

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for LYSINE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Abelmoschus esculentus	Fruit	810.0	8100.0	1.0322270292855846	USDA's Ag Handbook 8 and sequelae)
Acacia farnesiana	Seed	1750.0	1800.0	-1.3950017923225162	Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Acacia farnesiana	Leaf	3760.0	20170.0	1.6628021945345992	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Achillea millefolium	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
Albizia lebbek	Seed				Wealth of India.
Allium ampeloprasum	Plant				--
Allium sativum var. sativum	Bulb	10.0	6552.0	1.0	--
Allium cepa	Bulb	560.0	6104.0	-1.0	USDA's Ag Handbook 8 and sequelae)
Allium sativum var. sativum	Leaf				--
Allium schoenoprasum	Leaf	1630.0	17435.0	1.0400528624977512	USDA's Ag Handbook 8 and sequelae)
Aloe vera	Leaf		7748.0	-1.1656410239523205	--
Alpinia galanga	Leaf				--
Amaranthus sp.	Leaf	1270.0	15278.0	0.5489119816189648	--
Anacardium occidentale	Seed	8170.0	8311.0	-0.5130521224284408	--
Ananas comosus	Fruit	46.0	1852.0	-0.5859651529954232	--
Anethum graveolens	Seed	10380.0	11242.0	-0.11603254287698407	USDA's Ag Handbook 8 and sequelae)
Anethum graveolens	Fruit	10380.0	11242.0	1.8459850057143503	--
Angelica sinensis	Root				Jim Duke's personal files.
Annona muricata	Fruit	600.0	3180.0	-0.24202161617257129	--
Annona squamosa	Fruit	550.0	2055.0	-0.533389446688918	--
Annona reticulata	Fruit	370.0	1300.0	-0.7289296351687773	--
Apium graveolens	Pt	260.0	5410.0		USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Arachis hypogaea</i>	Seed	9390.0	10627.0	-0.19933757236321603	--
<i>Arctium lappa</i>	Root	670.0	3350.0	-0.3553603353392198	USDA's Ag Handbook 8 and sequelae)
<i>Artemisia dracunculus</i>	Shoot				--
<i>Artemisia dracunculus</i>	Root				--
<i>Artemisia dracunculus</i>	Leaf				--
<i>Artocarpus altilis</i>	Fruit	370.0	1258.0	-0.7398073675080542	--
<i>Artocarpus altilis</i>	Seed	5700.0	13035.0	0.12683886829181903	USDA's Ag Handbook 8 and sequelae)
<i>Asimina triloba</i>	Fruit	339.0	3831.0	-0.07341676491377869	--
<i>Asparagus officinalis</i>	Shoot	1450.0	18710.0	0.3111156963571142	--
<i>Avena sativa</i>	Seed	2000.0	7000.0	-0.6906340633332377	Jim Duke's personal files.*
<i>Avena sativa</i>	Plant		14000.0	0.48205927294439394	Jim Duke's personal files.*
<i>Averrhoa carambola</i>	Fruit	400.0	4400.0	0.0739506089207113	USDA's Ag Handbook 8 and sequelae)
<i>Basella alba</i>	Leaf	860.0	12465.0	-0.09159766043575311	--
<i>Benincasa hispida</i>	Fruit	90.0	2305.0	-0.46864103990750755	--
<i>Bertholletia excelsa</i>	Seed	5410.0	5597.0	-0.880677894827845	USDA's Ag Handbook 8 and sequelae)
<i>Beta vulgaris</i>	Root	530.0	4180.0	0.4061670574806671	USDA's Ag Handbook 8 and sequelae)
<i>Bixa orellana</i>	Seed	10130.0	14250.0	0.29141709727681386	--
<i>Brassica oleracea</i> var. <i>sabellica</i> l.	Leaf	1970.0	12675.0	-0.04378144115687264	--
<i>Brassica oleracea</i> var. <i>viridis</i> l.	Leaf	750.0	12293.0	-0.13076142098797902	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Leaf	1410.0	15143.0	0.5181729835111131	--
<i>Brassica chinensis</i>	Leaf	890.0	19019.0	1.4007237736298783	--
<i>Brassica rapa</i>	Leaf	890.0	19019.0	1.4007237736298783	USDA's Ag Handbook 8 and sequelae)
<i>Brassica rapa</i>	Root	360.0	4425.0	0.630955263794971	--
<i>Brassica oleracea</i> var. <i>capitata</i> l.	Leaf	570.0	7621.0	-1.1945584518019292	USDA's Ag Handbook 8 and sequelae)
<i>Brassica nigra</i>	Leaf	1130.0	16642.0	0.8594897106494074	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Flower	1070.0	13825.0		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Brassica oleracea	Stem	560.0	6222.0		--
Brassica oleracea var. gemmifera	Leaf	1540.0	10996.0	-0.426083499105636	USDA's Ag Handbook 8 and sequelae)
Brassica napus var. napobrassica	Root	390.0	3770.0	0.029990875485301268	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. italica	Leaf	1410.0	15143.0	0.5181729835111131	USDA's Ag Handbook 8 and sequelae)
Cajanus cajan	Seed	13750.0	17010.0	0.6652738149711231	--
Calathea allouia	Root	3810.0	4190.0	0.41534208630982233	--
Camellia sinensis	Leaf				--
Capsicum annuum	Fruit	380.0	5183.0	0.27674261896008856	USDA's Ag Handbook 8 and sequelae)
Capsicum frutescens	Fruit	890.0	7262.0	0.8151903697542972	USDA's Ag Handbook 8 and sequelae)
Carica papaya	Fruit	250.0	2238.0	-0.48599361292492554	USDA's Ag Handbook 8 and sequelae)
Carum carvi	Seed	10310.0	11445.0	-0.08853511037990262	Revised USDA data received 1993.
Castanea dentata	Seed	2687.0	4784.0	-0.9908030801486687	--
Castanea sativa	Seed	1189.0	2617.0	-1.2843347856717007	--
Castanea mollissima	Seed	2313.0	4116.0	-1.0812872422572914	--
Ceratonia siliqua	Seed		26320.0	1.926362960526928	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Chenopodium album	Seed	3540.0	22550.0	1.4156963570097005	--
Cicer arietinum	Seed	12910.0	14595.0	0.3381491869886026	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	630.0	10145.0	-0.619853035326242	--
Cichorium intybus	Leaf	350.0	7956.0	-1.1182801972380008	USDA's Ag Handbook 8 and sequelae)
Citrullus lanatus	Seed		8932.0	-0.4289343609472212	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrullus lanatus	Fruit		7303.0	0.8258091084664485	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus paradisi	Fruit	160.0	1760.0	-0.6097925666909821	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus aurantiifolia	Fruit	140.0	1190.0	-0.7574189341525978	USDA's Ag Handbook 8 and sequelae)
Citrus sinensis	Fruit	470.0	3548.0	-0.1467119613903352	USDA's Ag Handbook 8 and sequelae)
Citrus reticulata	Fruit	40.0	2579.0	-0.3976767860750818	--
Cnidioscolus chayamansa	Leaf	3040.0	15190.0	0.528874708778291	--
Cocos nucifera	Leaf				Jim Duke's personal files.
Cocos nucifera	Endosperm				Jim Duke's personal files.
Cocos nucifera	Seed	1470.0	2775.0	-1.2629328431370264	USDA's Ag Handbook 8 and sequelae)
Colocasia esculenta	Leaf	2460.0	17155.0	0.9762979034592439	--
Colocasia esculenta	Root	670.0	2280.0	-1.337088420058833	--
Corchorus olitorius	Leaf	1540.0	17825.0	1.1288544125871007	--
Coriandrum sativum	Leaf				--
Coriandrum sativum	Fruit				--
Crocus sativus	Bulb				--
Cryptotaenia japonica	Root				--
Cucumis sativus	Fruit	220.0	5570.0	0.3769731526577118	--
Cucurbita spp	Fruit	650.0	10285.0	1.5981281045551112	--
Cucurbita pepo	Seed	15580.0	21120.0	1.221995231537649	--
Cucurbita foetidissima	Seed	10130.0	33000.0	2.8312045816131546	--
Cucurbita pepo	Fruit	470.0	6429.0	0.5994486783586378	--
Daucus carota	Root	400.0	3275.0	-0.4241730515578843	--
Dioscorea pentaphylla	Root	520.0	2800.0	-0.8599869209427593	--
Eryngium creticus	Shoot		3980.0	-1.3502985177843803	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Fagopyrum esculentum	Seed		7110.0	-0.6757339767584645	--
Ficus carica	Fruit	300.0	1436.0	-0.69370650187969	USDA's Ag Handbook 8 and sequelae)
Fragaria spp	Fruit	250.0	2966.0	-0.29744625237745853	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ginkgo biloba	Seed	2060.0	5640.0	-0.8748533155304336	USDA's Ag Handbook 8 and sequelae)
Glycine max	Seed	24290.0	26560.0	1.9588722403264331	USDA's Ag Handbook 8 and sequelae)
Glycine max	Shoot				--
Harpagophytum procumbens	Root				--
Helianthus tuberosus	Tuber		4288.0	-0.812095239335622	Izidoost, M. & Robinson, T., Synergism & antagonism in the pharmacology of alkaloidal plants, pp 137-58 in Craker, L. & Simon, J., eds., Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture & Pharmacology, v. 2, 1987, 255pp.
Helianthus annuus	Seed	9370.0	9900.0	-0.29781359908921706	--
Humulus lupulus	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Hypericum perforatum	Plant				--
Ipomoea batatas	Root	810.0	3280.0	-0.41958553714330665	--
Juglans nigra	Seed	7210.0	7540.0	-0.6174881837843511	USDA's Ag Handbook 8 and sequelae)
Juglans cinerea	Seed	7700.0	7966.0	-0.5597842121402294	--
Juglans regia	Seed	3880.0	4025.0	-1.0936136775146037	USDA's Ag Handbook 8 and sequelae)
Lablab purpureus	Seed	190.0	18000.0	0.799374594144082	--
Lactuca sativa	Leaf	840.0	14000.0	0.25791613286463505	--
Lagenaria siceraria	Fruit	210.0	4700.0	0.15164869705840375	--
Lens culinaris	Sprout Seedling	7120.0	23735.0	0.4097902073122836	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Seed	19570.0	22035.0	1.3459368607732625	USDA's Ag Handbook 8 and sequelae)
Lentinus edodes	Fruit				--
Lepidium meyenii	Root		5450.0	1.5713957187833856	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Linum usitatissimum	Plant		0.209	-1.2551253944019245	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Linum usitatissimum</i>	Seed		2.5	-1.63848275248756	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Lupinus albus</i>	Seed	19330.0	21585.0	1.2849819611491902	--
<i>Lycopersicon esculentum</i>	Fruit	20.0	5455.0	0.34718888553826305	--
<i>Macadamia</i> spp	Seed	3240.0	3330.0	-1.1877551336006706	USDA's Ag Handbook 8 and sequelae)
<i>Malus domestica</i>	Fruit	20.0	746.0	-0.8724121045963826	--
<i>Mangifera indica</i>	Fruit	410.0	3200.0	-0.23684174363005844	--
<i>Manihot esculenta</i>	Root	1000.0	3175.0	-0.515923339849437	--
<i>Medicago sativa</i>	Plant				--
<i>Melia azedarach</i>	Seed				--
<i>Melicoccus bijugatas</i>	Fruit	170.0	545.0	-0.9244698236486365	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
<i>Mentha x piperita</i>	Leaf	1610.0	7540.0	-1.2130018506666402	USDA's Ag Handbook 8 and sequelae)
<i>Mentha spicata</i>	Leaf	1410.0	9760.0	-0.7075161040041896	--
<i>Momordica charantia</i>	Seed		149.0	-1.618638546276612	Jim Duke's personal files.
<i>Moringa oleifera</i>	Shoot	5370.0	25165.0	1.0391828214272667	USDA's Ag Handbook 8 and sequelae)
<i>Mucuna pruriens</i>	Seed	9700.0	20564.0	1.1466820666687954	--
<i>Murraya</i> sp	Fruit	600.0	1728.0	-0.6180803627590027	--
<i>Musa x paradisiaca</i>	Fruit	600.0	1728.0	-0.6180803627590027	USDA's Ag Handbook 8 and sequelae)
<i>Nasturtium officinale</i>	Herb	1340.0	26800.0	1.0	USDA's Ag Handbook 8 and sequelae)
<i>Nelumbo nucifera</i>	Seed	2640.0	8000.0	-0.5551787308352996	--
<i>Nelumbo nucifera</i>	Rhizome	940.0	4500.0	1.0	--
<i>Nigella sativa</i>	Seed	16200.0	20700.0	1.1651039918885149	--
<i>Ocimum basilicum</i>	Leaf		6180.0	-1.5226687945679613	USDA's Ag Handbook 8 and sequelae)
<i>Oenothera biennis</i>	Seed	3100.0	3842.0	-1.1184020033617263	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Opuntia ficus-indica	Seed		6275.0	-0.7888391793942429	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Opuntia ficus-indica	Bud		6005.0		Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Oryza sativa	Hay				--
Pachyrhizus erosus	Tuber	510.0	4700.0	-0.705310514654771	--
Panax ginseng	Root				--
Panax ginseng	Leaf				--
Panax quinquefolius	Plant	2080.0	2100.0	-0.994569738261644	--
Papaver somniferum	Seed	10990.0	11789.0	-0.0419384760006119	--
Papaver bracteatum	Seed	7200.0	8150.0	-0.5348604309606089	--
Perideridia gairdneri	Root		2984.0	-0.6911663904863025	Izadoost, M. & Robinson, T., Synergism & antagonism in the pharmacology of alkaloidal plants, pp 137-58 in Craker, L. & Simon, J., eds., Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture & Pharmacology, v. 2, 1987, 255pp.
Persea americana	Fruit	750.0	3653.0	-0.11951763054214287	J. Ethnobiology.
Petroselinum crispum	Plant	2190.0	18724.0	1.068243764451732	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Fruit	880.0	9044.0	1.2767170132921903	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Sprout Seedling	2390.0	25700.0	0.9673053866582134	USDA's Ag Handbook 8 and sequelae)
Phaseolus lunatus	Seed	4520.0	19010.0	0.9361844799669995	--
Phaseolus acutifolius	Seed	17800.0	19400.0	0.9890120596411954	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Phaseolus vulgaris	Seed	14830.0	16667.0	0.6188126359243304	USDA's Ag Handbook 8 and sequelae)
Phoenix dactylifera	Fruit	30.0	2450.0	-0.4310869639742895	--
Phyllanthus emblica	Fruit	170.0	1168.0	-0.7631167939493619	--
Pinus edulis	Seed	4340.0	4615.0	-1.0136950313408202	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pinus pinea	Seed	9010.0	9655.0	-0.3310001555512119	USDA's Ag Handbook 8 and sequelae)
Pistacia vera	Seed	12780.0	13295.0	0.16205725474128296	--
Pisum sativum	Fruit	2020.0	19980.0	4.109071319538206	--
Pisum sativum	Seed	3170.0	14995.0	0.3923313199877778	--
Portulaca oleracea	Herb	650.0	13200.0	-1.0	--
Pouteria campechiana	Fruit	840.0	2130.0	-0.5139649246544948	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Pouteria caimito	Fruit		3160.0	-0.2472014887150841	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Prunus persica	Fruit	230.0	1863.0	-0.5831162230970411	--
Prunus armeniaca	Fruit	970.0	7105.0	0.7745283702955714	USDA's Ag Handbook 8 and sequelae)
Prunus dulcis	Seed	6660.0	6966.0	-0.6952395446381676	USDA's Ag Handbook 8 and sequelae)
Prunus domestica	Fruit	170.0	1149.0	-0.7680376728647491	USDA's Ag Handbook 8 and sequelae)
Psidium cattleianum	Fruit	160.0	825.0	-0.8519516080534569	--
Psidium guajava	Fruit	230.0	1656.0	-0.6367279039120489	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Seed	21360.0	23304.0	1.517829677713146	--
Psophocarpus tetragonolobus	Leaf	2280.0	9849.0	-0.6872511348812355	--
Psophocarpus tetragonolobus	Tuber	5920.0	13897.0	1.6784251962427683	--
Psoralea esculenta	Root		2743.0	-0.9122845852689443	Izadoost, M. & Robinson, T., Synergism & antagonism in the pharmacology of alkaloidal plants, pp 137-58 in Craker, L. & Simon, J., eds., Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture & Pharmacology, v. 2, 1987, 255pp.
Pyrus communis	Fruit	140.0	865.0	-0.8415918629684312	--
Raphanus sativus	Root	350.0	6785.0	2.796262067475613	--
Rehmannia glutinosa	Root	2000.0	4000.0	0.24101653855587235	--
Rosmarinus officinalis	Leaf	1430.0	4435.0	-1.91999880714723	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sambucus canadensis	Plant	260.0	1287.0	-1.0954520396154683	--
Santalum album	Fruit				--
Scutellaria baicalensis	Root				--
Secale cereale	Seed	6050.0	6795.0	-0.7184024064953151	USDA's Ag Handbook 8 and sequelae)
Sechium edule	Fruit	430.0	6145.0	0.5258944882549557	--
Senna obtusifolia	Seed		9500.0	-0.35199573208839235	--
Sesamum indicum	Seed	2890.0	8729.0	-0.4564317934443026	--
Sinapis alba	Seed	15190.0	16252.0	0.5625986729376861	--
Solanum tuberosum	Tuber	1260.0	6800.0	-0.16101944225237538	--
Solanum melongena	Fruit	510.0	6320.0	0.5712183730019429	--
Spinacia oleracea	Plant	1740.0	20664.0	1.308971519219775	USDA's Ag Handbook 8 and sequelae)
Spinacia oleracea	Leaf				--
Stachys officinalis	Shoot				--
Tamarindus indica	Fruit	1390.0	2026.0	-0.5409002618755615	USDA's Ag Handbook 8 and sequelae)
Theobroma cacao	Seed		800.0	-1.5304571248204542	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Thymus vulgaris	Plant	2070.0	2236.0	-0.977693978133575	USDA's Ag Handbook 8 and sequelae)
Trifolium pratense	Plant				--
Trigonella foenum-graecum	Leaf				--
Trigonella foenum-graecum	Seed	15310.0	18525.0	0.8704886437054995	--
Triticum aestivum	Plant	15000.0	18000.0	0.9784051590640706	--
Triticum aestivum	Seed	2000.0	9000.0	-0.4197233983373614	--
Tulipa gesneriana	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Urtica dioica	Leaf				Jim Duke's personal files.
Vaccinium corymbosum	Fruit	120.0	780.0	-0.8636063212741109	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Valerianella locusta	Plant	1010.0	14025.0	0.4851614347326419	--
Vicia faba	Seed	3660.0	19265.0	0.9707255897539737	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Fruit	1840.0	15144.0	2.8565781387586036	USDA's Ag Handbook 8 and sequelae)
Vigna angularis	Seed	14970.0	17294.0	0.7037431294005376	--
Vigna unguiculata	Seed	1940.0	18069.0	0.8087210120864397	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Sprout Seedling	1666.0	17437.0	-1.377095593970498	USDA's Ag Handbook 8 and sequelae)
Vigna aconitifolia	Seed	12480.0	13818.0	0.23290039363770462	--
Vigna unguiculata	Seed	16460.0	17975.0	0.7959882108316335	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Seed	16640.0	18296.0	0.8394693725634716	USDA's Ag Handbook 8 and sequelae)
Vitis vinifera	Fruit	150.0	772.0	-0.8656782702911159	USDA's Ag Handbook 8 and sequelae)
Zea mays	Seed	1370.0	5699.0	-0.8668614509130552	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Rhizome	570.0	3110.0	-1.0	--
Zingiber officinale	Root	570.0	3110.0	-0.5755610272389462	USDA's Ag Handbook 8 and sequelae)