	Shoot				Jim Duke's personal files.
<i>Borago officinalis</i>	Seed Essent. Oil		360000.0	-0.9883274356612421	Jim Duke's personal files.
<i>Borago officinalis</i>	Seed	45500.0	149370.0	0.36198337357431687	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Flower	190.0	2455.0	0.4542076634572454	--
<i>Brassica rapa</i>	Root	120.0	1475.0	-0.6136111513494188	--
<i>Brassica oleracea</i> var. <i>italica</i>	Leaf	380.0	4081.0	-0.6928297779549968	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>viridis</i> l.	Plant				--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Leaf	380.0	4081.0	-0.6928297779549968	--
<i>Brassica chinensis</i>	Leaf	390.0	8334.0	0.025971257735994156	--
<i>Brassica oleracea</i>	Stem	200.0	2222.0		--
<i>Brassica rapa</i>	Leaf	390.0	8334.0	0.025971257735994156	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>capitata</i> l.	Leaf	350.0	4680.0	-0.5915925758908295	USDA's Ag Handbook 8 and sequelae)
<i>Brassica nigra</i>	Leaf	270.0	3976.0	-0.7105758651281813	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>sabellica</i> l.	Leaf	1380.0	8880.0	0.118250911036554	--
<i>Brassica oleracea</i> var. <i>gemmifera</i>	Leaf	450.0	3213.0	-0.8395307652533226	USDA's Ag Handbook 8 and sequelae)
<i>Brassica napus</i> var. <i>napobrassica</i>	Root	350.0	3385.0	0.09816926627523243	USDA's Ag Handbook 8 and sequelae)
<i>Bupleurum chinense</i>	Root				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Buxus sempervirens	Seed				--
Cajanus cajan	Seed	7780.0	24472.0	-0.7081550900966141	--
Calendula officinalis	Seed	100000.0	177500.0	0.6030040062751071	--
Calotropis sp.	Seed	86000.0	117000.0	0.0846339999332014	--
Camellia sinensis	Leaf				--
Camellia sinensis	Seed				--
Camellia sinensis	Seed Oil				--
Canarium indicum	Seed		136210.0	0.24922718707085442	--
Cannabis sativa	Seed	207000.0	250600.0	1.229332063524583	--
Capparis spinosa	Flower	700.0	2115.0	0.10814468177553463	--
Capparis spinosa	Seed	142200.0	183600.0	0.6552694118732165	Wealth of India.
Capparis spinosa	Plant				--
Capsicum frutescens	Fruit	1040.0	8486.0	-0.2356752831952287	USDA's Ag Handbook 8 and sequelae)
Capsicum annuum	Fruit	2190.0	29871.0	0.06603462603214637	--
Carica papaya	Leaf				Jim Duke's personal files.
Carica papaya	Seed Oil		4000.0	-1.5223259403119926	Jim Duke's personal files.
Carica papaya	Seed		5389.0	-0.871660128625913	--
Carica papaya	Flower				Jim Duke's personal files.
Carica papaya	Fruit	60.0	537.0	-0.347823614663473	--
Carthamus tinctorius	Seed	122000.0	481394.0	3.2067979683786954	--
Carum carvi	Fruit	20300.0	46714.0	0.3036638054156712	--
Carum carvi	Seed	19600.0	46714.0	-0.5175834259469172	--
Carya illinoensis	Leaf				--
Catalpa bignonioides	Seed	17075.0	129200.0	0.1891648111294204	--
Caulophyllum thalictroides	Root				Jim Duke's personal files.
Cedrus deodora	Seed		42465.0	-0.553989279780748	--
Ceiba pentandra	Seed	52000.0	145200.0	0.32625439958347807	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Centaurea calcitrapa</i>	Plant				--
<i>Centaureum erythraea</i>	Plant				--
<i>Centella asiatica</i>	Plant				--
<i>Ceratonia siliqua</i>	Seed	1185.0	10655.0	-0.8265405178259713	Wealth of India.
<i>Chamaelirium luteum</i>	Rhizome				Jim Duke's personal files.
<i>Cicer arietinum</i>	Seed	25930.0	29310.0	-0.6667026257878185	USDA's Ag Handbook 8 and sequelae)
<i>Cichorium intybus</i>	Leaf	370.0	7548.0	-0.10687088053184475	USDA's Ag Handbook 8 and sequelae)
<i>Cichorium endivia</i>	Leaf	750.0	12077.0	0.658577012871517	--
<i>Cichorium intybus</i>	Root	750.0	3750.0	0.23419013142339878	--
<i>Cichorium intybus</i>	Seed				--
<i>Citrullus lanatus</i>	Seed	52000.0	210280.0	0.8838663006203578	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Citrullus colocynthis</i>	Seed				--
<i>Citrullus lanatus</i>	Cotyledon		486700.0	0.16004066347331836	--
<i>Citrus sinensis</i>	Fruit	180.0	1359.0	-0.33622644162700344	USDA's Ag Handbook 8 and sequelae)
<i>Citrus reticulata</i>	Seed Oil				--
<i>Citrus reticulata</i>	Fruit	270.0	2176.0	-0.32469981100559747	USDA's Ag Handbook 8 and sequelae)
<i>Citrus paradisi</i>	Fruit	190.0	2090.0	-0.32591314054469284	USDA's Ag Handbook 8 and sequelae)
<i>Citrus aurantiifolia</i>	Fruit	360.0	3060.0	-0.31222791202233824	USDA's Ag Handbook 8 and sequelae)
<i>Cnicus benedictus</i>	Seed	56160.0	65520.0	-0.3564517509177292	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6. Springer-Verlag, Berlin, 1969-1979.
<i>Cocos nucifera</i>	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.
<i>Coffea arabica</i>	Seed				--
<i>Coix lacryma-jobi</i>	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Colocasia esculenta	Leaf	2140.0	14925.0	1.1399185011498951	--
Colocasia esculenta	Root	580.0	1975.0	-0.42728119909165674	--
Corchorus olitorius	Seed	70625.0	92500.0	-0.12528443238707443	--
Corchorus olitorius	Leaf	1170.0	9525.0	0.22726258938611646	--
Coriandrum sativum	Seed		132000.0	0.2131554891088805	--
Coriandrum sativum	Fruit	13030.0	18260.0	-0.09777897022873985	--
Cornus mas	Seed Oil				Hohn, M. E., Meinschein, W. G. 1976. Seed Oil Fatty Acids: Evolutionary Significance in the Nyssaceae and Cornaceae. Biochem. Syst. Ecol., 4: 193-199.
Cornus mas	Seed		687000.0	4.968450588609008	Kleiman, R., Spencer, G. F. 1982. Search for New Industrial Oils: 16. Umbelliflorae-Seed Oils Rich in Petroselinic Acid. J. Amer. Oil Chem. Soc., 59: 29-32.
Corylus avellana	Seed	14500.0	18850.0	-0.7563249442396587	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Crataegus rhipidophylla	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Crataegus laevigata	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Crocus sativus	Silk Stigma Style				--
Croton tiglium	Seed	57000.0	95000.0	-0.10386418419112792	--
Cryptostegia grandifolia	Seed		29820.0	-0.6623328951558454	--
Cryptotaenia japonica	Shoot				--
Cucumis sativus	Fruit	220.0	5570.0	-0.276815619660369	--
Cucumis melo	Cotyledon	56100.0	726700.0	1.2359442834620131	--
Cucumis sativus	Cotyledon	35100.0	486700.0	0.16004066347331836	--
Cucumis sativus	Seed	66900.0	170468.0	0.5427531321495487	--
Cucumis melo	Seed	99600.0	246192.0	1.1915638819054901	--
Cucurbita pepo	Flower	20.0	410.0	-1.6272593881283386	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cucurbita pepo	Seed	33025.0	260000.0	1.309872196741342	--
Cucurbita maxima	Seed		151750.0	0.38237544985685795	--
Cucurbita pepo	Fruit	20.0	238.0	-0.35204205108428127	USDA's Ag Handbook 8 and sequelae)
Cucurbita foetidissima	Seed	92340.0	221365.0	0.9788436811211846	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Cucurbita spp	Fruit	330.0	5220.0	-0.28175358871482686	--
Cyamopsis tetragonoloba	Seed Oil		472000.0	0.3180948503279217	Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.
Cydonia oblonga	Seed				--
Cynara cardunculus	Flower	460.0	3055.0	1.0649070428955585	USDA's Ag Handbook 8 and sequelae)
Cyperus rotundus	Rhizome				--
Cytisus scoparius	Seed		30960.0	-0.6525652619784938	--
Datura stramonium	Seed	22500.0	45000.0	-0.5322691481100582	--
Daucus carota	Seed	9360.0	43400.0	-0.545978106955464	--
Daucus carota	Root	670.0	5485.0	0.8807550657578334	--
Dioscorea pentaphylla	Root	380.0	2050.0	-0.3993317062529924	--
Dipsacus fullonum	Seed	90000.0	122000.0	0.12747449632509444	--
Dipteryx odorata	Seed		3850.0	-0.8848464334153376	--
Dodonaea viscosa	Seed	22670.0	108470.0	0.011548113088631904	--
Echinacea angustifolia	Root				--
Elaeis guineensis	Fruit	9200.0	92550.0	0.9503402327874722	--
Elettaria cardamomum	Seed	7035.0	10500.0	-0.82786857321412	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Elettaria cardamomum	Fruit	3100.0	3370.0	-0.30785428228838985	Revised USDA data received 1993.
Elettaria cardamomum	Seed Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eriobotrya japonica	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Eruca sativa	Seed	18675.0	53700.0	-0.45772668438816433	--
Erythrina crista-galli	Seed		31560.0	-0.6474244024114666	--
Eucalyptus globulus	Fruit				--
Eucommia ulmoides	Seed Oil		100000.0	-1.144803726847395	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Euonymus atropurpureus	Plant				--
Euphorbia hirta	Plant				--
Fagopyrum esculentum	Seed	3960.0	6078.0	-0.8657567082231101	--
Fagopyrum esculentum	Pollen Or Spore				--
Ferula assa-foetida	Seed		128000.0	0.17888309199536606	--
Ficus carica	Seed	84000.0	105000.0	-0.018183191407341856	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ficus carica	Fruit	1440.0	6893.0	-0.2581500966345183	USDA's Ag Handbook 8 and sequelae)
Foeniculum vulgare	Fruit	14000.0	18539.0	-0.09384270346818631	--
Foeniculum vulgare	Seed	14000.0	18539.0	-0.7589896231152344	--
Foeniculum vulgare	Seed Essent. Oil				Jim Duke's personal files.
Fragaria spp	Seed		153900.0	0.40079686330537195	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Fragaria spp	Fruit	1080.0	12811.0	-0.17465609416514233	USDA's Ag Handbook 8 and sequelae)
Frangula purshiana	Plant				--
Ganoderma lucidum	Tissue Culture				--
Ginkgo biloba	Seed	5780.0	12889.0	-0.8073993840380734	USDA's Ag Handbook 8 and sequelae)
Ginkgo biloba	Leaf				Jim Duke's personal files.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Glycine max	Sprout Seedling				--
Glycine max	Plant				--
Glycine max	Seed	70335.0	126082.0	0.1624494775794359	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Glycine max	Tissue Culture				--
Gossypium sp	Seed	72480.0	104328.0	-0.02394095412241228	--
Harpagophytum procumbens	Tuber				--
Hedera helix	Seed		45630.0	-0.5268712455646797	--
Helianthus annuus	Seed	89000.0	350000.0	2.0810011317954165	--
Hibiscus sabdariffa	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hippophae rhamnoides	Seed	11040.0	14935.0	-0.7898690529145109	--
Hippophae rhamnoides	Fruit		2100.0	-0.32577205571456547	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Holarrhena pubescens	Seed	52000.0	164100.0	0.4881914759448337	--
Hordeum vulgare	Leaf				--
Hordeum vulgare	Seed	2185.0	24035.0	-0.7118993494812657	Jim Duke's personal files.*
Houttuynia cordata	Root				--
Houttuynia cordata	Shoot				--
Hyoscyamus niger	Seed	141000.0	219396.0	0.9619730936420571	--
Ipomoea batatas	Root	1110.0	4087.0	0.35977651924513043	--
Isatis tinctoria	Seed	23940.0	72960.0	-0.29270509228659236	--
Jatropha curcas	Seed	87960.0	162240.0	0.4722548112870495	--
Juglans cinerea	Seed	337270.0	348924.0	2.071781856971881	--
Juglans regia	Seed	228000.0	532760.0	3.646906955911891	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Juglans nigra	Seed	334590.0	349845.0	2.0796730764072677	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juniperus communis	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Juniperus communis	Plant				--
Justicia adhatoda	Seed		31700.0	-0.6462248685124936	--
Lablab purpureus	Seed	10.0	82.0	-0.9171310314962683	--
Lactuca scariola	Seed	165616.0	204160.0	0.8314295330366807	--
Lactuca sativa	Leaf	470.0	7833.0	-0.05870292963320087	--
Lagenaria siceraria	Fruit	90.0	2465.0	-0.32062245941491657	--
Lagenaria siceraria	Seed	288000.0	336250.0	1.9631897667177107	--
Laurus nobilis	Plant				--
Laurus nobilis	Fruit	36000.0	176000.0	2.127693140200353	--
Lawsonia inermis	Seed	16415.0	35820.0	-0.6109242994855738	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Lawsonia inermis	Oil		293000.0		--
Lens culinaris	Sprout Seedling	1810.0	6035.0	-0.42260520553770015	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Seed	3510.0	3950.0	-0.8839896234874998	USDA's Ag Handbook 8 and sequelae)
Lentinus edodes	Fruit				--
Leonotis nepetaefolia	Seed	33320.0	45220.0	-0.5303841662688149	--
Lepidium meyenii	Root		7.0	-1.1606758911782085	--
Lepidium sativum	Leaf	1520.0	14340.0	1.0410474440421524	--
Ligustrum lucidum	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
Ligustrum japonicum	Fruit				--
Linum usitatissimum	Flower				--
Linum usitatissimum	Sprout Seedling				--
Linum usitatissimum	Seed	30000.0	100000.0	-0.06102368779923489	--
Linum usitatissimum	Seed Oil		182000.0	-0.8223368361797175	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lobelia inflata	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Lonicera japonica	Flower				--
Luffa aegyptiaca	Seed	94000.0	211500.0	0.8943193817399796	--
Luffa aegyptiaca	Fruit	870.0	17400.0	-0.10991226561969344	--
Lupinus albus	Seed	19950.0	22275.0	-0.726979204211212	--
Lycium chinense	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
Lycopersicon esculentum	Fruit	830.0	13720.0	-0.16183148310656464	--
Lycopodium clavatum	Pollen Or Spore				--
Macadamia spp	Seed	10710.0	14725.0	-0.7916683537629705	--
Maclura pomifera	Fruit				--
Mangifera indica	Fruit	140.0	765.0	-0.344606880536569	--
Manihot esculenta	Root	440.0	1400.0	-0.6415606441880831	--
Matricaria recutita	Plant				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
Medicago sativa	Seed Oil				--
Mentha x piperita	Leaf	690.0	3230.0	-0.836657589234807	USDA's Ag Handbook 8 and sequelae)
Mentha spicata	Leaf	540.0	3735.0	-0.7513073604494908	USDA's Ag Handbook 8 and sequelae)
Mimosa pudica	Seed	12240.0	86700.0	-0.17497940820167032	--
Momordica charantia	Fruit				Jim Duke's personal files.
Momordica charantia	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.
Momordica charantia	Seed Oil				Jim Duke's personal files.
Momordica charantia	Cotyledon	72200.0	103900.0	-1.5560256104086498	Jim Duke's personal files.
Monarda punctata	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Morinda citrifolia	Fruit		0.02	-0.3553995878716523	--
Morus alba	Seed				--
Mucuna pruriens	Seed	715.0	30680.0	-0.6549643297764398	--
Murraya sp	Plant				--
Musa x paradisiaca	Fruit	560.0	2176.0	-0.32469981100559747	USDA's Ag Handbook 8 and sequelae)
Musa x paradisiaca	Plant				--
Myristica fragrans	Seed	0.0	6000.0	-0.8664250199668236	--
Myrtus communis	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Nelumbo nucifera	Seed	2850.0	8636.0	-0.8438395102690177	--
Nelumbo nucifera	Rhizome	140.0	670.0	-1.0	--
Nepeta cataria	Seed Oil		180000.0	-0.8302018822935633	--
Nerium oleander	Flower				--
Nicotiana tabacum	Seed	50000.0	70000.0	-0.31806666615059304	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Nigella sativa	Seed Oil	487600.0	576300.0	0.7282570051649796	--
Nigella sativa	Seed	128124.0	233459.0	1.0824662737938955	--
Ocimum basilicum	Seed	53240.0	145200.0	0.32625439958347807	--
Ocimum tenuiflorum	Seed		102455.0	-0.039989004070815404	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ocimum sanctum	Seed		102455.0	-0.039989004070815404	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Oenothera biennis	Seed	121500.0	227798.0	1.033962263778994	--
Oenothera biennis	Seed Essent. Oil		710000.0	1.3701812176212669	--
Oenothera biennis	Seed Oil	177000.0	747000.0	1.3995386909817178	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Olea europaea</i>	Fruit	10500.0	28000.0	0.03963765431531594	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Opuntia ficus-indica</i>	Seed	39640.0	133590.0	0.22677876696150248	--
<i>Opuntia ficus-indica</i>	Seed Oil		734000.0	1.3484158912417201	--
<i>Origanum majorana</i>	Seed		10000.0	-0.8321526228533093	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Origanum vulgare</i>	Plant	1050.0	1131.0	-0.564956755492135	USDA's Ag Handbook 8 and sequelae)
<i>Oryza sativa</i>	Seed	6600.0	11880.0	-0.8160445962099575	--
<i>Pachira aquatica</i>	Seed	29000.0	63800.0	-0.3711888816765404	--
<i>Pachyrhizus erosus</i>	Seed				--
<i>Paeonia lactiflora</i>	Root				Economic & Medicinal Plant Research, 1: 53.
<i>Panax ginseng</i>	Root		140.0	-1.1111121238776438	--
<i>Panax quinquefolius</i>	Plant				--
<i>Papaver bracteatum</i>	Seed	358650.0	383520.0	2.3682038196066673	--
<i>Papaver somniferum</i>	Seed Oil				--
<i>Papaver somniferum</i>	Seed	300335.0	309465.0	1.7336932275463397	--
<i>Papaver somniferum</i>	Latex Exudate				--
<i>Passiflora edulis</i>	Seed		137770.0	0.262593421945125	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
<i>Pastinaca sativa</i>	Root	410.0	2000.0	-0.41796470147876863	--
<i>Pastinaca sativa</i>	Seed		36330.0	-0.6065545688536007	--
<i>Perilla frutescens</i>	Seed				Endo, S., Ishizaki, T., Kimata, M. 1993. Fatty Acid and Sterol Compositions in the Seeds of <i>Perilla frutescens</i> and <i>Linum Usitatissimum</i> . <i>Takyo Gakugei Daigaku Kiyo Dai-4-Bumon</i> , 45: 27-32.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Perilla frutescens</i>	Seed Oil		176000.0	-0.8459319745212549	Longyah, T., Deosthale, Y. G. 1991. Chemical and Nutritional Studies on Hanshi ( <i>Perilla frutescens</i> ), a Traditional Oilseed from Northeast India. J. Amer. Oil Chem. Soc., 68(10): 781-784.
<i>Persea americana</i>	Fruit	24340.0	505440.0	6.775591783916344	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Petasites hybridus</i>	Root				--
<i>Phaseolus vulgaris</i>	Sprout Seedling	1070.0	11505.0	1.3800855724382957	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus lunatus</i>	Seed	2150.0	9509.0	-0.8363595595989931	--
<i>Phaseolus vulgaris</i>	Seed	3320.0	3731.0	-0.8858660372294648	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus vulgaris</i>	Fruit	230.0	2364.0	-0.322047416199203	USDA's Ag Handbook 8 and sequelae)
<i>Phoenix dactylifera</i>	Seed	6000.0	10000.0	-0.8321526228533093	--
<i>Phyllanthus emblica</i>	Seed Oil				--
<i>Phyllanthus emblica</i>	Seed		70400.0	-0.3146394264392416	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Physalis peruviana</i>	Seed	23625.0	41830.0	-0.5594300228225184	--
<i>Physostigma venenosum</i>	Seed				--
<i>Pimpinella anisum</i>	Seed	13700.0	52000.0	-0.47229245316140794	--
<i>Pinus gerardiana</i>	Seed	137000.0	231350.0	1.064396152415795	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Pinus edulis</i>	Seed	248820.0	264420.0	1.3477431955517754	USDA's Ag Handbook 8 and sequelae)
<i>Pinus walliciana</i>	Seed		105250.0	-0.016041166587747204	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Pinus pinea</i>	Seed	206890.0	221725.0	0.9819281968614009	USDA's Ag Handbook 8 and sequelae)
<i>Piper nigrum</i>	Fruit	13200.0	14750.0	-0.1472997456034458	USDA's Ag Handbook 8 and sequelae)
<i>Pistacia vera</i>	Seed	70220.0	110880.0	0.032197232349524346	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pisum sativum	Seed	1520.0	7190.0	-0.8562289818255532	--
Pisum sativum	Fruit	1750.0	7418.0	-0.2507431430528315	--
Plantago ovata	Seed Coat				--
Plantago psyllium	Seed				--
Plantago asiatica	Seed				--
Plantago ovata	Seed Oil		534000.0	0.5619112798571412	--
Plantago ovata	Seed	13000.0	24375.0	-0.7089861957266169	--
Plantago ovata	Se	13000.0	24375.0		--
Plantago major	Seed	25000.0	50000.0	-0.48942865171816513	--
Portulaca oleracea	Seed		67686.0	-0.33789324788076114	--
Portulaca oleracea	Herb	704.0	18245.0		--
Prosopis glandulosa	Plant				--
Prunella vulgaris	Leaf				--
Prunus cerasus	Seed	127200.0	169600.0	0.5353160219759161	--
Prunus armeniaca	Fruit	770.0	5640.0	-0.27582802584947747	USDA's Ag Handbook 8 and sequelae)
Prunus dulcis	Seed	59500.0	136400.0	0.25085512593374637	--
Prunus cerasus	Fruit	460.0	3312.0	-0.30867257430312856	--
Prunus persica	Seed				--
Prunus domestica	Seed	54600.0	83160.0	-0.2053104796471306	--
Prunus armeniaca	Seed	56000.0	411200.0	2.6053688076321877	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Prunus persica	Fruit	440.0	3565.0	-0.3051031281009062	--
Prunus domestica	Fruit	1340.0	9054.0	-0.22766166484399425	USDA's Ag Handbook 8 and sequelae)
Psidium cattleianum	Fruit	1820.0	9410.0	-0.22263904489145997	--
Psidium guajava	Seed		13900.0	-0.7987370356676327	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Psidium guajava	Fruit	1820.0	13104.0	-0.17052230864241047	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Leaf	1870.0	8078.0	-0.01729539289577017	--
Psophocarpus tetragonolobus	Tuber	1530.0	3592.0	1.0	--
Psophocarpus tetragonolobus	Seed	1640.0	44381.0	-0.5375728015633745	--
Pueraria montana	Stem				--
Punica granatum	Seed				--
Pyrus communis	Fruit	930.0	5744.0	-0.2743607436161528	--
Quisqualis indica	Seed	20700.0	24300.0	-0.7096288031724953	--
Raphanus sativus	Root	160.0	3100.0	-0.008038806511691974	--
Rhus toxicodendron	Seed				--
Ribes nigrum	Seed Essent. Oil		450000.0	-0.38185378196002584	--
Ribes nigrum	Fruit	1070.0	5928.0	-0.27176478274180926	USDA's Ag Handbook 8 and sequelae)
Ribes nigrum	Seed Oil				--
Ribes uva-crispa	Fruit	2710.0	22341.0	-0.04020225105376124	--
Ribes rubrum	Fruit	530.0	3302.0	-0.3088136591332559	--
Ricinus communis	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Robinia pseudoacacia	Seed	15900.0	70490.0	-0.31386829750418754	--
Rosa rubiginosa	Seed Oil				--
Rosa canina	Seed Oil				--
Rosa canina	Seed	43200.0	58320.0	-0.41814206572205515	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Rosmarinus officinalis	Leaf	4470.0	13870.0	0.9616125776478976	USDA's Ag Handbook 8 and sequelae)
Rubus idaeus	Seed Oil				--
Rubus idaeus	Fruit	2080.0	15555.0	-0.13594241677819272	Revised USDA data received 1993.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Ruta graveolens	Seed				--
Salvia sclarea	Seed		53488.0	-0.45954312143518056	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Salvia officinalis	Fruit Essent. Oil				--
Salvia officinalis	Seed		73000.0	-0.29236236831545726	--
Salvia sp.	Seed	34885.0	169200.0	0.5318887822645646	--
Sambucus nigra	Leaf				--
Sambucus nigra	Flower				--
Sambucus canadensis	Seed	106530.0	169600.0	0.5353160219759161	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Santalum album	Fruit				--
Sassafras albidum	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Satureja hortensis	Seed		75600.0	-0.27008531019167287	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Secale cereale	Seed	9580.0	10760.0	-0.8256408674017415	USDA's Ag Handbook 8 and sequelae)
Senna obtusifolia	Seed		23160.0	-0.719396436349847	--
Senna occidentalis	Seed	7850.0	8164.0	-0.8478836531284124	--
Serenoa repens	Fruit	1840.0	36000.0	0.15250551841720983	--
Sesamum indicum	Seed Oil		500000.0	0.4282054959217627	--
Sesamum indicum	Seed	123656.0	278784.0	1.4708153735864058	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Silybum marianum	Seed				--
Silybum marianum	Plant				--
Silybum marianum	Seed Oil	600000.0	700000.0	1.2147101073063415	--
Simarouba glauca	Seed	11780.0	12860.0	-0.8076478589171464	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sinapis alba	Seed	25062.0	28610.0	-0.6727002952826835	--
Skimmia arborescens	Seed		83500.0	-0.20239732589248188	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Solanum melongena	Fruit	350.0	4337.0	-0.2942113792150734	--
Solanum tuberosum	Tuber	320.0	1520.0	-1.0	--
Solanum nigrum	Seed		100190.0	-0.059395748936342946	--
Sophora japonica	Seed	36570.0	64130.0	-0.36836140891467545	--
Spartium junceum	Seed	68800.0	85312.0	-0.18687193000005983	--
Spinacia oleracea	Leaf				--
Spinacia oleracea	Plant	104.0	2613.0	-0.541791899786887	--
Stellaria media	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Sterculia urens	Seed	4840.0	6292.0	-0.8639231349775371	--
Strophanthus gratus	Seed		90000.0	-0.14670468058302094	--
Strychnos nux-vomica	Seed	360.0	4600.0	-0.8784203589565537	--
Tamarindus indica	Seed	27840.0	34336.0	-0.6236393588146877	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Tamarindus indica	Fruit	590.0	860.0	-0.34326657465035904	USDA's Ag Handbook 8 and sequelae)
Tamarindus indica	Seed Oil				--
Taraxacum officinale	Root				--
Taraxacum officinale	Pollen Or Spore				--
Terminalia pallida	Seed Oil		35000.0	-1.400417725547383	Gunasekar, D., Sreeramulu, K., Rao, K. V. 1992. Fatty Acid Composition of the Seed Oil of Terminalia pallida. Asian J. Chem. 4 2: 400-401.
Terminalia catappa	Seed Oil				Abdullahi, A. H., Anelli, G. 1980. Fatty Acid Composition and Characteristics of Terminalia catappa Oil Seed from Somalia. Riv. Agric. Subtrop. Trop. 74: 245-247.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Terminalia chebula	Seed	80100.0	84800.0	-0.1912587968305897	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Terminalia chebula	Seed Oil				Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminalia chebula. J. Inst. Chem. (Calcutta) 46: 189-.
Terminalia catappa	Seed	102600.0	184450.0	0.6625522962598384	--
Terminalia bellirica	Seed	72475.0	202930.0	0.820890770924275	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Tetragonia tetragonioides	Leaf	130.0	2165.0	-1.016653616277108	--
Teucrium polium	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Theobroma cacao	Seed	7420.0	29115.0	-0.6683734051471023	--
Theobroma bicolor	Seed	9620.0	10160.0	-0.8307817269687686	--
Theobroma cacao	Plant	10700.0	12230.0	-0.39147043061187325	--
Theobroma angustifolium	Seed	8965.0	23600.0	-0.7156264726673603	--
Thespesia populnea	Seed		86400.0	-0.17754983798518392	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Thevetia peruviana	Seed	31500.0	42210.0	-0.5561741450967345	--
Thevetia neriifolia	Seed		37800.0	-0.5939594629143842	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Thymus vulgaris	Plant	5000.0	5400.0	-0.498228841183293	USDA's Ag Handbook 8 and sequelae)
Thymus vulgaris	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Tilia sp.	Wood				--
Tribulus terrestris	Fruit	19950.0	28500.0	0.04669189582168431	--
Trichosanthes anguina	Seed		49500.0	-0.49371270135735446	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Trichosanthes kirilowii	Seed				--
Trifolium pratense	Pollen Or Spore				--
Trigonella foenum-graecum	Seed Oil	68000.0	449000.0	0.2276468200186951	--
Triticum aestivum	Plant				--
Urtica dioica	Seed	114235.0	317060.0	1.7987679415656253	--
Urtica dioica	Root				Jim Duke's personal files.
Valeriana officinalis	Plant		165000.0	1.9964479270741882	--
Valeriana jatamansi	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Vanilla planifolia	Fruit		135.0	-0.35349522483459317	--
Verbascum thapsus	Seed	48000.0	613000.0	4.33441124200899	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Vernonia cinerea	Seed	8360.0	83600.0	-0.201540515964644	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Viburnum prunifolium	Bark				--
Viburnum opulus	Root Bark				--
Viburnum opulus	Bark				--
Viburnum opulus	Seed				--
Viburnum opulus	Fruit				--
Vicia faba	Seed	1200.0	6315.0	-0.8637260686941344	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Sprout Seedling	420.0	4412.0	-0.9574803669005961	USDA's Ag Handbook 8 and sequelae)
Vigna aconitifolia	Seed	4850.0	5370.0	-0.8718229225122022	--
Vigna unguiculata	Shoot	600.0	5871.0	-0.7071067811865476	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Seed	3570.0	4890.0	-0.8759356101658239	--
Vigna unguiculata	Seed	3080.0	3364.0	-0.8890105296646297	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vigna unguiculata	Seed	1168.0	5783.0	-0.8682842975102318	--
Vigna unguiculata	Shoot	600.0	5871.0	-0.7071067811865476	--
Vigna unguiculata	Fruit	960.0	7901.0	-0.2439287457576797	USDA's Ag Handbook 8 and sequelae)
Vigna mungo	Seed	1467.0	4075.0	-0.8829186110777025	--
Virola surinamensis	Seed	30600.0	34680.0	-0.6206919326629254	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Vitellaria paradoxa	Seed Oil		69000.0	-1.2667119416120045	Adomako, D. 1977. Fatty Acid Composition and Characteristics of Pentadesma Butyracea Fat Extracted From Ghana Seeds. J. Sci. Food Agr. 28: 384-386.
Vitellaria paradoxa	Seed	22620.0	28930.0	-0.6699585035136024	--
Vitex agnus-castus	Fruit				--
Vitis vinifera	Seed	33000.0	110000.0	0.02465730498455117	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Vitis vinifera	Fruit	1300.0	6687.0	-0.26105644413514206	USDA's Ag Handbook 8 and sequelae)
Vitis vinifera	Seed Oil				--
Withania somnifera	Plant				--
Withania somnifera	Seed Oil		600000.0	0.8214578016140522	--
Zea mays	Seed	5420.0	22547.0	-0.724648681207493	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Root	1200.0	11220.0	3.017959618154365	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Rhizome	1200.0	11220.0	1.0	--