

C GLYCINE

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GLYCINE

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	Fruit	440	4400	0.30769740137959467	USDA's Ag Handbook 8 and sequelae)
Acacia farnesiana	Leaf	2720	14590	1.1085158262772645	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.
Allium cepa	Bulb	490	5341	1	--
Allium sativum var. sativum	Bulb	2000	4800	-1	--
Allium sativum var. sativum	Leaf	--	--		--
Allium schoenoprasum	Leaf	1390	17375	1.8481537597591051	USDA's Ag Handbook 8 and sequelae)
Aloe vera	Leaf	5030	5030	-1.4304208502349065	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Alpinia galanga	Leaf	--	--		--
Amaranthus sp.	Leaf	1320	15880	1.45111293011625	--
Anacardium occidentale	Seed	8030	8169	-0.4024005622319234	--
Ananas comosus	Fruit	65	1259	-0.9073607916848047	--
Angelica sinensis	Root	--	--		Jim Duke's personal files.
Apium graveolens	Pt	210	4290		USDA's Ag Handbook 8 and sequelae)
Arachis hypogaea	Seed	15760	18993	1.1625612782547456	--
Arctium lappa	Root	310	1550	-0.9327345082827507	USDA's Ag Handbook 8 and sequelae)
Artemisia dracunculus	Shoot	--	--		--
Artemisia dracunculus	Root	--	--		--
Artemisia dracunculus	Leaf	--	--		--
Artocarpus altilis	Seed	4650	10635	-0.045859921189783166	USDA's Ag Handbook 8 and sequelae)
Asimina triloba	Fruit	389	3501	-0.040069970656347695	--
Asparagus officinalis	Shoot	990	12774	-1	--
Avena sativa	Seed	2000	2000	-1.294330495155266	Jim Duke's personal files.*
Averrhoa carambola	Fruit	260	2860	-0.28803313581211976	USDA's Ag Handbook 8 and sequelae)
Basella alba	Leaf	670	9710	-0.187510427005099	--
Bertholletia excelsa	Seed	6570	6797	-0.6007678613032196	USDA's Ag Handbook 8 and sequelae)
Beta vulgaris	Root	290	2287	-0.3761711380939947	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Borago officinalis	Leaf	--	--		Jim Duke's personal files.
Brassica chinensis	Leaf	430	9189	-0.3258771642920071	--
Brassica napus var. napobrassica	Root	270	2610	-0.1322498781605236	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. botrytis l.	Leaf	950	10203	-0.05657990592554876	--
Brassica oleracea var. botrytis l.	Flower	640	8270		--
Brassica oleracea var. capitata l.	Leaf	270	3610	-1.8075432436080534	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. sabellica l.	Leaf	1590	10232	-0.04887811056792816	--
Brassica oleracea var. viridis l.	Leaf	600	9834	-0.15457861237251436	--
Brassica rapa	Root	250	3075	0.2189061152421515	--
Brassica rapa	Leaf	430	9189	-0.3258771642920071	USDA's Ag Handbook 8 and sequelae)
Cajanus cajan	Seed	6860	8970	-0.2865899160540019	--
Calathea allouia	Root	3920	4310	1.151546226752482	--
Camellia sinensis	Leaf	--	--		--
Canavalia ensiformis	Seed	--	--		--
Capsicum annuum	Fruit	310	4228	0.24116126345948113	--
Capsicum frutescens	Fruit	740	6038	0.9413380636653274	USDA's Ag Handbook 8 and sequelae)
Carica papaya	Fruit	180	1611	-0.7711938117552699	USDA's Ag Handbook 8 and sequelae)
Carum carvi	Seed	13220	14675	0.5382536999822551	Revised USDA data received 1993.
Castanea dentata	Seed	2268	4038	-0.9996711981382823	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Castanea mollissima	Seed	1837	3271	-1.1105660366132708	--
Castanea sativa	Seed	1070	2353	-1.2432928445924616	--
Centella asiatica	Plant	--	--		=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
Ceratonia siliqua	Seed	24910	24910	2.0180564011445847	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Chenopodium album	Leaf	2490	15861	1.446066926261257	--
Cicer arietinum	Seed	8030	9075	-0.2714087452067088	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	580	9340	-0.2857747126023274	--
Citrullus lanatus	Fruit	1178	1178	-0.9386946705890442	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus paradisi	Fruit	--	--		--
Citrus reticulata	Fruit	20	5158	0.6009206138414905	--
Citrus sinensis	Fruit	50	7097	1.3509995174874219	--
Cnidioscolus chayamansa	Leaf	2170	10850	0.11524980429446952	--
Cocos nucifera	Endosperm	--	--		Jim Duke's personal files.
Cocos nucifera	Leaf	--	--		Jim Duke's personal files.
Cocos nucifera	Seed	1580	2980	-1.1526395672471974	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Colocasia esculenta	Root	740	2520	-0.20021555430297686	--
Corchorus olitorius	Leaf	2140	17420	1.8601048215209302	--
Coriandrum sativum	Fruit	--	--		--
Crocus sativus	Bulb	--	--		--
Cryptotaenia japonica	Root	--	--		--
Cucumis sativus	Fruit	190	4810	0.46630098595660957	--
Cucurbita foetidissima	Seed	14735	27700	2.421441797944086	--
Cucurbita pepo	Fruit	270	8000	1.700314241568018	--
Cucurbita pepo	Seed	17960	19295	4.087033113761383	--
Cucurbita spp	Fruit	440	6962	1.298776385980356	--
Daucus carota	Root	300	2455	-0.24930187596141531	--
Dioscorea pentaphylla	Root	460	2480	-0.23042252147740053	--
Echinacea purpurea	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Fagopyrum esculentum	Seed	9750	9750	-0.17381550404553908	--
Ficus carica	Fruit	250	1197	-0.9313447483769386	USDA's Ag Handbook 8 and sequelae)
Foeniculum vulgare	Fruit	11070	12144	3.303370959829359	--
Foeniculum vulgare	Seed	11070	12144	0.17231519127274303	USDA's Ag Handbook 8 and sequelae)
Fragaria spp	Fruit	240	2847	-0.2930620299572446	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ginkgo biloba	Seed	2320	5174	-0.6690108388262893	USDA's Ag Handbook 8 and sequelae)
Glycine max	Seed	16870	18445	1.0833300246898254	USDA's Ag Handbook 8 and sequelae)
Harpagophytum procumbens	Root	--	--		--
Helianthus annuus	Seed	14610	15400	0.6430760701183263	USDA's Ag Handbook 8 and sequelae)
Helianthus tuberosus	Tuber	2478	2478	-0.9589643883137438	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.
Ipomoea aquatica	Leaf	990	13150	0.7260818498988622	--
Ipomoea batatas	Root	580	2725	-0.045404847534055576	--
Juglans cinerea	Seed	15080	15601	0.6721371685974302	--
Juglans nigra	Seed	12030	12580	0.2353531959338838	USDA's Ag Handbook 8 and sequelae)
Juglans regia	Seed	7550	7835	-0.45069114378426517	USDA's Ag Handbook 8 and sequelae)
Lablab purpureus	Seed	10280	11345	0.056793710253817624	--
Lactuca sativa	Leaf	570	9500	-0.24328204856028268	--
Larrea tridentata	Plant	4200	4200	-0.21783927246057364	--
Lens culinaris	Sprout Seedling	3190	10635	-0.07650916912078726	USDA's Ag Handbook 8 and sequelae)
Lentinus edodes	Fruit	--	--		--
Lepidium meyenii	Root	--	6830	3.054585158741173	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Linum usitatissimum	Seed	--	0.352	-1.5834447610833413	--
Lupinus albus	Seed	15390	17185	0.9011559745223087	--
Lycium chinense	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Lycopersicon esculentum	Fruit	23	3637	0.012539998861881632	--
Macadamia spp	Seed	3710	3815	-1.0319131133663428	USDA's Ag Handbook 8 and sequelae)
Malus domestica	Plant	80	497	-0.8208359653564842	--
Mangifera indica	Fruit	210	1900	-0.6593976265290327	--
Manihot esculenta	Root	640	2030	-0.5702509021896668	--
Melia azedarach	Plant	--	--		--
Mentha spicata	Leaf	1580	10935	0.13782403206680577	USDA's Ag Handbook 8 and sequelae)
Mentha x piperita	Leaf	1800	8430	-0.5274517393414566	USDA's Ag Handbook 8 and sequelae)
Momordica charantia	Seed	--	38.2	-1.5779725996145	Jim Duke's personal files.
Moringa oleifera	Shoot	5170	24225	1	USDA's Ag Handbook 8 and sequelae)
Mucuna pruriens	Seed	7200	15265	0.6235574218860924	--
Murraya sp	Fruit	450	1296	-0.893047785271757	--
Musa x paradisiaca	Fruit	450	1296	-0.893047785271757	USDA's Ag Handbook 8 and sequelae)
Nasturtium officinale	Herb	1120	22400	1	USDA's Ag Handbook 8 and sequelae)
Nelumbo nucifera	Rhizome	1560	7464	1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Nelumbo nucifera	Seed	2210	6697	-0.6152261192530225	--
Nigella sativa	Seed	8840	20700	1.4093637414578815	--
Ocimum basilicum	Leaf	6900	6900	-0.9337878392435092	USDA's Ag Handbook 8 and sequelae)
Oenothera biennis	Seed	10500	11206	0.03669673170359155	--
Opuntia ficus-indica	Bud	4745	4745		Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Opuntia ficus-indica	Seed	14200	14200	0.4695769747206912	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Oryza sativa	Plant	--	--		--
Pachyrhizus erosus	Tuber	310	2855	-0.8182366442910574	--
Panax ginseng	Root	--	--		--
Panax ginseng	Leaf	--	--		--
Panax quinquefolius	Plant	23	1540	-0.6509937966580142	--
Papaver bracteatum	Seed	7750	9350	-0.23164853584475079	--
Papaver somniferum	Seed	11230	12047	0.15829068106143418	--
Perideridia gairdneri	Root	1842	1842	-0.712223647909458	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.
Persea americana	Fruit	660	3226	-0.14645042372629669	--
Phaseolus lunatus	Seed	2740	10090	-0.12465742701620912	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Phaseolus vulgaris	Fruit	650	6680	1.1896880668322627	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Seed	8430	9474	-0.21372029598699516	USDA's Ag Handbook 8 and sequelae)
Phaseolus vulgaris	Sprout Seedling	1440	15484	1.261205834725475	USDA's Ag Handbook 8 and sequelae)
Phoenix dactylifera	Fruit	40	3010	-0.2300074341376021	--
Phyllanthus emblica	Fruit	198	980	-1.0152885967994074	--
Pinellia ternata	Tuber	--	--		--
Pinus edulis	Seed	5890	6260	-0.6784087064936613	USDA's Ag Handbook 8 and sequelae)
Pinus pinea	Seed	12230	15000	0.5852430383191146	--
Pistacia vera	Seed	10950	11391	0.06344450891072696	--
Pisum sativum	Fruit	720	7122	1.360670467766508	--
Pisum sativum	Seed	1840	8704	-0.32504888220047773	--
Plantago ovata	Seed	--	--		--
Portulaca oleracea	Herb	460	11000	-1	--
Prunus armeniaca	Fruit	400	2930	-0.26095447503067815	USDA's Ag Handbook 8 and sequelae)
Prunus cerasus	Fruit	--	--		--
Prunus domestica	Fruit	120	811	-1.0806642206860306	USDA's Ag Handbook 8 and sequelae)
Prunus dulcis	Seed	12360	12929	0.285812516178696	USDA's Ag Handbook 8 and sequelae)
Prunus persica	Fruit	240	1944	-0.6423767540378408	--
Psidium cattleianum	Fruit	290	1500	-0.814132830994413	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Psidium guajava	Fruit	410	2952	-0.25244403878508226	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Leaf	1490	6436	-1.0570165649654388	--
Psophocarpus tetragonolobus	Seed	11400	12437	0.2146778870656656	--
Psophocarpus tetragonolobus	Tuber	3900	9155	1.533447141764445	--
Psoralea esculenta	Root	1097	1097	-1.2748284115330988	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.
Pyrus communis	Fruit	110	679	-1.1317268381596062	--
Raphanus sativus	Root	220	4265	1.1175633886812555	--
Rehmannia glutinosa	Root	1000	2000	-0.5929061275704846	--
Rosmarinus officinalis	Leaf	1590	4935	-1.4556508695098707	USDA's Ag Handbook 8 and sequelae)
Salvia officinalis	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
Sambucus canadensis	Fruit	360	1782	-0.7050445118463198	USDA's Ag Handbook 8 and sequelae)
Scutellaria baicalensis	Root	--	--		--
Secale cereale	Seed	7010	7870	-0.4456307535018341	USDA's Ag Handbook 8 and sequelae)
Sechium edule	Fruit	450	6430	1.0929785640414	--
Senna obtusifolia	Seed	6890	6890	-0.5873216814099028	--
Sesamum indicum	Seed	5890	19918	1.2963001642904226	--
Silybum marianum	Seed	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sinapis alba	Seed	13120	14038	0.4461545968420105	--
Solanum melongena	Fruit	320	5452	0.7146509891235451	--
Solanum tuberosum	Tuber	620	5700	0.24375389084035604	--
Spinacia oleracea	Plant	1340	15914	1.6896690344750718	USDA's Ag Handbook 8 and sequelae)
Stachys officinalis	Shoot	--	--		--
Theobroma cacao	Seed	900	900	-1.4533713326030981	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Thymus vulgaris	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
Tilia sp.	Fruit	--	--		--
Trigonella foenum-graecum	Seed	10630	14366	0.4935776829173641	--
Triticum aestivum	Seed	4830	5635	-0.7687728186799295	--
Urtica dioica	Leaf	--	--		Jim Duke's personal files.
Vaccinium corymbosum	Fruit	280	1819	-0.6907315054332721	--
Valerianella locusta	Leaf	790	10970	0.14711930232600304	--
Vicia faba	Seed	2300	12100	0.16595355777482973	USDA's Ag Handbook 8 and sequelae)
Vigna angularis	Seed	7560	8734	-0.32071140481553684	--
Vigna radiata	Seed	9540	10489	-0.06696897779649544	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Sprout Seedling	930	6618	-1.1846966656046878	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	--	8550	-0.3473145994431742	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vigna unguiculata	Seed	--	8550	-0.3473145994431742	--
Vitis vinifera	Fruit	200	1029	-0.9963335342523983	USDA's Ag Handbook 8 and sequelae)
Zea mays	Seed	1270	5283	-0.8196658866632359	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Rhizome	430	2486	-1	--
Zingiber officinale	Root	430	2486	-0.22589147640123697	USDA's Ag Handbook 8 and sequelae)
Zingiber officinale	Shoot	--	--		--
Zingiber officinale	Tuber	--	--		--