

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for ALANINE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Glycine max	Seed	17190.0	18795.0	1.8364311043346604	USDA's Ag Handbook 8 and sequelae)
Juglans cinerea	Seed	13724.0	14194.0	0.8583505440524668	--
Lupinus albus	Seed	12960.0	14470.0	0.9170226228696556	--
Pinus pinea	Seed	12540.0	15000.0	1.029690020598315	--
Sinapis alba	Seed	11870.0	12700.0	0.5407560304550756	--
Papaver somniferum	Seed	11780.0	12637.0	0.5273634907250652	--
Lens culinaris	Seed	11720.0	13200.0	0.6470460283123016	USDA's Ag Handbook 8 and sequelae)
Vigna angularis	Seed	11600.0	13401.0	0.6897746074509065	--
Cucurbita pepo	Seed	11580.0	24420.0	3.0321935802284528	--
Helianthus annuus	Seed	11170.0	11800.0	0.3494340343120688	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	11090.0	12111.0	0.41554641297926337	USDA's Ag Handbook 8 and sequelae)
Juglans nigra	Seed	10610.0	11095.0	0.1995651373333798	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Seed	10500.0	11545.0	0.2952261354048832	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Seed	10400.0	11346.0	0.25292271625770724	--
Arachis hypogaea	Seed	10390.0	12137.0	0.4210734928678391	--
Cucurbita foetidissima	Seed	10130.0	17100.0	1.4761080115986642	--
Pistacia vera	Seed	9940.0	10340.0	0.039067240568968556	--
Vigna unguiculata	Seed	9830.0	12175.0	0.4291515327049883	--
Prunus dulcis	Seed	9430.0	9864.0	-0.06212083739111058	USDA's Ag Handbook 8 and sequelae)
Carum carvi	Seed	9140.0	10150.0	-0.0013229586167773184	Revised USDA data received 1993.
Phaseolus vulgaris	Seed	9050.0	10171.0	0.003141221293226173	USDA's Ag Handbook 8 and sequelae)
Trigonella foenum-graecum	Seed	8720.0	11220.0	0.22613763679768628	--
Cicer arietinum	Seed	8280.0	9360.0	-0.16926115523119437	USDA's Ag Handbook 8 and sequelae)
Cajanus cajan	Seed	8170.0	10870.0	0.1517346382976281	--
Nigella sativa	Seed	8000.0	10255.0	0.020997940933240138	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Foeniculum vulgare	Fruit	7890.0	8655.0	1.9445066148830974	--
Foeniculum vulgare	Seed	7890.0	8655.0	-0.319130052209883	USDA's Ag Handbook 8 and sequelae)
Secale cereale	Seed	7110.0	7985.0	-0.46155864933856583	USDA's Ag Handbook 8 and sequelae)
Anacardium occidentale	Seed	7020.0	7141.0	-0.6409761657215634	--
Papaver bracteatum	Seed	7000.0	8650.0	-0.3201929521884553	--
Pinus edulis	Seed	6050.0	6430.0	-0.7921205426745387	USDA's Ag Handbook 8 and sequelae)
Bertholletia excelsa	Seed	5700.0	5897.0	-0.9054256803903415	USDA's Ag Handbook 8 and sequelae)
Sesamum indicum	Seed	5510.0	14802.0	0.9875991814468537	--
Oenothera biennis	Seed	5500.0	5870.0	-0.9111653402746318	--
Mucuna pruriens	Seed	5475.0	11600.0	0.30691803516917804	--
Moringa oleifera	Shoot	5320.0	24930.0	1.0	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Tuber	3970.0	9319.0	1.557710779605233	--
Lens culinaris	Sprout Seedling	3560.0	11865.0	-0.4950179055736652	USDA's Ag Handbook 8 and sequelae)
Calathea allouia	Root	3545.0	3900.0	0.22555458337068118	--
Acacia farnesiana	Leaf	3440.0	18450.0	1.3615480815328946	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Artocarpus altilis	Seed	3360.0	7685.0	-0.5253326480529015	USDA's Ag Handbook 8 and sequelae)
Macadamia spp	Seed	3290.0	3385.0	-1.4394266296250449	USDA's Ag Handbook 8 and sequelae)
Chenopodium album	Plant	3220.0	20511.0	1.1026806613709943	--
Triticum aestivum	Seed	3036.0	3542.0	-1.406051570297876	--
Rehmannia glutinosa	Root	3000.0	9000.0	2.736543589307772	--
Zea mays	Seed	2950.0	12272.0	0.44977179228929015	USDA's Ag Handbook 8 and sequelae)
Cnidioscolus chayamansa	Leaf	2850.0	14260.0	0.3869898898654339	--
Phaseolus lunatus	Seed	2600.0	12190.0	0.4323402326407051	USDA's Ag Handbook 8 and sequelae)
Corchorus oleriorius	Leaf	2560.0	20840.0	1.917441656254907	--
Castanea dentata	Seed	2469.0	4395.0	-1.2247208339534483	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pisum sativum</i>	Seed	2400.0	11353.0	0.2544107762277084	--
<i>Ginkgo biloba</i>	Seed	2400.0	6745.0	-0.7251578440244862	USDA's Ag Handbook 8 and sequelae)
<i>Nelumbo nucifera</i>	Seed	2390.0	7242.0	-0.6195055861544037	--
<i>Vicia faba</i>	Seed	2280.0	12000.0	0.3919500334549592	USDA's Ag Handbook 8 and sequelae)
<i>Castanea mollissima</i>	Seed	2012.0	3581.0	-1.3977609504650124	--
<i>Mentha x piperita</i>	Leaf	1950.0	9135.0	-0.8050413111598015	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus vulgaris</i>	Sprout Seedling	1740.0	18710.0	1.3947743775561388	USDA's Ag Handbook 8 and sequelae)
<i>Rosmarinus officinalis</i>	Leaf	1720.0	5335.0	-1.688888835822415	USDA's Ag Handbook 8 and sequelae)
<i>Psophocarpus tetragonolobus</i>	Leaf	1720.0	7430.0	-1.2016097399886847	--
<i>Mentha spicata</i>	Leaf	1710.0	11835.0	-0.1770443857416287	USDA's Ag Handbook 8 and sequelae)
<i>Cocos nucifera</i>	Seed	1700.0	3205.0	-1.4776910288536462	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>sabellica</i> l.	Leaf	1660.0	10680.0	-0.4456875149482915	--
<i>Asparagus officinalis</i>	Seed	1440.0	18581.0	1.7909389852517676	--
<i>Spinacia oleracea</i>	Plant	1420.0	16864.0	0.5700171464175169	USDA's Ag Handbook 8 and sequelae)
<i>Amaranthus</i> sp.	Leaf	1390.0	16722.0	0.9596300492652641	--
<i>Castanea sativa</i>	Seed	1380.0	3036.0	-1.5136170481293887	--
<i>Nasturtium officinale</i>	Herb	1370.0	27400.0	1.0	USDA's Ag Handbook 8 and sequelae)
<i>Allium schoenoprasum</i>	Leaf	1260.0	15830.0	0.7521584724234085	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Leaf	1180.0	12673.0	0.017867252591863454	--
<i>Brassica oleracea</i> var. <i>italica</i>	Leaf	1180.0	12673.0	0.017867252591863454	USDA's Ag Handbook 8 and sequelae)
<i>Solanum tuberosum</i>	Tuber	1140.0	5700.0	0.16439508227667685	--
<i>Ipomoea aquatica</i>	Leaf	1090.0	14475.0	0.4369970524450292	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Flower	1050.0	13565.0		--
<i>Vigna radiata</i>	Sprout Seedling	990.0	10399.0	-0.8997564719824734	USDA's Ag Handbook 8 and sequelae)
<i>Persea americana</i>	Fruit	960.0	4625.0	0.36060329846493017	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Valerianella locusta	Plant	880.0	12220.0	-0.10826345776234306	--
Manihot esculenta	Root	870.0	2765.0	-0.333263558146691	--
Brassica chinensis	Leaf	860.0	18378.0	1.3448014968550768	--
Brassica rapa	Leaf	860.0	18378.0	1.3448014968550768	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Fruit	840.0	8633.0	1.9358599962823033	USDA's Ag Handbook 8 and sequelae)
Capsicum frutescens	Fruit	820.0	6691.0	1.172599390703127	USDA's Ag Handbook 8 and sequelae)
Basella alba	Leaf	750.0	10870.0	-0.40149513871516085	--
Abelmoschus esculentus	Fruit	730.0	7300.0	1.4119535146978326	USDA's Ag Handbook 8 and sequelae)
Colocasia esculenta	Root	730.0	2485.0	-0.47112177808049205	--
Prunus armeniaca	Fruit	680.0	4980.0	0.5001282804322874	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. viridis l.	Leaf	670.0	10981.0	-0.3756774873368582	--
Cichorium endivia	Leaf	620.0	9984.0	-0.6075711668338649	--
Cucurbita spp	Fruit	620.0	9810.0	2.3984540914247807	--
Daucus carota	Root	590.0	4830.0	0.6834408138650919	--
Pisum sativum	Fruit	580.0	5737.0	0.797650565923243	--
Portulaca oleracea	Herb	570.0	13400.0	-1.0	--
Lactuca sativa	Leaf	560.0	9333.0	-0.7589882032958022	--
Beta vulgaris	Root	560.0	4338.0	0.4412042274099843	USDA's Ag Handbook 8 and sequelae)
Sechium edule	Fruit	560.0	8000.0	1.6870731974503679	--
Dioscorea pentaphylla	Root	550.0	2965.0	-0.2347934010511188	--
Nelumbo nucifera	Rhizome	540.0	2585.0	1.0	--
Asimina triloba	Fruit	523.0	5331.0	0.6380811499267729	--
Murraya sp	Fruit	510.0	1469.0	-0.8797934426307861	--
Mangifera indica	Fruit	510.0	5650.0	0.7634571196382851	--
Musa x paradisiaca	Fruit	510.0	1469.0	-0.8797934426307861	USDA's Ag Handbook 8 and sequelae)
Ficus carica	Fruit	450.0	2154.0	-0.6105691816515194	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Brassica oleracea var. capitata l.	Leaf	420.0	5615.0	-1.623763228742012	USDA's Ag Handbook 8 and sequelae)
Solanum melongena	Fruit	420.0	6815.0	1.2213348773621473	--
Prunus persica	Fruit	420.0	3402.0	-0.12007009011557077	--
Lablab purpureus	Seed	420.0	11775.0	0.3441195344192075	--
Psidium guajava	Fruit	410.0	2952.0	-0.2969327433136292	USDA's Ag Handbook 8 and sequelae)
Pachyrhizus erosus	Tuber	380.0	3500.0	-0.6826053416312601	--
Brassica rapa	Root	350.0	4305.0	0.42495665148921485	--
Capsicum annuum	Fruit	350.0	4774.0	0.41916448807939843	--
Allium cepa	Bulb	330.0	8597.0	1.0	USDA's Ag Handbook 8 and sequelae)
Brassica napus var. napobrassica	Root	330.0	3190.0	-0.12401447431860009	USDA's Ag Handbook 8 and sequelae)
Fragaria spp	Fruit	310.0	3677.0	-0.011987357605646181	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Rhizome	310.0	1793.0	-1.0	--
Zingiber officinale	Root	310.0	1793.0	-0.8118285216311718	USDA's Ag Handbook 8 and sequelae)
Ipomoea batatas	Root	300.0	3314.0	-0.06296297691934533	--
Sambucus canadensis	Fruit	300.0	1485.0	-0.8735049927392996	--
Prunus domestica	Fruit	290.0	1959.0	-0.6872096647040113	USDA's Ag Handbook 8 and sequelae)
Psidium cattleianum	Fruit	290.0	1500.0	-0.867609570966031	--
Cucurbita pepo	Fruit	280.0	3333.0	-0.14718903027260638	USDA's Ag Handbook 8 and sequelae)
Vitis vinifera	Fruit	280.0	1440.0	-0.8911912580591054	USDA's Ag Handbook 8 and sequelae)
Vaccinium corymbosum	Fruit	280.0	1820.0	-0.7418405731363005	--
Arctium lappa	Root	250.0	1250.0	-1.0791749981456504	USDA's Ag Handbook 8 and sequelae)
Phyllanthus emblica	Fruit	240.0	1190.0	-0.9894482876135823	--
Raphanus sativus	Root	220.0	4265.0	0.40526262007010044	--
Apium graveolens	Pt	220.0	4665.0		USDA's Ag Handbook 8 and sequelae)
Panax quinquefolius	Plant	209.0	2250.0	-1.5644343500261684	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cucumis sativus	Fruit	180.0	4557.0	0.3338773864261125	--
Ananas comosus	Fruit	170.0	1259.0	-0.9623293474565466	USDA's Ag Handbook 8 and sequelae)
Carica papaya	Fruit	140.0	1253.0	-0.9646875161658541	USDA's Ag Handbook 8 and sequelae)
Pyrus communis	Fruit	130.0	803.0	-1.1415501693639125	--
Phoenix dactylifera	Fruit	80.0	1290.0	-0.9501454757917915	--
Malus domestica	Fruit	70.0	435.0	-1.2861845168681025	USDA's Ag Handbook 8 and sequelae)
Citrus reticulata	Fruit	70.0	2740.0	-0.3802547043758256	--
Lycopersicon esculentum	Fruit	30.0	4132.0	0.16684043618350175	--
Citrus sinensis	Fruit	30.0	3775.0	0.02652939797970876	--
Allium sativum var. sativum	Bulb	6.15	7000.0	-1.0	--
Cryptotaenia japonica	Shoot				--
Cryptotaenia japonica	Root				--
Stachys officinalis	Shoot				--
Angelica sinensis	Root				Jim Duke's personal files.
Citrullus lanatus	Fruit		2000.0	-0.6710955118570772	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrullus lanatus	Seed		15000.0	1.029690020598315	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Alpinia galanga	Leaf				--
Cannabis sativa	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
Anastatica hierochuntica	Fruit				--
Lepidium meyenii	Root		6310.0	1.412119976372326	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Crocus sativus	Bulb				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ceratonia siliqua	Seed		19270.0	1.937406602299025	--
Cocos nucifera	Endosperm				Jim Duke's personal files.
Cocos nucifera	Leaf				Jim Duke's personal files.
Citrus paradisi	Fruit		90.0	-1.4217792176532806	--
Lycium barbarum	Fruit		3700.0	-0.002947710886634307	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Ocimum basilicum	Leaf		7470.0	-1.1923060818343414	USDA's Ag Handbook 8 and sequelae)
Thymus vulgaris	Plant				Stitt, Paul. Why George should eat broccoli.
Artemisia dracunculus	Plant				Stitt, Paul. Why George should eat broccoli.
Senna obtusifolia	Seed		6500.0	-0.777239942974527	--
Psoralea esculenta	Root		1139.0	-1.1338259353336928	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.
Theobroma cacao	Seed		10400.0	0.051822040311835675	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Astragalus membranaceus	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Momordica charantia	Seed		157.7	-2.125486049794296	Jim Duke's personal files.
Opuntia ficus-indica	Bud		7180.0		Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Momordica charantia	Fruit				Jim Duke's personal files.
Opuntia ficus-indica	Seed		8480.0	-0.35633155145991213	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Juglans regia	Seed				USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Helianthus tuberosus	Tuber		2573.0	-1.0395005202506498	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.
Perideridia gairdneri	Root		2603.0	-0.41302438539410447	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.
Althaea officinalis	Root				--
Lycopodium clavatum	Pollen Or Spore				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Allium ampeloprasum	Plant				--
Pisum sativum	Shoot		313.0	-1.0	--
Myrciaria dubia	Fruit				Jim Duke's personal files.
Avena sativa	Seed		4000.0	-1.3086899322606569	Jim Duke's personal files.*
Borago officinalis	Leaf				Jim Duke's personal files.
Linum usitatissimum	Seed		0.254	-2.158955919799553	--
Urtica dioica	Leaf				Jim Duke's personal files.
Panax ginseng	Root				--
Panax ginseng	Leaf				--
Salvia officinalis	Plant				Stitt, Paul. Why George should eat broccoli.
Canavalia ensiformis	Seed				--
Valeriana officinalis	Root				--
Valeriana officinalis	Rhizome				--
Lippia javanica	Plant				Neidlein, R., Staehle, R. 1974. Constituents of Lippia javanica. III. Deutsche Apot. Ztit., 114: 1588.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Dryopteris marginalis	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Glycine max	Shoot				--
Camellia sinensis	Plant				--
Harpagophytum procumbens	Root		60.0	-1.665072432864305	--
Angelica archangelica	Leaf				--
Santalum album	Fruit				--
Coriandrum sativum	Fruit				--
Tilia sp.	Flower				--
Fagopyrum esculentum	Seed		6880.0	-0.6964595446030353	--
Aloe vera	Leaf		15769.0	0.737970393738035	--
Lentinus edodes	Fruit				--
Lycium chinense	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.