

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for HISTIDINE

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Abelmoschus esculentus</i>	Fruit	310.0	3100.0	0.9727269415226906	USDA's Ag Handbook 8 and sequelae)
<i>Acacia farnesiana</i>	Leaf	1840.0	9870.0	2.255186144347604	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Achillea millefolium</i>	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
<i>Aesculus hippocastanum</i>	Leaf				Jim Duke's personal files.
<i>Albizia lebeck</i>	Seed				Wealth of India.
<i>Allium cepa</i>	Bulb	190.0	2071.0	-1.0	USDA's Ag Handbook 8 and sequelae)
<i>Allium schoenoprasum</i>	Leaf	480.0	6090.0	0.3581707187383524	USDA's Ag Handbook 8 and sequelae)
<i>Allium ampeloprasum</i>	Plant				--
<i>Allium sativum</i> var. <i>sativum</i>	Bulb	2.4	8300.0	1.0	--
<i>Aloe vera</i>	Leaf		2327.0	-1.5303131560149847	--
<i>Alpinia galanga</i>	Leaf				--
<i>Amaranthus</i> sp.	Leaf	520.0	6256.0	0.4414788035666947	--
<i>Anacardium occidentale</i>	Seed	3990.0	4059.0	-0.5489975487982978	--
<i>Ananas comosus</i>	Fruit	48.0	667.0	-0.7330978320953143	--
<i>Anethum graveolens</i>	Seed	3200.0	3466.0	-0.7066452608029122	USDA's Ag Handbook 8 and sequelae)
<i>Anethum graveolens</i>	Fruit	3200.0	3466.0	1.229336833484955	--
<i>Angelica sinensis</i>	Root				Jim Duke's personal files.
<i>Apium graveolens</i>	Pt	110.0	2425.0		USDA's Ag Handbook 8 and sequelae)
<i>Arachis hypogaea</i>	Seed	6610.0	8013.0	0.5021644297282549	--
<i>Arctium lappa</i>	Root	310.0	1550.0	-0.235775973025123	USDA's Ag Handbook 8 and sequelae)
<i>Artocarpus altilis</i>	Seed	2070.0	4735.0	-0.3692844740679109	USDA's Ag Handbook 8 and sequelae)
<i>Asimina triloba</i>	Fruit	124.0	1336.0	-0.2640486033446176	--
<i>Asparagus officinalis</i>	Shoot	470.0	6065.0	-1.0	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Avena sativa	Seed	1000.0	6000.0	-0.03298707830764554	Jim Duke's personal files.*
Averrhoa carambola	Fruit	40.0	440.0	-0.8922520547057898	USDA's Ag Handbook 8 and sequelae)
Basella alba	Leaf	390.0	5650.0	0.13735410834997389	--
Bertholletia excelsa	Seed	4020.0	4159.0	-0.5224127744298973	USDA's Ag Handbook 8 and sequelae)
Beta vulgaris	Root	200.0	1577.0	-0.20948317136853128	USDA's Ag Handbook 8 and sequelae)
Bixa orellana	Seed	3620.0	3930.0	-0.5832919077335342	--
Brassica oleracea var. sabellica l.	Leaf	690.0	4440.0	-0.46989157021806705	--
Brassica oleracea var. gemmifera	Leaf	760.0	5426.0	0.024938379424981175	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. botrytis l.	Flower	400.0	5165.0		--
Brassica napus var. napobrassica	Root	300.0	2900.0	1.0788641098044627	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. italica	Leaf	500.0	5370.0	-0.0031655528062669996	USDA's Ag Handbook 8 and sequelae)
Brassica rapa	Root	140.0	1720.0	-0.07022870333547145	--
Brassica oleracea var. viridis l.	Leaf	300.0	4917.0	-0.2305062903197567	--
Brassica oleracea var. botrytis l.	Leaf	500.0	5370.0	-0.0031655528062669996	--
Brassica chinensis	Leaf	260.0	5556.0	0.09017965067609301	--
Brassica rapa	Leaf	260.0	5556.0	0.09017965067609301	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea	Stem	190.0	2111.0		--
Brassica oleracea var. capitata l.	Leaf	250.0	3343.0	-1.0204275283909108	USDA's Ag Handbook 8 and sequelae)
Brassica nigra	Leaf	450.0	6627.0	0.6276673545987139	USDA's Ag Handbook 8 and sequelae)
Cajanus cajan	Seed	7090.0	8655.0	0.6728386811733856	--
Calathea allouia	Root	1080.0	1190.0	-0.5863466617796792	--
Camellia sinensis	Leaf				--
Cannabis sativa	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Capsicum frutescens	Fruit	410.0	3346.0	1.1452024426776553	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Capsicum annuum	Fruit	170.0	2319.0	0.4251522813518472	--
Carica papaya	Fruit	50.0	448.0	-0.8866430953186365	USDA's Ag Handbook 8 and sequelae)
Carum carvi	Seed	5500.0	6105.0	-0.005073065220825094	Revised USDA data received 1993.
Castanea mollissima	Seed	1267.0	2256.0	-1.0283210306605572	--
Castanea dentata	Seed	1230.0	2158.0	-1.0543741095415897	--
Castanea sativa	Seed	554.0	1218.0	-1.3042709886045538	--
Ceratonia siliqua	Seed		11750.0	1.4956374478753787	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Chenopodium album	Leaf	1160.0	7389.0	1.0100815753167693	--
Cicer arietinum	Seed	4620.0	6000.0	-0.03298707830764554	--
Cichorium endivia	Leaf	230.0	3704.0	-0.8392575366859002	--
Cichorium intybus	Leaf	150.0	3468.0	-0.9576955368033032	USDA's Ag Handbook 8 and sequelae)
Citrullus lanatus	Seed		7018.0	0.23764592476267077	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrullus lanatus	Fruit		707.0	-0.7050530351595478	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus paradisi	Fruit		140.0	-1.1025880317240395	--
Citrus sinensis	Fruit	180.0	1359.0	-0.24792284510655177	USDA's Ag Handbook 8 and sequelae)
Citrus reticulata	Fruit	440.0	3546.0	1.2854264273564884	USDA's Ag Handbook 8 and sequelae)
Coccinia grandis	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Cocos nucifera	Leaf				Jim Duke's personal files.
Cocos nucifera	Seed	770.0	1455.0	-1.2412650733514448	USDA's Ag Handbook 8 and sequelae)
Colocasia esculenta	Root	340.0	1160.0	-0.6155608858425589	--
Colocasia esculenta	Leaf	1140.0	7950.0	1.291622753561952	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Corchorus olitorius	Leaf	690.0	8950.0	1.7934786862628123	--
Coriandrum sativum	Fruit				--
Crocus sativus	Bulb				--
Cryptotaenia japonica	Root				--
Cucumis sativus	Fruit	80.0	2025.0	0.2190230238739625	--
Cucurbita foetidissima	Seed	5835.0	19000.0	3.42303358958441	--
Cucurbita spp	Fruit	250.0	3955.0	1.5721844760247021	--
Cucurbita pepo	Seed	6810.0	9615.0	0.9280525151100297	--
Cucurbita pepo	Fruit	140.0	1905.0	0.13488863306666263	--
Daucus carota	Root	160.0	1310.0	-0.46948976552816046	--
Dioscorea pentaphylla	Root	300.0	1615.0	-0.17247848755555034	--
Fagopyrum esculentum	Seed		2750.0	-0.8969922452806592	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Ficus carica	Fruit	110.0	527.0	-0.8312546213704974	USDA's Ag Handbook 8 and sequelae)
Foeniculum vulgare	Fruit	3310.0	3631.0	1.3450216208449925	--
Foeniculum vulgare	Seed	3310.0	3631.0	-0.6627803830950515	USDA's Ag Handbook 8 and sequelae)
Fragaria spp	Fruit	120.0	1423.0	-0.20305117000932518	USDA's Ag Handbook 8 and sequelae)
Ginkgo biloba	Seed	1020.0	2785.0	-0.8876875742517191	USDA's Ag Handbook 8 and sequelae)
Glycine max	Seed	9840.0	10770.0	1.2351066590650546	USDA's Ag Handbook 8 and sequelae)
Glycine max	Shoot				--
Glycine max	Sprout Seedling				--
Harpagophytum procumbens	Root				--
Helianthus tuberosus	Tuber		1906.0	-0.9223195022041148	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
Helianthus annuus	Seed	6320.0	20000.0	3.688881333268414	--
Humulus lupulus	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ipomoea batatas	Root	300.0	1200.0	-0.5766085870920526	--
Ipomoea aquatica	Leaf	470.0	6240.0	0.43344910864348096	--
Juglans cinerea	Seed	8080.0	8359.0	0.5941477490429204	--
Juglans nigra	Seed	6800.0	7110.0	0.26210391718159914	USDA's Ag Handbook 8 and sequelae)
Juglans regia	Seed	3590.0	3725.0	-0.6377906951887551	USDA's Ag Handbook 8 and sequelae)
Lablab purpureus	Seed	1090.0	8986.0	0.7608342843327911	--
Lactuca sativa	Leaf	220.0	3667.0	-0.857826206195832	--
Lagenaria siceraria	Fruit	40.0	900.0	-0.5697368899444738	--
Lens culinaris	Sprout Seedling	2570.0	8565.0	-0.42492819593571496	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Seed	7900.0	8900.0	0.7379713783759667	USDA's Ag Handbook 8 and sequelae)
Lentinus edodes	Fruit				--
Lepidium meyenii	Root		4190.0	2.335075744508289	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Linum usitatissimum	Seed		0.108	-1.6280448288553528	--
Lupinus albus	Seed	10300.0	11500.0	1.4291755119543776	--
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	30.0	2149.0	0.30596189437483906	--
Lycopodium clavatum	Pollen Or Spore				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Macadamia spp	Seed	1680.0	1730.0	-1.1681569438383435	USDA's Ag Handbook 8 and sequelae)
Malus domestica	Fruit	30.0	187.0	-1.0696353953245137	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Mangifera indica	Fruit	120.0	1200.0	-0.3594009129262241	--
Manihot esculenta	Root	450.0	1430.0	-0.3526328692766417	--
Medicago sativa	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.
Mentha spicata	Leaf	660.0	4565.0	-0.4071595786304595	USDA's Ag Handbook 8 and sequelae)
Mentha x piperita	Leaf	750.0	3515.0	-0.9341083079663628	USDA's Ag Handbook 8 and sequelae)
Momordica charantia	Seed		43.6	-1.6164825787870483	Jim Duke's personal files.
Moringa oleifera	Shoot	1960.0	9185.0	1.0	USDA's Ag Handbook 8 and sequelae)
Mucuna pruriens	Seed	3275.0	6945.0	0.21823903947373846	--
Murraya sp	Fruit	640.0	1843.0	0.09141919781622437	--
Musa x paradisiaca	Fruit	640.0	1843.0	0.09141919781622437	USDA's Ag Handbook 8 and sequelae)
Nasturtium officinale	Herb	400.0	8000.0	1.0	USDA's Ag Handbook 8 and sequelae)
Nelumbo nucifera	Rhizome	380.0	1820.0	1.0	--
Nelumbo nucifera	Seed	1150.0	3485.0	-0.7015941536729161	--
Ocimum basilicum	Leaf		2870.0	-1.2578053845584176	USDA's Ag Handbook 8 and sequelae)
Oenothera biennis	Seed	3700.0	3949.0	-0.5782408006035382	--
Pachyrhizus erosus	Tuber	370.0	3410.0	0.0885520819204898	--
Panax ginseng	Root		20.0	-1.7257014002319866	--
Panax quinquefolius	Plant	320.0	1100.0	-1.2977122612239684	--
Panax ginseng	Leaf				--
Papaver somniferum	Seed	5280.0	5664.0	-0.12231192018547095	--
Papaver bracteatum	Seed	4350.0	4650.0	-0.3918815322810512	--
Perideridia gairdneri	Root		1080.0	-0.6934654833435714	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
<i>Persea americana</i>	Fruit	230.0	1127.0	-0.4105826673339982	--
<i>Phaseolus vulgaris</i>	Fruit	340.0	3494.0	1.2489681913399917	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus vulgaris</i>	Sprout Seedling	1180.0	12688.0	1.3806152102919922	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus lunatus</i>	Seed	2320.0	7796.0	0.44447546934882604	USDA's Ag Handbook 8 and sequelae)
<i>Phaseolus vulgaris</i>	Seed	6010.0	6754.0	0.16746212043009365	USDA's Ag Handbook 8 and sequelae)
<i>Phoenix dactylifera</i>	Fruit	10.0	390.0	-0.9273080508754981	--
<i>Phyllanthus emblica</i>	Fruit	133.0	658.0	-0.7394079114058618	--
<i>Pinus pinea</i>	Seed	5750.0	7475.0	0.3591383436262607	--
<i>Pinus edulis</i>	Seed	2770.0	2945.0	-0.8451519352622784	USDA's Ag Handbook 8 and sequelae)
<i>Pistacia vera</i>	Seed	5360.0	5576.0	-0.14570652162966333	--
<i>Pisum sativum</i>	Seed	1070.0	5061.0	-0.2826181096269255	--
<i>Pisum sativum</i>	Fruit	170.0	1682.0	-0.021461109850236294	--
<i>Portulaca oleracea</i>	Herb	220.0	5170.0	-1.0	--
<i>Prunus domestica</i>	Fruit	130.0	878.0	-0.5851615282591455	USDA's Ag Handbook 8 and sequelae)
<i>Prunus persica</i>	Fruit	130.0	1053.0	-0.46246554166516646	--
<i>Prunus armeniaca</i>	Fruit	270.0	1980.0	0.18747262732122505	USDA's Ag Handbook 8 and sequelae)
<i>Prunus dulcis</i>	Seed	5580.0	5837.0	-0.07632026052813823	USDA's Ag Handbook 8 and sequelae)
<i>Psidium guajava</i>	Fruit	70.0	504.0	-0.8473803796085632	USDA's Ag Handbook 8 and sequelae)
<i>Psidium cattleianum</i>	Fruit	50.0	260.0	-1.0184536409167395	--
<i>Psophocarpus tetragonolobus</i>	Leaf	7900.0	8618.0	1.6268625166061266	--
<i>Psophocarpus tetragonolobus</i>	Tuber	2410.0	5657.0	1.598810359532183	--
<i>Psoralea esculenta</i>	Root		1266.0	-0.5123372941537173	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.
<i>Pyrus communis</i>	Fruit	40.0	247.0	-1.0275681999208637	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Raphanus sativus	Root	130.0	2520.0	0.7088172716746535	--
Rehmannia glutinosa	Root	1000.0	4000.0	2.1500523254433843	--
Rosmarinus officinalis	Leaf	660.0	2050.0	-1.669327249373123	USDA's Ag Handbook 8 and sequelae)
Sambucus canadensis	Fruit	150.0	742.0	-0.6805138378407519	USDA's Ag Handbook 8 and sequelae)
Secale cereale	Seed	3670.0	4120.0	-0.5327808364335734	USDA's Ag Handbook 8 and sequelae)
Sechium edule	Fruit	160.0	2285.0	0.40131420395644557	--
Sesamum indicum	Seed	3050.0	7112.0	0.2626356126689672	--
Sinapis alba	Seed	7620.0	8153.0	0.5393831138440155	--
Solanum melongena	Fruit	240.0	3098.0	0.9713247016759022	--
Solanum tuberosum	Tuber	450.0	2140.0	-0.765042939248558	USDA's Ag Handbook 8 and sequelae)
Spinacia oleracea	Plant	640.0	7601.0	1.1356385926026882	USDA's Ag Handbook 8 and sequelae)
Stachys officinalis	Shoot				--
Theobroma cacao	Seed		800.0	-1.4153953454644674	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Trifolium pratense	Plant				--
Trigonella foenum-graecum	Seed	4850.0	7350.0	0.32590737566576017	--
Triticum aestivum	Seed	1000.0	6000.0	-0.03298707830764554	--
Urtica dioica	Leaf				Jim Duke's personal files.
Vaccinium corymbosum	Fruit	100.0	715.0	-0.6994440757723944	--
Valerianella locusta	Plant	360.0	5000.0	0.16207366862128014	--
Vicia faba	Seed	1340.0	7050.0	0.2461530525605589	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	950.0	8290.0	0.5758042547287241	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Fruit	900.0	7407.0	3.9924504515813624	USDA's Ag Handbook 8 and sequelae)
Vigna angularis	Seed	5240.0	6054.0	-0.01863130014870931	--
Vigna radiata	Sprout Seedling	700.0	7353.0	-0.9556870143562779	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vigna aconitifolia	Seed	7710.0	8536.0	0.6412027996749892	--
Vigna unguiculata	Seed	7550.0	8245.0	0.5638411062629439	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Seed	6950.0	7642.0	0.4035349168214894	USDA's Ag Handbook 8 and sequelae)
Vitis vinifera	Fruit	240.0	1235.0	-0.33486171560742833	USDA's Ag Handbook 8 and sequelae)
Zea mays	Seed	890.0	3702.0	-0.6439051932934873	USDA's Ag Handbook 8 and sequelae)
Zea mays	Embryo				--
Zingiber officinale	Rhizome	300.0	1738.0	-1.0	--
Zingiber officinale	Root	300.0	1738.0	-0.05270016889774364	USDA's Ag Handbook 8 and sequelae)