

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for PROLINE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Santalum album	Fruit				--
Zea mays	Root		69.0	-1.2553270966850225	--
Zea mays	Shoot		11.0	-0.7071737762939713	--
Linum usitatissimum	Seed		0.191	-2.226996902840283	--
Rosa damascena	Pollen Or Spore				--
Allium sativum var. sativum	Leaf				--
Fagopyrum esculentum	Seed		5965.0	-1.0551551244383455	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Silybum marianum	Tissue Culture				--
Passiflora incarnata	Plant				--
Vigna unguiculata	Seed		14050.0	0.5332177435578753	--
Avena sativa	Root		2.4	-1.2997594393680416	--
Avena sativa	Shoot		1.3	-0.7081532669989642	--
Lycopersicon esculentum	Root		541.0	-0.940431214607169	--
Morus alba	Leaf				--
Angelica sinensis	Root				Jim Duke's personal files.
Anastatica hierochuntica	Plant				--
Lentinus edodes	Fruit				--
Melia azedarach	Seed				--
Glycine max	Shoot				--
Lycium barbarum	Fruit		6500.0	0.6843480896141092	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Pisum sativum	Root		575.0	-0.9177480366608831	--
Pisum sativum	Shoot		23.0	-0.7059620352156295	--
Aloe vera	Leaf		3339.0	-1.1450504019821863	--
Coriandrum sativum	Fruit				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ceratonia siliqua	Seed		18800.0	1.4663990822074793	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Alpinia galanga	Leaf				--
Lepidium meyenii	Root		50.0	-1.2680029902432413	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Psoralea esculenta	Root		1266.0	-0.45674580251724606	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.
Cocos nucifera	Leaf				Jim Duke's personal files.
Citrullus lanatus	Fruit		2827.0	-0.3240363604117524	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrullus lanatus	Seed		11800.0	0.09118447788174708	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Astragalus membranaceus	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Crocus sativus	Bulb				--
Senna obtusifolia	Seed		5360.0	-1.1740129580979266	--
Capsella bursa-pastoris	Plant				--
Terminalia chebula	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Prunus cerasus	Fruit				--
Perideridia gairdneri	Root		5524.0	2.3839886591088133	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Prosopis glandulosa	Leaf				Carman, N. J., Dossaji, S. F., Mabry, T. J. 1974. A Populational Survey of Amino Acids in Prosopis Species from North and South America. Biochem. Syst. Ecol. 2: 73.
Myrciaria dubia	Fruit				Jim Duke's personal files.
Tamarindus indica	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Helianthus tuberosus	Tuber		2573.0	-0.9342964673469841	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.
Panax ginseng	Root				--
Panax ginseng	Leaf				--
Vigna unguiculata	Seed		14050.0	0.5332177435578753	--
Triticum aestivum	Root		173.0	-1.1859432582610887	--
Triticum aestivum	Shoot		12.0	-0.7070727978707761	--
Lycopodium clavatum	Pollen Or Spore				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Glechoma hederacea	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Opuntia ficus-indica	Bud		3995.0		Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Opuntia ficus-indica	Seed		10500.0	-0.16421252006446033	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Lippia javanica	Plant				Neidlein, R., Staehle, R. 1974. Constituents of Lippia javanica. III. Deutsche Apot. Ztit., 114: 1588.
Punica granatum	Fruit				--
Artemisia dracuncululus	Leaf				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Scutellaria baicalensis	Root				--
Momordica charantia	Fruit				Jim Duke's personal files.
Humulus lupulus	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Citrus paradisi	Fruit		590.0	-0.9381817496597383	--
Theobroma cacao	Seed		7200.0	-0.8125279763894483	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hypericum perforatum	Plant				--
Urtica dioica	Leaf				Jim Duke's personal files.
Camellia sinensis	Leaf				--
Allium ampeloprasum	Plant				--
Ocimum basilicum	Leaf		5880.0	-0.7770140055446013	USDA's Ag Handbook 8 and sequelae)
Ribes nigrum	Fruit Juice		98.0		--
Artemisia dracunculus	Root				--
Harpagophytum procumbens	Root				--
Allium sativum var. sativum	Bulb	1.3	5800.0	1.0	--
Malus domestica	Plant	20.0	435.0	-1.0472597877182985	--
Ananas comosus	Fruit	31.0	963.0	-0.8357784281624211	--
Murraya sp	Fruit	50.0	1440.0	-0.7048229741296588	--
Hordeum vulgare	Root	57.0	219.0	-1.1552542528043488	--
Citrus sinensis	Fruit	60.0	3473.0	-0.14668369100889192	--
Carica papaya	Fruit	100.0	895.0	-0.8544471302048274	USDA's Ag Handbook 8 and sequelae)
Pyrus communis	Fruit	110.0	679.0	-0.9137477131630594	--
Phoenix dactylifera	Fruit	120.0	1590.0	-0.6636420137419976	--
Cucumis sativus	Fruit	120.0	3038.0	-0.2661084761331091	--
Lycopersicon esculentum	Fruit	170.0	2810.0	-0.32870353592235396	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Apium graveolens</i>	Leaf	170.0	3208.0	-1.1640243366273353	USDA's Ag Handbook 8 and sequelae)
<i>Panax quinquefolius</i>	Plant	175.0	1120.0	-0.9274280071141	--
<i>Mangifera indica</i>	Fruit	180.0	2000.0	-0.551080722015724	--
<i>Psidium cattleianum</i>	Fruit	180.0	930.0	-0.8448382394477065	--
<i>Raphanus sativus</i>	Root	180.0	3490.0	1.0270008960868768	--
<i>Fragaria spp</i>	Fruit	190.0	1898.0	-0.5790837750793335	USDA's Ag Handbook 8 and sequelae)
<i>Vitis vinifera</i>	Fruit	220.0	1132.0	-0.7893812127923229	USDA's Ag Handbook 8 and sequelae)
<i>Vaccinium corymbosum</i>	Fruit	250.0	1624.0	-0.6543076627207944	--
<i>Psidium guajava</i>	Fruit	250.0	1800.0	-0.6059886691992721	USDA's Ag Handbook 8 and sequelae)
<i>Sambucus canadensis</i>	Fruit	250.0	1238.0	-0.7602800007850423	USDA's Ag Handbook 8 and sequelae)
<i>Averrhoa carambola</i>	Fruit	260.0	2860.0	-0.31497654912646694	USDA's Ag Handbook 8 and sequelae)
<i>Cucurbita pepo</i>	Fruit	260.0	17100.0	3.5944692903421607	--
<i>Asimina triloba</i>	Fruit	282.0	3648.0	-0.0986392372232873	--
<i>Prunus persica</i>	Fruit	290.0	2349.0	-0.45526635418043243	--
<i>Daucus carota</i>	Root	290.0	2375.0	0.28312608990720195	--
<i>Brassica chinensis</i>	Leaf	310.0	6625.0	-0.6691088047000515	--
<i>Citrus reticulata</i>	Fruit	310.0	2499.0	-0.4140853937927713	USDA's Ag Handbook 8 and sequelae)
<i>Brassica rapa</i>	Leaf	310.0	6625.0	-0.6691088047000515	USDA's Ag Handbook 8 and sequelae)
<i>Prunus domestica</i>	Fruit	340.0	2297.0	-0.469542420448155	USDA's Ag Handbook 8 and sequelae)
<i>Capsicum annuum</i>	Fruit	370.0	5047.0	0.28544185332563193	--
<i>Allium cepa</i>	Bulb	370.0	4033.0	-1.0	USDA's Ag Handbook 8 and sequelae)
<i>Cucurbita spp</i>	Fruit	370.0	5855.0	0.5072699599471664	--
<i>Beta vulgaris</i>	Root	380.0	2997.0	0.6980948158657292	USDA's Ag Handbook 8 and sequelae)
<i>Musa x paradisiaca</i>	Fruit	400.0	1554.0	-0.6735254442350362	USDA's Ag Handbook 8 and sequelae)
<i>Zingiber officinale</i>	Rhizome	410.0	2376.0	-1.0	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Root	410.0	2376.0	0.2837932421997398	USDA's Ag Handbook 8 and sequelae)
Abelmoschus esculentus	Fruit	450.0	14930.0	2.9987180634006636	--
Solanum melongena	Fruit	460.0	5700.0	0.4647163008799166	--
Pachyrhizus erosus	Tuber	470.0	4330.0	-0.5931933207228488	--
Sechium edule	Fruit	480.0	6855.0	0.7818096958649071	--
Lactuca sativa	Leaf	480.0	8000.0	-0.4699549105238691	--
Dioscorea pentaphylla	Root	480.0	2585.0	0.42322807134014523	--
Ficus carica	Fruit	490.0	2346.0	-0.4560899733881857	USDA's Ag Handbook 8 and sequelae)
Arctium lappa	Root	520.0	2600.0	0.43323535572821265	USDA's Ag Handbook 8 and sequelae)
Portulaca oleracea	Herb	540.0	13200.0	-1.0	--
Cichorium endivia	Leaf	590.0	9500.0	-0.2526961168771247	--
Colocasia esculenta	Root	600.0	2045.0	0.0629658333697197	--
Persea americana	Fruit	620.0	2993.0	-0.27846276424940747	--
Cnidoscopus chayamansa	Leaf	620.0	3100.0	-1.179666969769901	--
Pisum sativum	Fruit	630.0	6231.0	0.6104969006522369	--
Phyllanthus emblica	Fruit	652.0	3225.0	-0.2147695455164916	--
Brassica oleracea var. viridis l.	Leaf	670.0	10981.0	-0.038189267949905695	--
Phaseolus vulgaris	Fruit	680.0	6989.0	0.8185980204778843	USDA's Ag Handbook 8 and sequelae)
Basella alba	Leaf	700.0	10145.0	-0.15927483560902458	--
Ipomoea batatas	Root	710.0	2840.0	0.5933519059372906	--
Solanum tuberosum	Tuber	740.0	6700.0	-0.13308264485534704	--
Manihot esculenta	Root	760.0	2415.0	0.309812181608715	--
Valerianella locusta	Plant	780.0	10830.0	0.7712093500636632	--
Brassica oleracea var. botrytis l.	Flower	860.0	11110.0		--
Capsicum frutescens	Fruit	870.0	7099.0	0.8487973914288358	--
Ipomoea aquatica	Leaf	880.0	11685.0	0.06377752586829968	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Nasturtium officinale</i>	Herb	960.0	19200.0	1.0	USDA's Ag Handbook 8 and sequelae)
<i>Castanea sativa</i>	Seed	1010.0	2222.0	-1.7905020192942334	--
<i>Prunus armeniaca</i>	Fruit	1010.0	7400.0	0.9314338519400758	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus lunatus</i>	Seed	1020.0	10855.0	-0.09446949370222676	--
<i>Lablab purpureus</i>	Seed	1070.0	12822.0	0.29196581011330397	--
<i>Spinacia oleracea</i>	Plant	1120.0	13301.0	1.2034784447687357	USDA's Ag Handbook 8 and sequelae)
<i>Corchorus olitorius</i>	Leaf	1130.0	20052.0	1.2756470768298402	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Leaf	1140.0	12244.0	0.14474263630065312	--
<i>Brassica oleracea</i> var. <i>italica</i>	Leaf	1140.0	12244.0	0.14474263630065312	USDA's Ag Handbook 8 and sequelae)
<i>Amaranthus</i> sp.	Leaf	1210.0	14556.0	0.4796108569081685	--
<i>Mentha spicata</i>	Leaf	1350.0	9345.0	-0.27514619222062164	USDA's Ag Handbook 8 and sequelae)
<i>Rosmarinus officinalis</i>	Leaf	1360.0	4220.0	-1.0174470705136651	USDA's Ag Handbook 8 and sequelae)
<i>Nelumbo nucifera</i>	Rhizome	1360.0	6500.0	1.0	--
<i>Cocos nucifera</i>	Seed	1380.0	2605.0	-1.7152581345146969	USDA's Ag Handbook 8 and sequelae)
<i>Mentha x piperita</i>	Leaf	1540.0	7215.0	-0.5836536791989987	USDA's Ag Handbook 8 and sequelae)
<i>Asparagus officinalis</i>	Shoot	1620.0	20903.0	1.4024674410990334	--
<i>Castanea mollissima</i>	Seed	1632.0	2904.0	-1.6565168249870692	--
<i>Psophocarpus tetragonolobus</i>	Leaf	1680.0	7257.0	-0.5775704329768899	--
<i>Phaseolus vulgaris</i>	Sprout Seedling	1690.0	18172.0	1.0	USDA's Ag Handbook 8 and sequelae)
<i>Pisum sativum</i>	Seed	1730.0	8183.0	-0.6194085540962777	--
<i>Allium schoenoprasum</i>	Leaf	1850.0	23125.0	1.7207379254141373	USDA's Ag Handbook 8 and sequelae)
<i>Brassica oleracea</i> var. <i>sabellica</i> l.	Leaf	1960.0	12610.0	0.19775378195045876	--
<i>Castanea dentata</i>	Seed	2141.0	3811.0	-1.478328304112292	--
<i>Chenopodium album</i>	Leaf	2230.0	14205.0	0.42877229919483034	--
<i>Brassica oleracea</i> var. <i>capitata</i> l.	Leaf	2380.0	31821.0	2.980259571782197	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vicia faba	Seed	2520.0	13265.0	0.37899724864420387	USDA's Ag Handbook 8 and sequelae)
Calathea allouia	Root	2610.0	2870.0	0.6133664747134254	--
Zea mays	Seed	2920.0	12147.0	0.15935583041046553	--
Rehmannia glutinosa	Root	3000.0	4000.0	1.3672485652811677	--
Nelumbo nucifera	Seed	3440.0	10424.0	-0.17914342148285398	--
Ginkgo biloba	Seed	3470.0	9475.0	-0.3655832299835854	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Sprout Seedling	3560.0	11865.0	-1.0	USDA's Ag Handbook 8 and sequelae)
Artocarpus altilis	Seed	3690.0	8440.0	-0.5689185321946043	USDA's Ag Handbook 8 and sequelae)
Macadamia spp	Seed	3960.0	4075.0	-1.426463067606293	USDA's Ag Handbook 8 and sequelae)
Acacia farnesiana	Leaf	4080.0	21890.0	1.5418615186449842	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Moringa oleifera	Shoot	4510.0	21135.0	1.4258944352803073	USDA's Ag Handbook 8 and sequelae)
Juglans regia	Seed	5530.0	5740.0	-1.0993584510059582	USDA's Ag Handbook 8 and sequelae)
Oenothera biennis	Seed	5900.0	6297.0	-0.9899306603474678	--
Pinus edulis	Seed	6220.0	6610.0	-0.9284389216111886	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Tuber	6790.0	15939.0	1.66057243292518	--
Papaver bracteatum	Seed	6800.0	8400.0	-0.57677690136218	--
Anacardium occidentale	Seed	6900.0	7019.0	-0.848087096872728	--
Bertholletia excelsa	Seed	7620.0	7884.0	-0.6781498636239054	USDA's Ag Handbook 8 and sequelae)
Cicer arietinum	Seed	7970.0	16530.0	1.0204366319475633	--
Sesamum indicum	Seed	8100.0	14277.0	0.5778139885838669	--
Cucurbita foetidissima	Seed	8290.0	15390.0	0.7964731106716583	--
Vigna angularis	Seed	8740.0	10097.0	-0.24338558942778463	--
Foeniculum vulgare	Seed	9000.0	9873.0	-0.28739245676620806	USDA's Ag Handbook 8 and sequelae)
Foeniculum vulgare	Fruit	9000.0	9873.0	1.6103706188646485	--
Phaseolus vulgaris	Seed	9160.0	10294.0	-0.20468312127747473	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Carum carvi	Seed	9170.0	10180.0	-0.2270794734050652	Revised USDA data received 1993.
Mucuna pruriens	Seed	9225.0	19555.0	1.614725800245469	--
Juglans nigra	Seed	9370.0	9800.0	-0.30173398049703354	USDA's Ag Handbook 8 and sequelae)
Pistacia vera	Seed	9470.0	9851.0	-0.29171455980837463	--
Cajanus cajan	Seed	9550.0	11830.0	0.09707825475742879	--
Cucurbita pepo	Seed	10000.0	10743.0	-0.11647292737143848	USDA's Ag Handbook 8 and sequelae)
Papaver somniferum	Seed	10620.0	11392.0	0.011029112372475834	--
Vigna radiata	Seed	10950.0	12090.0	0.14815765434667028	USDA's Ag Handbook 8 and sequelae)
Nigella sativa	Seed	11350.0	14520.0	0.6255535812768888	--
Arachis hypogaea	Seed	11540.0	15362.0	0.7909722522543554	--
Lens culinaris	Seed	11720.0	13200.0	0.36622739874689353	USDA's Ag Handbook 8 and sequelae)
Helianthus annuus	Seed	11820.0	12500.0	0.2287059383143203	--
Trigonella foenum-graecum	Seed	11980.0	17800.0	1.269939853018089	--
Juglans cinerea	Seed	12360.0	12787.0	0.2850897370916753	--
Prunus dulcis	Seed	12550.0	13127.0	0.351885875016068	USDA's Ag Handbook 8 and sequelae)
Pinus pinea	Seed	12900.0	13900.0	0.5037488591794668	--
Lupinus albus	Seed	14760.0	16480.0	1.0106136704880937	--
Secale cereale	Seed	14910.0	16745.0	1.0626753662232822	USDA's Ag Handbook 8 and sequelae)
Triticum aestivum	Seed	17526.0	20447.0	1.789967432682405	--
Psophocarpus tetragonolobus	Seed	19240.0	20991.0	1.8968412533614334	--
Sinapis alba	Seed	19440.0	20800.0	1.8593175405862599	--
Glycine max	Seed	21350.0	23344.0	2.3591098196440687	USDA's Ag Handbook 8 and sequelae)