

C STEARIC-ACID

Chemid

STEARICACID

ubiquitous

Yes

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Abelmoschus esculentus	Seed	7200	10120	-0.34582040476667064	--
Abrus precatorius	Seed	--	1225	-0.5388117000042002	Wealth of India.
Abutilon theophrasti	Seed	--	1375	-0.5355572093593851	Wealth of India.
Acacia farnesiana	Seed	600	2300	-0.515487850383026	--
Achillea millefolium	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Aesculus hippocastanum	Leaf	--	--		Jim Duke's personal files.
Aesculus hippocastanum	Seed	--	1015	-0.5433679869069411	--
Agrimonia eupatoria	Plant	--	--		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
Akebia quinata	Seed	--	--		--
Aleurites fordii	Seed	3900	7800	-0.3961565267398093	--
Aleurites moluccana	Seed	38190	46230	0.43764397646179387	Wealth of India.
Alisma plantago-aquatica	Plant	--	--		--
Alliaria petiolata	Seed	880	880	-0.5462970284872747	--
Allium ampeloprasum	Plant	--	--		--
Allium cepa	Bulb	20	195		--
Allium cepa	Seed Oil	--	35000	-0.6541098145281985	--
Allium cepa	Seed	--	6300	-0.4287014331879593	Wealth of India.
Allium schoenoprasum	Leaf	80	1000	0.0297331201637005	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	12415	16685	-0.20338219754526743	Wealth of India.
Ammi visnaga	Plant	--	--		--
Amphicarpaea bracteata	Seed	650	2560	-0.5098467332653467	--
Anacardium occidentale	Seed	17725	102000	1.6476635982040109	--
Anamirta cocculus	Seed	52250	85500	1.2896696272743606	--
Ananas comosus	Fruit	110	815	-0.22517226092311657	USDA's Ag Handbook 8 and sequelae)
Anethum graveolens	Fruit	1000	1083	-0.2073990310361778	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Anethum graveolens	Seed	1000	1083	-0.541892617814625	USDA's Ag Handbook 8 and sequelae)
Angelica archangelica	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
Angelica archangelica	Fruit	--	--		--
Angelica sinensis	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Annona muricata	Plant	--	--		--
Annona reticulata	Plant	--	--		--
Apium graveolens	Pt	30	560		USDA's Ag Handbook 8 and sequelae)
Apium graveolens	Seed	3100	5000	-0.456907018776356	USDA's Ag Handbook 8 and sequelae)
Aquilegia vulgaris	Seed	5100	5100	-0.4547373583464793	--
Arachis hypogaea	Seed	10980	13760	-0.26684476511915994	--
Arctium lappa	Plant	--	--		--
Arctium lappa	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Areca catechu	Seed	--	--		--
Arnica montana	Flower	--	--		--
Artemisia capillaris	Essential Oil	--	--		--
Artocarpus altilis	Seed	5100	11660	-0.31240763414656997	USDA's Ag Handbook 8 and sequelae)
Asimina triloba	Fruit	102	2124	-0.1383619701693744	--
Asparagus officinalis	Shoot	30	387	-1.4142135623730951	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Azadirachta indica	Fruit	79650	81000	5.092538330435788	--
Bactris gasipaes	Fruit	125	650	-0.23611473454753784	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Bactris gasipaes	Seed	9700	9700	-0.3549329785721526	--
Balanites aegyptiacus	Seed	42000	77000	1.1052484907348443	--
Benincasa hispida	Fruit	50	1280	-0.19433438070883846	--
Bertholletia excelsa	Seed	16228	72800	1.0141227526800243	--
Beta vulgaris	Root	10	79	-0.6950094104911273	USDA's Ag Handbook 8 and sequelae)
Bixa orellana	Seed	200	1275	-0.5377268697892619	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Borago officinalis	Seed	6110	18000	-0.17485116289238925	--
Brassica chinensis	Leaf	10	214	-0.48241730258681836	--
Brassica napus var. napobrassica	Root	30	290	-0.18860255369586548	USDA's Ag Handbook 8 and sequelae)
Brassica nigra	Leaf	20	294	-0.43029003309567143	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea	Stem	10	110		--
Brassica oleracea var. botrytis l.	Leaf	70	752	-0.13186141525885503	--
Brassica oleracea var. botrytis l.	Flower	30	390	0.6447612226140537	--
Brassica oleracea var. capitata l.	Leaf	10	134	-0.5345445720779654	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. gemmifera	Leaf	30	214	-0.48241730258681836	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Brassica oleracea var. italica	Leaf	70	752	-0.13186141525885503	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. sabellica l.	Leaf	40	260	-0.4524441226294089	--
Brassica oleracea var. viridis l.	Plant	--	--		--
Brassica rapa	Root	10	120	-0.5966080781280669	--
Brassica rapa	Leaf	10	214	-0.48241730258681836	USDA's Ag Handbook 8 and sequelae)
Bryonia alba	Root	--	--		--
Cajanus cajan	Seed	240	733	-0.5494864293191933	--
Camellia sinensis	Seed	--	--		--
Canarium indicum	Seed	74297	74297	1.046602569315278	--
Capparis spinosa	Flower	348	348	0.1338183669576338	--
Capparis spinosa	Seed	11060	16200	-0.21390505063016926	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Capsicum annuum	Fruit	160	2180	-0.1346481609392678	USDA's Ag Handbook 8 and sequelae)
Capsicum annuum	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Capsicum frutescens	Fruit	30	245	-0.2629735334438446	USDA's Ag Handbook 8 and sequelae)
Capsicum frutescens	Seed	--	--		--
Carapa guianensis	Seed	220000	260000	5.0757270774091445	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
Carica papaya	Fruit	20	179	-0.2673505228936131	--
Carica papaya	Seed	12650	13282	-0.2772157419739704	--
Carica papaya	Seed Oil	--	50000	-0.5312228391740013	Jim Duke's personal files.
Carica papaya	Leaf	--	--		Jim Duke's personal files.
Carica papaya	Flower	--	--		Jim Duke's personal files.
Carthamus tinctorius	Seed	2000	6260	-0.42956929735990995	--
Carum carvi	Plant	1100	1221	-0.31662981705011717	--
Carum carvi	Seed	1000	1221	-0.5263361525324093	--
Carya illinoensis	Leaf	--	--		--
Cassia tora	Seed	2508	5624	-0.4433683376939256	--
Caulophyllum thalictroides	Root	--	--		Jim Duke's personal files.
Cedrus deodora	Seed	37995	37995	0.2589724400614503	--
Ceiba pentandra	Seed	4000	32000	0.12890129729034414	--
Centaurea calcitrapa	Plant	--	--		--
Centaurium erythraea	Plant	--	--		--
Centella asiatica	Plant	--	--		--
Ceratonia siliqua	Seed	200	1820	-0.525902220446434	Wealth of India.
Chamaelirium luteum	Rhizome	--	--		Jim Duke's personal files.
Chrysanthemum x morifolium	Flower	--	--		Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cicer arietinum	Seed	850	960	-0.5445613001433733	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	20	322	-0.41204548877377	--
Cichorium intybus	Leaf	10	204	-0.48893321127321177	USDA's Ag Handbook 8 and sequelae)
Cichorium intybus	Root	20	100	-0.6446087280612671	USDA's Ag Handbook 8 and sequelae)
Cichorium intybus	Seed	--	--		--
Cichorium intybus	Plant	--	--		--
Citrullus colocynthis	Seed	--	--		--
Citrullus lanatus	Seed	12200	66000	0.8665858434484109	--
Citrullus lanatus	Cotyledon	--	59100	-0.5870403836004546	--
Citrus aurantiifolia	Fruit	10	85	-0.2735844169584349	--
Citrus paradisi	Fruit	10	110	-0.27192646640928014	USDA's Ag Handbook 8 and sequelae)
Citrus reticulata	Fruit	10	80	-0.27391600706826585	USDA's Ag Handbook 8 and sequelae)
Citrus reticulata	Seed Oil	--	--		--
Cocos nucifera	Seed	584	23008	0.14430588634246846	--
Coffea arabica	Seed	5920	12800	-0.28767350524597596	--
Coix lacryma-jobi	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Colocasia esculenta	Plant	200	200	-0.7284502542579766	--
Colocasia esculenta	Root	60	205	-0.39260531591196624	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Corchorus olitorius	Leaf	60	490	-0.30257822228423614	--
Corchorus olitorius	Seed	4180	5475	-0.4466011317344418	--
Coriandrum sativum	Fruit	1100	1207	-0.1991755963123703	USDA's Ag Handbook 8 and sequelae)
Coriandrum sativum	Seed Essent. Oil	--	2000		--
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.
Corylus avellana	Seed	8000	10400	-0.33974535556301594	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Crataegus laevigata	Bark	--	--		--
Crataegus rhipidophylla	Bark	--	--		--
Crocus sativus	Silk Stigma Style	--	--		--
Croton tiglium	Seed	900	1500	-0.5328451338220394	--
Cryptostegia grandifolia	Seed	10240	10240	-0.3432168122508186	--
Cucumis melo	Cotyledon	10100	61400	-0.5578470239835672	--
Cucumis melo	Seed	10080	35145	0.19713711780996532	--
Cucumis sativus	Cotyledon	28800	59100	-0.5870403836004546	--
Cucumis sativus	Fruit	30	759	-0.22888607015322318	--
Cucumis sativus	Seed	11100	69785	0.9487074907192428	--
Cucurbita foetidissima	Seed	2430	28475	0.052420767137191626	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cucurbita maxima	Seed	21450	21450	-0.09999787806164424	--
Cucurbita pepo	Flower	20	410	0.8880673443552061	USDA's Ag Handbook 8 and sequelae)
Cucurbita pepo	Fruit	30	357	-0.2555459149836314	USDA's Ag Handbook 8 and sequelae)
Cucurbita pepo	Seed	22670	30200	0.10091267774493513	--
Cucurbita spp	Fruit	40	635	-0.2371095048770307	--
Cyamopsis tetragonoloba	Seed Oil	--	58000	-0.46568311898509607	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.
Cynara cardunculus	Flower	30	200	-1.6666469339268937	USDA's Ag Handbook 8 and sequelae)
Cyperus rotundus	Rhizome	--	--		--
Datura stramonium	Plant	--	--		--
Daucus carota	Root	10	80	-0.6926093779944673	--
Daucus carota	Seed	285	1240	-0.5384862509397187	--
Dioscorea pentaphylla	Root	20	108	-0.625408468087987	--
Dipsacus fullonum	Seed	4200	5660	-0.44258725993917	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Dipteryx odorata	Seed	1425	1425	-0.5344723791444468	--
Dodonaea viscosa	Seed	7490	31400	0.11588333471108414	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Elaeagnus angustifolia	Seed	--	235	-0.5602913382599791	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
Elaeis guineensis	Fruit	4600	69615	4.33750765035072	--
Elettaria cardamomum	Seed	1830	18300	-0.16834218160275924	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Elettaria cardamomum	Fruit	600	650	-0.23611473454753784	Revised USDA data received 1993.
Elettaria cardamomum	Seed Oil	--	--		--
Eleutherococcus senticosus	Rhizome	--	--		--
Eruca sativa	Seed	2900	6600	-0.4221924518983293	--
Erythrina crista-galli	Seed	6500	6500	-0.424362112328206	--
Eucommia ulmoides	Seed Oil	--	25000	-0.73603446476433	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Fagopyrum esculentum	Seed	460	460	-0.5554096022927567	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Fagopyrum esculentum	Pollen Or Spore	--	--		--
Ficus carica	Fruit	120	574	-0.24115490421696825	USDA's Ag Handbook 8 and sequelae)
Ficus carica	Seed	5232	6540	-0.4234942481562553	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
Fragaria spp	Fruit	40	475	-0.247720388391621	USDA's Ag Handbook 8 and sequelae)
Fucus vesiculosus	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Ganoderma lucidum	Fruit	--	--		--
Ganoderma lucidum	Tissue Culture	--	--		--
Ganoderma lucidum	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Ginkgo biloba	Seed	160	357	-0.5576443525355296	USDA's Ag Handbook 8 and sequelae)
Ginkgo biloba	Pollen Or Spore	--	--		Jim Duke's personal files.
Glycine max	Seed	4320	7785	-0.3964819758042908	--
Gossypium sp	Seed	1760	5589	-0.4441277188443824	--
Harpagophytum procumbens	Tuber	--	--		--
Helianthus annuus	Seed	9000	28000	0.04211488009527745	--
Hibiscus sabdariffa	Seed	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hippophae rhamnoides	Bark	5720	5720		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hippophae rhamnoides	Fruit	1040	1040	-0.21025070598072393	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
Hippophae rhamnoides	Seed	6610	6610	-0.4219754858553416	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Holarrhena pubescens	Seed	12920	12920	-0.28506991273012394	--
Hordeum vulgare	Seed	130	1430	-0.534363896122953	Jim Duke's personal files.*
Hordeum vulgare	Leaf	--	--		--
Houttuynia cordata	Shoot	--	--		--
Houttuynia cordata	Root	--	--		--
Hyoscyamus niger	Seed	4000	6224	-0.43035037511466556	--
Hypericum perforatum	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ilex paraguariensis	Leaf	--	--		--
Ipomoea batatas	Root	60	221	-0.35420479596540605	--
Iris versicolor	Rhizome	--	--		--
Jatropha curcas	Seed	26400	87360	1.3300253112700666	--
Juglans cinerea	Seed	4250	4397	-0.46999007116851227	--
Juglans nigra	Seed Oil	--	--		--
Juglans nigra	Seed	13940	14575	-0.2491620326156651	USDA's Ag Handbook 8 and sequelae)
Juglans regia	Seed	2000	21030	-0.10911045186712624	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
Juniperus communis	Plant	--	--		--
Lablab purpureus	Seed	90	742	-0.5492911598805045	--
Lactuca sativa	Leaf	40	667	-0.18724663909319866	--
Lactuca scariola	Seed	13165	13165	-0.2797542446769261	--
Lagenaria siceraria	Fruit	--	--		--
Lawsonia inermis	Seed	8835	19285	-0.1469710263684741	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Lawsonia inermis	Oil	157800	158000		--
Lens culinaris	Seed	140	160	-0.5619185835823867	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Sprout Seedling	60	200	-1.397001397002096	USDA's Ag Handbook 8 and sequelae)
Leonotis nepetaefolia	Seed	3360	4560	-0.4664535246678133	--
Lepidium sativum	Leaf	70	660	-0.19180777517367403	--
Lepidium sativum	Seed	9560	15325	-0.2328895793915901	--
Ligustrum japonicum	Seed	--	--		--
Linum usitatissimum	Seed	13595	16545	-0.20641972214709475	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
Linum usitatissimum	Seed Oil	--	81000	-0.2772564234419937	--
Lobelia inflata	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Luffa aegyptiaca	Fruit	50	1000	-0.21290342685937153	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Luffa aegyptiaca	Seed	36000	81000	1.192034907929911	--
Lupinus albus	Seed	3160	3525	-0.4889095101170368	--
Lycopersicon esculentum	Fruit	80	1322	-0.19154902378625838	--
Macadamia spp	Seed	23560	27810	0.03799252527851179	--
Malus domestica	Fruit	70	435	-0.25037310927026857	--
Malus domestica	Seed	--	--		Fathy, M. M., Abd El Megid, R. M. 1995. A Comparative Study of the Lipid Contents and the Antimicrobial Activity of Certain Rosaceous Seeds. Zagazig J Pharm Sci, 4(2): 121-127.
Mangifera indica	Fruit	30	164	-0.26834529322310596	--
Manihot esculenta	Root	70	220	-0.3566048284620661	--
Medicago sativa	Seed Oil	--	--		--
Melia azedarach	Seed	22800	22800	-0.07070746225830923	--
Mentha spicata	Leaf	200	1385	0.28059560458984517	USDA's Ag Handbook 8 and sequelae)
Mentha x piperita	Leaf	250	1170	0.14050356783238777	--
Mimosa pudica	Seed	2135	15130	-0.2371204172298496	--
Momordica charantia	Seed	29800	147800	2.641368075087524	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	Fruit	--	--		Jim Duke's personal files.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Momordica charantia	Cotyledon	121200	241800	1.7319277911844766	Jim Duke's personal files.
Moringa oleifera	Seed	6000	26745	0.7364062176558109	--
Morus alba	Seed	--	--		--
Mucuna pruriens	Seed	390	12475	-0.29472490164307513	--
Murraya sp	Plant	--	--		--
Musa x paradisiaca	Fruit	60	233	-0.26376934970743887	USDA's Ag Handbook 8 and sequelae)
Musa x paradisiaca	Plant	--	--		--
Myrica cerifera	Fruit	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Myristica fragrans	Seed	--	--		--
Myristica fragrans	Seed Essent. Oil	--	--		--
Nardostachys chinensis	Root	--	--		--
Nelumbo nucifera	Rhizome	10	50	-1	--
Nepeta cataria	Seed Oil	--	--		--
Nerium oleander	Flower	--	--		--
Nigella sativa	Seed	8722	10192	-0.3442582492571594	--
Nigella sativa	Seed Oil	18100	60400	-0.4460212029284245	--
Ocimum basilicum	Seed	--	485	-0.5548671871852875	--
Ocimum sanctum	Seed	3255	3255	-0.4947675932777038	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
Ocimum tenuiflorum	Seed	3255	3255	-0.4947675932777038	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Oenothera biennis	Seed	1875	12150	-0.30177629804017425	--
Oenothera biennis	Seed Oil	5000	19000	-0.7851892549060089	--
Olea europaea	Fruit	2100	5600	0.09215947418510027	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Opuntia ficus-indica	Seed	3130	10555	-0.3363823818967071	--
Opuntia ficus-indica	Seed Oil	--	58000	-0.46568311898509607	--
Opuntia ficus-indica	Flower	--	--		--
Origanum vulgare	Plant	5800	6247	1.7106077122414611	USDA's Ag Handbook 8 and sequelae)
Oryza sativa	Seed	150	270	-0.5595319571095223	--
Pachira aquatica	Seed	0	17400	-0.18786912547164925	--
Pachyrhizus erosus	Seed	--	--		--
Panax ginseng	Root	--	--		--
Panax quinquefolius	Plant	--	--		--
Papaver bracteatum	Seed	9900	12000	-0.3050307886849893	--
Papaver somniferum	Seed	5890	8036	-0.39103612812530036	--
Papaver somniferum	Seed Oil	--	--		--
Papaver somniferum	Latex Exudate	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Passiflora edulis	Seed	4050	4050	-0.47751879286018434	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Pastinaca sativa	Root	140	685	0.7594102824848379	--
Persea americana	Fruit	120	4320	0.007272406068377717	--
Petasites hybridus	Root	--	--		--
Petiveria alliacea	Leaf	--	--		Germosen-Robineau, L. (Ed.) 1997. Farmacopea Vegetal Caribena. Endacaribe, Tramil. Ediciones Emile Desormeaux, Martinique F.W.I. 360 pp.
Petroselinum crispum	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Phaseolus lunatus	Seed	220	739	-0.5493562496934008	--
Phaseolus vulgaris	Fruit	40	411	-0.25196474179745715	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Seed	220	247	-0.5600309790083939	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Sprout Seedling	90	968	0.8890008890013331	USDA's Ag Handbook 8 and sequelae)
Phoenix dactylifera	Seed	3000	7000	-0.3484239972825226	--
Phyllanthus emblica	Seed	3440	3440	-0.49075372148243196	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Phyllanthus emblica	Seed Oil	--	--		--
Physalis peruviana	Fruit	3400	3400	-0.053740174140516614	--
Physostigma venenosum	Seed	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pinellia ternata	Tuber	--	--		--
Pinus edulis	Seed	20110	21400	-0.10108270827658257	USDA's Ag Handbook 8 and sequelae)
Pinus gerardiana	Seed	3840	6485	-0.4246875613926875	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pinus pinea	Seed	16720	17920	-0.1765868912362906	USDA's Ag Handbook 8 and sequelae)
Pinus walliciana	Seed	13130	13130	-0.28051362582738293	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Piper nigrum	Fruit	--	--		=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Piscidia piscipula	Plant	--	--		--
Pistacia vera	Seed	6280	8960	-0.37098846575323996	--
Pisum sativum	Fruit	30	297	-0.25952499630160275	--
Pisum sativum	Seed	70	331	-0.5582084642472975	--
Plantago asiatica	Seed	--	--		--
Plantago ovata	Seed	1300	3450	-0.4905367554394443	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Plantago ovata	Seed Coat	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Plantago psyllium	Seed	--	--		--
Polypodium vulgare	Rhizome	--	--		--
Portulaca oleracea	Seed	6438	6438	-0.4257073017947295	--
Prunella vulgaris	Leaf	--	--		--
Prunus armeniaca	Fruit	30	220	-0.26463148399299935	USDA's Ag Handbook 8 and sequelae)
Prunus cerasus	Fruit	160	1152	-0.2028230875205107	--
Prunus cerasus	Seed	8700	11600	-0.31370943040449595	--
Prunus domestica	Fruit	90	608	-0.2389000914701178	USDA's Ag Handbook 8 and sequelae)
Prunus domestica	Seed	16380	17640	-0.18266194043994524	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Prunus dulcis	Seed	10210	10680	-0.3336703063593613	USDA's Ag Handbook 8 and sequelae)
Prunus laurocerasus	Seed	425	510	-0.5543247720778183	--
Prunus persica	Fruit	10	80	-0.27391600706826585	--
Prunus persica	Seed	--	--		--
Psidium cattleianum	Fruit	160	825	-0.22450908070345468	--
Psidium guajava	Fruit	160	1152	-0.2028230875205107	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Leaf	440	1901	0.616816492807743	--
Psophocarpus tetragonolobus	Seed	7450	8128	-0.38904004052981384	--
Psophocarpus tetragonolobus	Tuber	360	845	1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pueraria montana	Stem	--	--		--
Punica granatum	Seed	--	--		--
Quisqualis indica	Fruit	--	--		--
Quisqualis indica	Seed	20930	24570	-0.032304472649492225	--
Raphanus sativus	Root	40	775	0.9754132071842386	--
Ribes nigrum	Fruit	70	388	-0.2534900563026795	USDA's Ag Handbook 8 and sequelae)
Ribes rubrum	Fruit	30	187	-0.2668199787178836	--
Ribes uva-crispa	Fruit	130	1071	-0.20819484729977206	--
Robinia pseudoacacia	Seed	700	3125	-0.4975881518365435	--
Rosa canina	Seed Oil	--	--		--
Rosa rubiginosa	Seed Oil	--	--		--
Rosmarinus officinalis	Leaf	2310	7165	4.046790825325211	USDA's Ag Handbook 8 and sequelae)
Rubus idaeus	Fruit	130	970	-0.2148929675183572	Revised USDA data received 1993.
Ruta graveolens	Seed Oil	--	--		--
Salvia officinalis	Seed	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Salvia officinalis	Fruit Essent. Oil	--	--		--
Salvia sclarea	Seed	8568	8568	-0.3794935346383565	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Salvia sp.	Seed	6610	58320	0.6999559224338829	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sambucus canadensis	Seed	5628	8960	-0.37098846575323996	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Sambucus nigra	Plant	--	--		--
Sambucus nigra	Leaf	--	--		--
Sambucus nigra	Flower	--	--		--
Satureja hortensis	Seed	8400	8400	-0.3831385641605493	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Schisandra chinensis	Seed	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Scutellaria baicalensis	Root Essent. Oil	--	--		--
Secale cereale	Seed	90	100	-0.5632203798403127	USDA's Ag Handbook 8 and sequelae)
Senna obtusifolia	Seed	3550	3550	-0.48836709500956765	--
Serenoa repens	Seed	--	--		--
Serenoa repens	Fruit	720	2305	-0.12635840819349412	--
Sesamum indicum	Seed	11808	32832	0.146952872066918	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Sesamum indicum	Seed Oil	--	60000	-0.44929818893786977	--
Silybum marianum	Plant	--	--		--
Silybum marianum	Seed Oil	--	178000	0.5174126838484817	--
Silybum marianum	Seed	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Simarouba glauca	Seed	169600	185220	3.453255007947373	--
Sinapis alba	Seed	2340	2846	-0.5036415044358994	--
Skimmia arborescens	Seed	4000	4000	-0.47860362307512266	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Solanum melongena	Fruit	50	620	-0.23810427520652352	--
Solanum nigrum	Seed	4085	4085	-0.47675941170972747	--
Solanum tuberosum	Tuber	40	190	-1	--
Spartium junceum	Seed	--	--		--
Spinacia oleracea	Plant	7	356	-0.6655276409333674	--
Spinacia oleracea	Leaf	--	--		--
Stellaria media	Plant	--	--		--
Sterculia urens	Seed	4020	5226	-0.4520035862048347	--
Strychnos nux-vomica	Seed	2640	3300	-0.49379124608425934	--
Swertia chirata	Plant	--	--		--
Tagetes minuta	Seed Oil	--	--		--
Tamarindus indica	Fruit	600	874	-0.2212594976271114	USDA's Ag Handbook 8 and sequelae)
Tamarindus indica	Seed Oil	--	--		--
Taraxacum officinale	Pollen Or Spore	--	--		--
Tecoma stans	Seed	600	690	-0.5504193833040403	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Terminalia bellirica	Seed	40000	112000	1.8646296411916774	--
Terminalia catappa	Seed	21600	40525	0.31386484893733	--
Terminalia chebula	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.
Terminalia pallida	Seed Oil	--	92000	-0.18713930818224905	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.
Tetragonia tetragonioides	Leaf	20	335	-0.40357480748145863	--
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 angustifolium	Seed	43700	115050	1.9308042843029158	--
Theobroma bicolor	Seed	172655	182375	3.391528168717382	--
Theobroma cacao	Plant	--	--		--
Theobroma cacao	Seed	111300	215450	4.109143355899089	--
Thevetia neriifolia	Seed	59000	70800	0.970729544082491	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Thevetia peruviana	Seed	59000	79060	1.1499434955903036	--
Tribulus terrestris	Fruit	2800	4000	-0.01394936096080292	--
Trichosanthes anguina	Seed	30500	41100	0.3263403964091208	--
Trifolium pratense	Pollen Or Spore	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Trigonella foenum-graecum	Seed	--	--		--
Trigonella foenum-graecum	Seed Oil	--	107400	-0.06097534681860657	--
Triticum aestivum	Plant	--	--		--
Tussilago farfara	Flower	--	--		--
Urtica dioica	Root	--	--		Jim Duke's personal files.
Valeriana officinalis	Root	--	--		--
Vanilla planifolia	Fruit	--	39	-0.2766350459688796	--
Verbascum thapsus	Seed	--	164000	2.9928530647275444	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Verbascum thapsus	Seed Oil	--	325000	1.7217050423196145	--
Vicia faba	Seed	170	895	-0.5459715794227932	USDA's Ag Handbook 8 and sequelae)
Vigna aconitifolia	Seed	510	565	-0.5531314588413861	--
Vigna angularis	Seed	662	762	-0.5488572277945292	--
Vigna mungo	Seed	387	1075	-0.5420661906490152	--
Vigna radiata	Seed	710	1170	-0.5400050132406323	--
Vigna radiata	Sprout Seedling	80	840	0.5080005080007616	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Fruit	130	1070	-0.20826116532173825	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	200	218	-0.5606601805330582	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Shoot	80	783	0.7071067811865476	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vigna unguiculata	Seed	270	813	-0.547750700975292	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Shoot	80	783	0.7071067811865476	USDA's Ag Handbook 8 and sequelae)
Vitellaria paradoxa	Seed	215660	233020	4.49035269342842	--
Vitellaria paradoxa	Seed Oil	--	459000	2.8194953554837765	Adomako, D. 1977. Fatty Acid Composition and Characteristics of Pentadesma Butyracea Fat Extracted From Ghana Seeds. J. Sci. Food Agr. 28: 384-386.
Vitis vinifera	Seed	1440	4800	-0.4612463396361093	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Vitis vinifera	Seed Oil	--	--		--
Withania somnifera	Plant	--	--		--
Zea mays	Seed	110	457	-0.5554746921056529	USDA's Ag Handbook 8 and sequelae)
Zea mays	Silk Stigma Style	--	--		--
Zingiber officinale	Rhizome	170	1540	1	--
Zingiber officinale	Root	170	925	2.8114380671291452	USDA's Ag Handbook 8 and sequelae)