

C PHOSPHORUS

Chemid

PHOSPHORUS

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	630	6300	0.9367351316792745	USDA's Ag Handbook 8 and sequelae)
Abelmoschus esculentus	Seed	--	7900	0.6729743152569793	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Abrus precatorius	Leaf	650	3095	-0.34524319928607444	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Acacia catechu	Leaf	1700	1700	-0.6019050321936278	--
Acacia farnesiana	Leaf	840	4519	-0.08324574404567579	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Acacia farnesiana	Seed	2000	2700	-0.7011725748825549	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Acacia senegal	Leaf	1400	1400	-0.6571011252920264	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Acacia senegal	Seed	3100	3100	-0.5954689679487446	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Acacia tortilis	Fruit	3400	3400	0.055889745341155005	--
Acacia tortilis	Leaf	1700	1700	-0.6019050321936278	--
Acacia tortilis	Seed	7300	7300	0.5144189048562637	--
Acalypha indica	Leaf	990	5075	0.01905101516335627	Wealth of India.
Achillea millefolium	Plant	522	2950	-0.3068982377399405	--
Acrocomia totai	Fruit	12000	12000	2.6680519255162682	--
Acrocomia totai	Seed	4200	4200	-0.3047840488807662	--
Actaea racemosa	Root	--	2080	-0.2526248106460702	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Actinidia chinensis	Fruit	300	3060	-0.04738178271227972	--
Aegle marmelos	Fruit	500	1300	-0.5819638102830006	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Aframomum melegueta	Fruit	--	1900	-0.3997199372475276	Wealth of India.
Agathosma betulina	Leaf	6780	6780	0.33274881093925496	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Albizia lebbeck	Leaf	300	400	-0.8410881022866883	Wealth of India.
Albizia lebbeck	Seed	--	6200	0.22373398578828538	Wealth of India.
Aleurites moluccana	Seed	2000	2150	-0.8465150344165441	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Allium ampeloprasum	Flower	380	2249	-0.614081916695989	--
Allium ampeloprasum	Leaf	480	4528	-0.08158986125272383	--
Allium ampeloprasum	Root	500	3650	0.02323881179787081	--
Allium cepa	Bulb	275	4038	-1	--
Allium cepa	Leaf	310	5513	0.09963731108701822	--
Allium sativum var. sativum	Bulb	880	5220	1	--
Allium sativum var. sativum	Flower	460	3966	0.10782054497788832	--
Allium sativum var. sativum	Leaf	460	3382	-0.29243893688860645	--
Allium sativum var. sativum	Shoot	520	2332	-0.4790926300874732	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Allium sativum var. sativum	Root	1650	4460	0.16556335586130524	--
Allium schoenoprasum	Leaf	410	6437	0.31251024346984213	--
Alocasia macrorrhiza	Leaf	250	1400	-0.6571011252920264	--
Alocasia macrorrhiza	Root	440	3125	-0.06900857787287373	--
Aloe spp.	Leaf	5	940	-0.7417351347095709	--
Aloe vera	Leaf	6	940	-0.7417351347095709	--
Alpinia galanga	Rhizome	250	1773	-1.6394770420886036	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Althaea officinalis	Root	277	2560	-0.1682843400899607	--
Amaranthus sp.	Leaf	487	10082	0.9402738089756288	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Amaranthus spinosus	Leaf	500	4600	-0.06834279890910817	--
Amorphophallus campanulatus	Root	320	3020	-0.08745805580702264	--
Amorphophallus campanulatus	Shoot	8100	8100	2.1362214977672958	--
Amorphophallus konjac	Leaf	70	2692	-0.41938995101492305	--
Amorphophallus konjac	Root	39	39	-0.6112475198231933	--
Amphicarpaea bracteata	Shoot	2400	2400	-0.44826021665229215	--
Anacardium occidentale	Fruit	100	3125	-0.027638696466770137	--
Anacardium occidentale	Seed	3730	6255	0.2382682317416843	--
Ananas comosus	Fruit	60	923	-0.6964737105069562	--
Anethum graveolens	Fruit	2102	3723	0.153997696991918	--
Anethum graveolens	Plant	600	7625	1.9396126413461277	--
Anethum graveolens	Seed	2102	3723	-0.430835600149335	USDA's Ag Handbook 8 and sequelae)
Angelica sinensis	Root	735	3340	-0.031231075436283107	--
Annona cherimola	Fruit	240	1510	-0.5181784547205851	--
Annona diversifolia	Fruit	515	1815	-0.4255378192608863	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Annona glabra	Fruit	240	1820	-0.424019120318924	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Annona muricata	Fruit	210	3400	0.055889745341155005	--
Annona reticulata	Fruit	147	1475	-0.528809347314321	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Annona squamosa	Fruit	260	1600	-0.4908418737652641	--
Anogeissus latifolia	Leaf	3400	3400	-0.28912717130270255	--
Anthriscus cerefolium	Leaf	4500	4850	-0.022346054660442673	--
Apium graveolens	Pt	201	6849	1.363371911682067	--
Apium graveolens	Root	470	7900	0.7700033948467552	USDA's Ag Handbook 8 and sequelae)
Apium graveolens	Seed	980	6843	0.3936525339343855	--
Apium graveolens	Fruit	979	4660	0.4386018787156484	--
Arachis hypogaea	Leaf	820	3814	-0.21295656282691247	--
Arachis hypogaea	Plant	800	10000	3.080888221630494	--
Arachis hypogaea	Seed	2450	4248	-0.29209961604870893	--
Aralia cordata	Leaf	250	5320	0.06412782452704846	--
Arctium lappa	Root	1027	4370	0.14974951763203476	--
Arctostaphylos uva-ursi	Leaf	43	370	-0.8466077115965281	--
Areca catechu	Seed	630	1892	-0.9146938608888517	--
Areca catechu	Shoot	890	890	-1.1329211620511657	--
Armoracia rusticana	Root	1278	7100	0.6294359439199063	--
Arracacia xanthorrhiza	Root	550	1900	-0.28425248710461115	--
Artemisia dracunculus	Plant	3130	3391	-0.09498138262187504	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Artemisia herba-alba	Plant	1790	1790	-0.8643212580051465	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia vulgaris	Leaf	400	3150	-0.33512391555136806	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Artemisia vulgaris	Plant	270	700	-1.388106682219866	Chem. & Pharm. Bull. 38: 2205.
Artemisia vulgaris	Shoot	1900	1900	-0.6749691389697999	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Artocarpus altilis	Fruit	240	1460	-0.5333654441402078	--
Artocarpus altilis	Seed	1750	5385	0.008362886660646867	USDA's Ag Handbook 8 and sequelae)
Artocarpus heterophyllus	Fruit	260	1725	-0.45287440021620723	--
Artocarpus heterophyllus	Seed	1300	2685	-0.7051364601425728	--
Arundo donax	Plant	1100	1100	-1.195891847645657	--
Asimina triloba	Fruit	420	2265	-0.2888549144842815	--
Asparagus officinalis	Shoot	390	10244	3.108349356664769	--
Asparagus officinalis	Root	746	7460	0.6926912968369884	--
Astragalus membranaceus	Root	104	650	-0.5038891291778125	--
Avena sativa	Plant	618	2810	-0.3741734298409137	--
Avena sativa	Seed	500	10200	1.2807700551263885	Jim Duke's personal files.*
Averrhoa bilimbi	Fruit	110	1915	-0.39516384042164077	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Averrhoa carambola	Fruit	140	2100	-0.3389719795690366	--
Azadirachta indica	Fruit	2265	2400	-0.24785004305130007	--
Azadirachta indica	Leaf	1900	2400	-0.47311414829736437	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Bacopa monnieri	Shoot	--	160	-1.463916188634727	Wealth of India.
Balanites aegyptiacus	Fruit	4000	4000	0.23813361837662805	--
Balanites aegyptiacus	Shoot	3800	3800	0.18652476583672947	--
Barosma betulina	Leaf	6780	6780	0.33274881093925496	--
Basella alba	Leaf	520	7535	0.47165897857022476	--
Benincasa hispida	Fruit	70	4870	0.502387234278064	--
Berberis vulgaris	Root	450	450	-0.5390309919095246	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Berberis vulgaris	Bark	--	450	-0.6352599515754915	--
Bertholletia excelsa	Seed	6000	6750	0.36907644532227457	--
Beta vulgaris	Leaf	290	5946	0.17930367212570686	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Beta vulgaris	Root	260	45580	7.390730333501335	--
Bixa orellana	Fruit	100	641	-0.7821283308336285	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Bixa orellana	Seed	2820	3490	-0.4924079511882795	--
Blighia sapida	Aril	160	2300	1.0903216729896206	--
Blighia sapida	Seed	700	2455	-0.7659160341295137	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Boehmeria nivea	Leaf	450	3460	-0.27808795268302283	--
Boehmeria nivea	Plant	270	700	-1.388106682219866	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Boehmeria nivea	Shoot	1400	2400	-0.44826021665229215	--
Borago officinalis	Leaf	530	7579	0.47975440555798987	USDA's Ag Handbook 8 and sequelae)
Brassica chinensis	Leaf	370	7907	0.5401021340122389	--
Brassica napus var. napobrassica	Root	290	7250	0.6557923409686905	--
Brassica nigra	Leaf	290	4563	-0.07515031705791066	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea	Stem	400	5110	1.9403763589789504	--
Brassica oleracea var. botrytis l.	Leaf	644	9090	0.7577587277969241	--
Brassica oleracea var. botrytis l.	Flower	385	7375	1.5411143666705196	--
Brassica oleracea var. capitata l.	Leaf	214	6500	0.2812324573807496	--
Brassica oleracea var. gemmifera	Leaf	690	4927	-0.0081790574318537	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. italica	Leaf	644	9090	0.7577587277969241	--
Brassica oleracea var. sabellica l.	Leaf	560	3600	-0.25232977590377015	--
Brassica oleracea var. viridis l.	Leaf	160	2622	-0.4322690394045494	--
Brassica pekinensis	Leaf	4560	7560	0.4762586529950913	--
Brassica rapa	Root	270	5000	0.2604463852369282	--
Brassica rapa	Leaf	370	7907	0.5401021340122389	USDA's Ag Handbook 8 and sequelae)
Bromelia pinguin	Shoot	225	5000	0.7306261793987481	--
Brosimum alicastrum	Fruit	360	2250	-0.29341101131016833	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Bupleurum chinense	Root	77	700	-0.4951036634948844	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Byrsonima crassifolia	Fruit	125	100	-0.9464515563539467	--
Cajanus cajan	Fruit	1240	4888	0.5078545504691282	--
Cajanus cajan	Plant	2400	2400	-0.571193635279478	--
Cajanus cajan	Seed	1270	4500	-0.22550634368040845	--
Calathea macrosepala	Flower	490	6365	1.1164658598035329	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Camellia sinensis	Leaf	3200	4150	-0.15113693855670607	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Canavalia ensiformis	Fruit	100	3509	0.08899738227593261	--
Canavalia ensiformis	Seed	2700	3898	-0.384590272115793	--
Canna indica	Root	630	2200	-0.23153969300704283	--
Cannabis sativa	Seed	9700	11227	1.5521640659289466	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Capparis spinosa	Leaf	--	1350	-0.6663004741417594	Wealth of India.
Capsella bursa-pastoris	Plant	600	7288	1.7776716432173565	--
Capsicum annuum	Fruit	784	3040	-0.053456578480128816	--
Capsicum frutescens	Fruit	455	3794	0.17556322196778232	USDA's Ag Handbook 8 and sequelae)
Carica papaya	Fruit	170	1260	-0.5941134018186989	--
Carica papaya	Leaf	1420	6311	0.24645891872875847	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Carica pentagona	Fruit	140	2060	-0.3511215711047348	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Carthamus tinctorius	Flower	332	2370	-0.5632081846851916	--
Carthamus tinctorius	Plant	3400	3400	-0.09065654884395533	--
Carthamus tinctorius	Seed	3100	3526	-0.4828946265642366	--
Carum carvi	Fruit	5680	6302	0.9373426112560593	--
Carum carvi	Seed	5650	6302	0.3241524123754052	--
Carya glabra	Shoot	8	2640	-0.3394399339398884	--
Carya illinoensis	Seed	2890	3340	-0.5320468037884584	--
Carya ovata	Shoot	110	1620	-0.8019261354676044	--
Casimiroa edulis	Fruit	180	1000	-0.6730857468007372	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cassia tora	Sprout Seedling	5700	5700	-0.2943499474463605	--
Castanea dentata	Seed	960	1709	-0.9630532610610699	--
Castanea mollissima	Seed	940	1774	-0.9458764249343258	--
Castanea sativa	Seed	490	1122	-1.1181733042364366	--
Caulophyllum thalictroides	Root	1716	15600	2.122965110017675	--
Ceiba pentandra	Seed	9700	12690	1.9387750082893578	--
Cenchrus biflorus	Seed	2700	2990	-0.6245374598555424	--
Centella asiatica	Leaf	300	2800	-0.39951935749949974	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Chamaemelum nobile	Flower	3220	3220	-0.2058307284109949	--
Chamissoa altissima	Leaf	165	1660	-0.6092645112734142	Tramil
Chenopodium album	Leaf	720	36833	5.862109430559832	--
Chenopodium album	Seed	4160	4160	-0.31535440957414723	--
Chenopodium ambrosioides	Leaf	520	3585	-0.2550895805586901	--
Chondrus crispus	Plant	1800	1800	-0.8595158871407913	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Chrysanthemum cinerariifolium	Shoot	2400	2400	-0.44826021665229215	--
Chrysanthemum coronarium	Bud	320	4300	1	--
Chrysanthemum coronarium	Leaf	340	5230	0.047568996597528876	--
Chrysanthemum parthenium	Plant	--	5010	0.683008160317236	--
Chrysanthemum parthenium	Leaf	902	5010	0.0070918616587032435	--
Chrysophyllum cainito	Fruit	160	985	-0.6776418436266239	--
Cicer arietinum	Seed	3540	4275	-0.2849646225806768	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	242	5760	0.14508209440469974	--
Cichorium intybus	Leaf	210	4284	-0.12648268363942136	--
Cichorium intybus	Root	610	3050	-0.0821867763972658	--
Cimicifuga racemosa	Root	437	2080	-0.2526248106460702	--
Cinnamomum aromaticum	Bark	1000	1000	-0.17573390155376353	--
Cinnamomum burmannii	Bark	1600	1600	0.325567243924485	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cinnamomum sieboldii	Bark	1500	1500	0.24201705301144358	--
Cinnamomum sieboldii	Root Bark	800	800		--
Cinnamomum verum	Bark	674	1100	-0.09218371064072212	--
Citrullus lanatus	Fruit	1	2900	-0.09598014885507253	--
Citrullus lanatus	Seed	8300	14600	2.443509731398302	--
Citrus aurantiifolia	Fruit	110	2000	-0.3693459584082821	--
Citrus aurantium	Fruit	120	1600	-0.4908418737652641	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Citrus limon	Fruit	100	1979	-0.3757244939645237	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Citrus mitis	Fruit	700	7000	1.149352983553993	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Citrus paradisi	Fruit	76	2545	0.6269205475189703	--
Citrus reticulata	Fruit	90	1385	-0.5561459282696419	--
Citrus sinensis	Fruit	136	1980	-0.3754207541761312	--
Cnicus benedictus	Plant	359	2700	-0.42703250934882114	--
Cnidioscolus chayamansa	Leaf	540	4100	-0.16033628740643915	--
Coccinia grandis	Fruit	300	4350	0.34444254431398735	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Cocos nucifera	Seed	830	2400	-0.7804502800829126	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Coffea arabica	Leaf	1700	1816	-0.580562542862247	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Coffea arabica	Seed	1780	1900	-0.9125797887501755	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Coix lacryma-jobi	Seed	500	5000	-0.09337683501314556	--
Cola acuminata	Seed	860	2318	-0.8021195195043437	--
Colocasia esculenta	Leaf	490	5800	0.1524415734844862	--
Colocasia esculenta	Root	460	5204	0.29629108522327463	--
Colubrina texensis	Shoot	1700	1700	-0.7656527078968032	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Commelina benghalensis	Leaf	520	3770	-0.2210519898146776	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Corchorus olitorius	Leaf	830	6755	0.3281491365143884	--
Coriandrum sativum	Fruit	3907	4687	0.4468028530022447	USDA's Ag Handbook 8 and sequelae)
Coriandrum sativum	Leaf	720	6452	0.27240108248500583	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cornus florida	Seed	1500	1500	-1.0182833956839858	--
Corylus avellana	Seed	2900	4622	-0.1932667435655963	--
Crataegus laevigata	Fruit	405	1450	-0.5364028420241324	--
Crataegus rhipidophylla	Fruit	--	1450	-0.5364028420241324	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Crescentia alata	Seed	9680	10020	1.233203432006174	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cucumis melo	Fruit	121	2640	-0.17495249383711084	--
Cucumis sativus	Fruit	158	12600	2.850295798551741	--
Cucurbita foetidissima	Leaf	2600	2600	-0.43631675289843197	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cucurbita foetidissima	Root	220	220	-0.5794441340509937	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Cucurbita pepo	Flower	490	10100	2.686824447078974	USDA's Ag Handbook 8 and sequelae)
Cucurbita pepo	Fruit	440	5238	0.6141634764064872	USDA's Ag Handbook 8 and sequelae)
Cucurbita pepo	Seed	10600	12982	2.015938641351039	--
Cucurbita spp	Fruit	350	5540	0.7058928925010086	--
Cuminum cyminum	Fruit	4900	5673	0.7462902843572051	--
Cuminum cyminum	Seed	4900	5673	0.0844694836529903	--
Curcuma longa	Rhizome	640	6307	1.0401873086070448	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Curcuma longa	Plant	725	2340	-0.6000258604656092	--
Cyamopsis tetragonoloba	Fruit	--	500	-0.8249556409969647	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyamopsis tetragonoloba	Leaf	--	2700	-0.41791805519896574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyamopsis tetragonoloba	Shoot	1600	2855	-0.24195509734336013	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyclanthera pedata	Fruit	260	5615	0.7286733766304427	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cydonia oblonga	Fruit	150	1049	-0.6582024971695069	--
Cymbopogon citratus	Plant	2140	2140	-0.6961332777527138	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Cynara cardunculus	Flower	860	6240	1.0639103515279158	--
Cyphomandra betacea	Fruit	130	3400	0.055889745341155005	--
Cypripedium pubescens	Root	1230	1230	-0.401977727255847	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Cyrtosperma chamissonis	Root	140	790	-0.47928982526561387	--
Daucus carota	Root	340	5090	0.2762602234661987	--
Dioscorea alata	Root	48	2190	-0.23329678614362845	--
Dioscorea bulbifera	Tuber	290	1000	-1.11130549428799	--
Dioscorea pentaphylla	Root	340	1830	-0.29655213906071043	--
Dioscorea sp.	Root	1730	1730	-0.3141230704265665	--
Dioscorea villosa	Root	415	1730	-0.3141230704265665	--
Diospyros digyna	Fruit	230	1120	-0.6366369721936426	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Diospyros virginiana	Fruit	260	730	-0.7550954896667	--
Diospyros virginiana	Leaf	450	1500	-0.6387024275925601	--
Diospyros virginiana	Stem	132	2592	0.06306530160500212	--
Dipsacus fullonum	Plant	--	5400	0.8704176240270899	--
Durio zibethinus	Fruit	380	2010	-0.36630856052435756	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Echinacea purpurea	Root	198	790	-0.47928982526561387	--
Echinacea spp	Root	790	790	-0.47928982526561387	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Elaeagnus commutata	Fruit	200	1450	-0.5364028420241324	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Elaeagnus umbellatus	Fruit	380	2355	-0.26151833352896053	--
Elaeis guineensis	Fruit	440	3100	-0.035232191176581516	--
Eleocharis dulcis	Tuber	650	4075	0.7208441232272823	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Elettaria cardamomum	Fruit	1600	2000	-0.3693459584082821	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Elettaria cardamomum	Seed	1780	1941	-0.90174516903946	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Eleutherococcus senticosus	Root	1470	7000	0.6118650125540502	--
Elytrigia repens	Plant	2800	9510	2.845425049277088	--
Ephedra nevadensis	Plant	5000	5000	0.6782027894528808	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Ephedra sinica	Plant	678	3230	-0.17234785353799417	--
Equisetum arvense	Plant	407	1900	-0.811462178497239	--
Eriobotrya japonica	Fruit	140	2667	-0.16675151955051457	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Eriodictyon californicum	Leaf	2332	10600	1.0355790630588637	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eryngium floridanum	Shoot	3215	3215	-0.07872467327475456	--
Erythrina berteroana	Shoot	800	5060	0.7578312500768489	--
Erythrina fusca	Leaf	400	2220	-0.5062318041564036	--
Erythroxylum coca	Leaf	3630	9740	0.8773502628434544	--
Eugenia brasiliensis	Fruit	136	950	-0.6882727362203599	--
Eugenia floribunda	Fruit	90	700	-0.7642076833184737	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Eugenia uniflora	Fruit	90	815	-0.7292776076533414	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Eupatorium odoratum	Leaf	4350	4350	-0.11433954315777366	Tramil
Eupatorium perfoliatum	Plant	360	4000	0.19766570301735822	--
Euphrasia officinalis	Plant	323	2100	-0.7153547612101347	--
Fagopyrum esculentum	Seed	2820	3200	-0.569043066215292	--
Fallopia japonica	Plant	2300	2800	-0.3789788007052689	Chem. & Pharm. Bull. 38: 2205.
Feijoa sellowiana	Fruit	100	625	-0.7869881674479078	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Ficus carica	Fruit	129	2764	-0.13728876007644641	--
Foeniculum vulgare	Fruit	4449	5960	0.8334636036258397	--
Foeniculum vulgare	Plant	510	5100	0.7262564980964331	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Foeniculum vulgare	Seed	644	5960	0.1603118216279992	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Fragaria spp	Fruit	185	3191	-0.007591870432868103	--
Frangula purshiana	Bark	158	570	-0.5349997224798418	--
Fucus vesiculosus	Plant	294	2490	-0.5279452975002809	--
Garcinia mangostana	Fruit	100	685	-0.7687637801443605	--
Genipa americana	Fruit	580	3000	-0.06560617001582703	--
Gentiana lutea	Root	594	2700	-0.14368503617776215	--
Ginkgo biloba	Seed	1240	3268	-0.5510734530365442	--
Ginkgo biloba	Leaf	1440	6000	0.1892389688834186	--
Glechoma hederacea	Plant	2100	3500	-0.04260284020040307	Chem. & Pharm. Bull. 38: 2205.
Gleditsia triacanthos	Seed	3200	3200	-0.569043066215292	--
Gliricidia sepium	Flower	370	2645	-0.44758606647883387	--
Gliricidia sepium	Leaf	340	2220	-0.5062318041564036	--
Glycine max	Fruit	2250	7305	1.2419936190136918	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycine max	Plant	2400	5410	0.8752229948914451	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycine max	Seed	1580	8040	0.7099705776838129	--
Glycine max	Sprout Seedling	580	4891	-0.6799841296068554	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycyrrhiza glabra	Root	124	790	-0.47928982526561387	--
Gymnema sylvestre	Leaf	561	2950	-0.37192131095030045	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Harpagophytum procumbens	Root	134	707	-0.49387369829927447	--
Helianthus annuus	Seed	6930	7450	0.5540577574564426	--
Helianthus tuberosus	Tuber	660	5200	1.3911427637816502	Bonness, M. S., Promising new drugs from plants: poisons that heal, Herbarist, #56, 1990, 59-68
Hibiscus rosa-sinensis	Flower	265	2615	-0.460199388464982	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hibiscus sabdariffa	Flower	110	1000	-1.1392165553859557	--
Hibiscus sabdariffa	Leaf	480	6458	0.2735050043469738	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hibiscus sabdariffa	Seed	--	6000	0.17088218232138022	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hordeum vulgare	Plant	2300	6900	1.5912232536803737	Jim Duke's personal files.*
Hordeum vulgare	Seed	1890	9200	1.0165110377918627	Jim Duke's personal files.*
Hordeum vulgare	Stem	5950	5950	2.566643749048099	--
Humulus lupulus	Fruit	4760	4760	0.4689758575548939	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Humulus lupulus	Flower	885	4760	0.44165313354460856	--
Hydrangea arborescens	Root	2450	7000	0.6118650125540502	--
Hydrastis canadensis	Root	341	1230	-0.401977727255847	--
Hylocereus undatus	Fruit	260	1665	-0.47109878751975454	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Inga edulis	Seed	1280	1280	-1.0764203794975815	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Inga feuillei	Aril	300	1875	0.2348385141823803	J Cell Biochem VOL. 22=1995
Inula helenium	Plant	--	--		--
Inula helenium	Root	330	1500	-0.3545362125680356	--
Ipomoea aquatica	Leaf	420	12360	1.3593961425694687	--
Ipomoea batatas	Leaf	300	6090	0.2057977968129382	--
Ipomoea batatas	Root	261	2000	-0.26668155573875507	--
Juglans cinerea	Seed	4085	4834	-0.13724383189067685	--
Juglans nigra	Hull Husk	--	1070	1	--
Juglans nigra	Seed	4475	5882	0.13917110024123713	--
Juglans nigra	Fruit	1070	1070	-0.6518239616132653	--
Juglans nigra	Pericarp	128	1070		--
Juglans regia	Seed	2800	5100	-0.06695093327969298	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Juniperus communis	Fruit	279	900	-0.7034597256399827	--
Juniperus virginiana	Shoot	228	3168	-0.10003531197260028	--
Justicia pectoralis	Leaf	350	2335	-0.4850733018020174	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Kalmia latifolia	Leaf	1100	1100	-0.7122972183904249	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lablab purpureus	Fruit	600	3409	0.0586234034366871	--
Lablab purpureus	Seed	490	4800	-0.14622863848005072	--
Lactuca sativa	Leaf	108	13920	1.6464158266811415	--
Lagenaria siceraria	Fruit	130	2915	-0.0914240520291857	--
Lantana camara	Shoot	1500	1500	-0.8563362768238063	--
Larrea tridentata	Plant	375	1140	-1.1766703641882361	--
Lens culinaris	Seed	2420	5275	-0.02070560524615097	--
Lens culinaris	Sprout Seedling	1610	6165	-0.07269371171752223	USDA's Ag Handbook 8 and sequelae)
Lepidium meyenii	Root	--	1830	-0.29655213906071043	--
Lepidium sativum	Leaf	760	7170	0.4045037319671731	--
Lepidium sativum	Seed	16500	17500	3.2098608816684266	--
Licania platypus	Fruit	245	822	-0.7271514291345942	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Limonia acidissima	Fruit	800	3605	0.1181564019616083	--
Limonia acidissima	Seed	14300	14895	2.5214661415119872	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Linum usitatissimum	Hay	1110	1110		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Linum usitatissimum	Seed	3961	20335	3.9590351958118073	--
Liquidambar styraciflua	Leaf	360	2952	-0.3715533369963111	--
Liquidambar styraciflua	Stem	60	2880	0.27778554962871027	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lobelia inflata	Leaf	174	1540	-0.6313429485127736	--
Luffa aegyptiaca	Fruit	190	6400	0.96710911051852	--
Luffa aegyptiaca	Leaf	330	14141	1.687076948596962	--
Luffa aegyptiaca	Seed	18300	18300	3.4212680955360475	--
Lupinus albus	Seed	4400	4900	-0.11980273674659814	--
Lupinus mutabilis	Fruit	1680	5875	0.807645721612481	--
Lupinus mutabilis	Seed	6350	7100	0.4615671013893586	--
Lycium chinense	Leaf	430	4135	-0.153896743211626	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Lycium chinense	Fruit	--	560	-0.8067312536934174	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
Lycopersicon esculentum	Fruit	110	8400	1.57458868730343	--
Lycopersicon esculentum	Leaf	5500	5500	0.09724548038608762	--
Macadamia spp	Seed	1015	1750	-0.9522186413503544	USDA's Ag Handbook 8 and sequelae)
Malpighia glabra	Fruit	110	1280	-0.5880386060508498	--
Malus domestica	Fruit	68	925	-0.6958662309301713	--
Malva parviflora	Plant	670	4891	0.6258242470314088	--
Malva sylvestris	Leaf	360	5000	0.005251991888756623	--
Mammea americana	Fruit	78	925	-0.6958662309301713	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Mangifera indica	Fruit	103	1050	-0.6578987573811144	--
Mangifera indica	Leaf	720	3800	-0.21553238050483775	--
Manihot esculenta	Leaf	560	2800	-0.39951935749949974	--
Manihot esculenta	Root	310	2225	-0.2271469601655788	--
Manilkara zapota	Fruit	100	530	-0.8158434473451911	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Maranta arundinacea	Root	180	561	-0.5195272580934244	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Mauritia flexuosa	Fruit	270	585	-0.7991377589836061	J Cell Biochem VOL. 22=1995
Medicago sativa	Plant	282	1500	-1.003677013071448	--
Melia azedarach	Leaf	220	2300	-0.49151284599683054	--
Melicoccus bijugatas	Fruit	98	925	-0.6958662309301713	--
Melilotus indica	Plant	3500	3500	-0.04260284020040307	--
Mentha pulegium	Plant	2520	2520	-0.5135291849072152	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Mentha spicata	Plant	600	4706	0.5369248860408372	--
Mentha x piperita	Leaf	1150	7720	0.5056965693142372	--
Mimosa pudica	Leaf	530	1700	-0.6019050321936278	--
Mimulus glabratus	Shoot	520	5200	0.8213097483257511	--
Momordica charantia	Fruit	320	8333	1.5542381214811356	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Momordica charantia	Leaf	540	33467	5.2428092659958	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Morinda citrifolia	Leaf	150	670	-0.7914116184981296	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Moringa oleifera	Fruit	500	4235	0.309512468648855	USDA's Ag Handbook 8 and sequelae)
Moringa oleifera	Leaf	700	2800	-0.39951935749949974	USDA's Ag Handbook 8 and sequelae)
Moringa oleifera	Shoot	1120	5250	0.8439806405575019	USDA's Ag Handbook 8 and sequelae)
Morus alba	Fruit	320	3200	-0.004858212337336008	--
Morus alba	Leaf	2400	4500	-0.08674149660857437	--
Mucuna pruriens	Seed	3200	4700	-0.1726545402135033	--
Muntingia calabura	Fruit	720	3965	0.22750272578289213	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Murraya koenigii	Leaf	6000	17800	2.36028529742043	--
Murraya sp	Fruit	290	1040	-0.660936155265039	--
Musa x paradisiaca	Fruit	110	1127	-0.6345107936748954	--
Musa x paradisiaca	Flower	--	500	-1.3494385884884244	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Musa x paradisiaca	Leaf	--	2400	-0.47311414829736437	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Musa x paradisiaca	Pith	--	100		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Myrciaria cauliflora	Fruit	90	1030	-0.6639735531489636	--
Myrciaria dubia	Fruit	150	2835	-0.1157232351005821	--
Myrica cerifera	Bark	--	--		--
Myristica fragrans	Aril	1000	1100	-1.325160187171999	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Myristica fragrans	Seed	2130	2400	-0.7804502800829126	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Nasturtium officinale	Herb	600	12000	1	--
Nelumbo nucifera	Fruit	2940	3267	0.015492353484958482	--
Nelumbo nucifera	Rhizome	1000	4785	0.14066169286845265	--
Nelumbo nucifera	Seed	590	7130	0.4694948719093944	--
Nepeta cataria	Plant	289	2410	-0.5663882644151227	--
Nyssa sylvatica	Leaf	300	2184	-0.5128553353282114	--
Nyssa sylvatica	Stem	90	1056	-1.0821093545214413	--
Ocimum basilicum	Leaf	380	5168	0.04848893148250219	--
Ocimum tenuiflorum	Leaf	3400	3400	-0.28912717130270255	=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
Oenothera biennis	Plant	1700	3700	0.05350457708670144	--
Oenothera biennis	Seed	4100	7257	0.5030557671108792	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Olea europaea	Fruit	170	780	-0.7399085002470773	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Olea europaea	Leaf	900	900	-0.7490946137893574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Opuntia ficus-indica	Bud	243	243	-1	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Opuntia ficus-indica	Fruit	320	1985	-0.3739020552341689	--
Opuntia ficus-indica	Seed	1605	1605	-0.9905361988638606	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Origanum majorana	Plant	2670	3725	0.06551800424758951	USDA's Ag Handbook 8 and sequelae)
Origanum vulgare	Plant	1769	2402	-0.5702325611066069	USDA's Ag Handbook 8 and sequelae)
Oryza sativa	Plant	600	3478	-0.05317465610198457	--
Oryza sativa	Seed	528	5588	0.0620074671795556	--
Oxalis tuberosa	Root	340	2099	-0.2492863336865575	--
Pachira macrocarpa	Seed	2860	3025	-0.615288394248834	--
Pachyrhizus erosus	Tuber	180	1660	-0.7180636251627609	--
Panax ginseng	Root	112	528	-0.5253256654441569	--
Panax quinquefolius	Plant	2700	5200	0.7743102067399853	--
Panicum maximum	Leaf	5600	5600	0.11564417808555381	--
Papaver somniferum	Seed	8290	9277	1.0368589821266212	--
Parthenium integrifolium	Root	96	600	-0.5126745948607405	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Passiflora edulis	Fruit	480	2570	-0.19621427902458272	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Passiflora edulis	Seed	6400	6400	0.27658578925519056	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Passiflora foetida	Fruit	480	2665	-0.16735899912729948	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Passiflora incarnata	Fruit	430	1564	-0.5017765061473926	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Passiflora incarnata	Flower	407	3700	-0.0040175766326249985	--
Passiflora ligularis	Fruit	300	6095	0.8744684750588212	--
Passiflora mollissima	Fruit	200	2500	-0.21747606421205457	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Passiflora quadrangularis	Fruit	170	3035	-0.054975277422091094	--
Passiflora quadrangularis	Seed	390	1800	-0.9390056904836281	--
Pastinaca sativa	Root	400	7365	0.6759989120394251	--
Peganum harmala	Plant	600	600	-1.4361603908634184	--
Peperomia pelucida	Leaf	340	4360	-0.11249967338782704	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Peperomia pereskiaifolia	Leaf	400	2665	-0.42435759939377893	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pereskia aculeata	Fruit	90	3025	-0.05801267530601564	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Perideridia gairdneri	Root	2600	2600	-0.16125596754361826	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.
Perilla frutescens	Leaf	730	5214	0.044625204965614285	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Perilla frutescens	Seed	330	5339	-0.00379302813674132	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Persea americana	Cr	260	3030		--
Persea americana	Plant	260	3030	-0.2684552708250987	--
Persea schiedeana	Fruit	355	1540	-0.5090662610688115	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Petasites japonicus	Plant	400	1800	-0.8595158871407913	Chem. & Pharm. Bull. 38: 2205.
Petasites japonicus	Pt	120	2180	-1.0071283821276042	USDA's Ag Handbook 8 and sequelae)
Petroselinum crispum	Plant	324	4100	0.2457194116609105	--
Petroselinum crispum	Shoot	--	--		--
Peucedanum decursivum	Plant	2800	3100	-0.2348176747746121	--
Phaseolus acutifolius	Seed	2800	4050	-0.34442290148094507	--
Phaseolus coccineus	Fruit	1600	2770	-0.13546632134609168	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus coccineus	Seed	3280	4046	-0.34547993755028317	--
Phaseolus lunatus	Leaf	360	360	-0.8484475813664748	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Phaseolus lunatus	Seed	1130	9000	0.9636592343249576	--
Phaseolus lunatus	Sprout Seedling	3820	10611	2.046625909896273	--
Phaseolus vulgaris	Fruit	370	13500	3.123661608104951	--
Phaseolus vulgaris	Leaf	750	5682	0.1307311101991161	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus vulgaris	Seed	2130	5880	0.13917110024123713	--
Phaseolus vulgaris	Sprout Seedling	370	3978	-1.1151930397583163	USDA's Ag Handbook 8 and sequelae)
Phoenix dactylifera	Fruit	370	8795	1.69456590371845	--
Phoenix dactylifera	Seed	1120	1120	-1.1187018222711056	Abstract (See species file)
Phragmites australis	Shoot	--	3900	0.23186655030023104	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Phyllanthus acidus	Fruit	200	2442	-0.23509297193881695	--
Phyllanthus emblica	Fruit	200	1390	-0.5546272293276797	--
Physalis angulata	Fruit	1350	13500	3.123661608104951	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Physalis ixocarpa	Fruit	400	30250	8.211303063678573	--
Physalis peruviana	Fruit	550	4215	0.30343767288100587	--
Phytelephas aequatorialis	Flower	850	2910	-0.33616838893452544	KOZIOL & PEDERSEN. 1993. PHYTELEPHAS AEQUATORIALIS(ARECACEAE) IN HUMAN AND ANIMAL NUTRITION. ECON. BOT. 47:401-307.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Phytelephas aequatorialis	Mesocarp	120	505		KOZIOL & PEDERSEN. 1993. PHYTELEPHAS AEQUATORIALIS(AREACEAE) IN HUMAN AND ANIMAL NUTRITION. ECON. BOT. 47:401-307.
Phytolacca americana	Shoot	440	5238	0.8385396264218817	--
Pimenta dioica	Fruit	1100	1235	-0.6017068965285103	--
Pimenta dioica	Leaf	1173	1399	-0.657285112269021	--
Pimpinella anisum	Fruit	--	4862	0.4999573159709243	--
Pimpinella anisum	Seed	4400	4862	-0.12984457940531013	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pinus cembroides	Seed	5150	6235	0.23298305139499378	USDA's Ag Handbook 8 and sequelae)
Pinus echinata	Shoot	306	1512	-0.850895262688186	--
Pinus edulis	Seed	145	590	-1.2587591014584043	USDA's Ag Handbook 8 and sequelae)
Pinus gerardiana	Seed	925	1000	-1.1504129043512488	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pinus pinea	Seed	5080	5445	0.024218427700718415	USDA's Ag Handbook 8 and sequelae)
Piper auritum	Leaf	490	2920	-0.3774409202601403	--
Piper betel	Leaf	400	2740	-0.4105585761191793	--
Piper nigrum	Fruit	700	2040	-0.3571963668725839	--
Pistacia vera	Seed	4300	5280	-0.019384310159478342	--
Pisum sativum	Fruit	530	5240	0.614770955983272	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pisum sativum	Plant	1800	6400	1.3509547104626125	--
Pisum sativum	Seed	1038	6250	0.23694693665501168	--
Plantago major	Seed	180	600	-1.256116511285059	--
Plantago psyllium	Hull Husk	578	578	-1	--
Plantago psyllium	Seed	137	630	-1.2481887407650232	--
Platonia insignis	Fruit	360	1300	-0.5819638102830006	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Platycodon grandiflorum	Root	1890	2493	-0.18005686410508445	--
Plectranthus amboinicus	Leaf	80	1428	-0.6519494899361759	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Polygonum multiflorum	Root	1040	1040	-0.4353624968509736	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Polymnia edulis	Root	150	1650	-0.3281798155192514	--
Polystichum polyblepharum	Plant	900	900	-1.2919992649327616	--
Portulaca oleracea	Herb	320	7740	-1	--
Pothomorphe sp.	Leaf	400	2235	-0.5034719995014836	--
Pourouma cecropiaefolia	Fruit	100	555	-0.8082499526353797	J Cell Biochem VOL. 22=1995
Pouteria caimito	Fruit	410	1740	-0.4483183033903204	--
Pouteria campechiana	Fruit	300	1040	-0.660936155265039	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pouteria viridis	Fruit	280	885	-0.7080158224658695	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Prosopis juliflora	Leaf	2200	2200	-0.5099115436962968	--
Prunus armeniaca	Fruit	180	2982	-0.07107348620689122	USDA's Ag Handbook 8 and sequelae)
Prunus armeniaca	Seed	3000	3000	-0.6218948696821971	--
Prunus avium	Fruit	175	1175	-0.6199312838320575	--
Prunus cerasus	Fruit	150	2302	-0.27761654231376065	--
Prunus domestica	Fruit	70	4080	0.26243280144802444	--
Prunus dulcis	Seed	4420	8735	0.8936305947313082	--
Prunus persica	Bark	3150	3150	1.620595203076627	--
Prunus persica	Fruit	90	2000	-0.3693459584082821	--
Prunus salicifolia	Fruit	160	1050	-0.6578987573811144	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Prunus serotina	Leaf	261	4608	-0.06687090309315087	--
Prunus serotina	Stem	114	2592	0.06306530160500212	--
Psidium cattleianum	Fruit	170	2305	-0.2767053229485833	--
Psidium guajava	Fruit	60	1905	-0.4483183033903204	--
Psophocarpus tetragonolobus	Leaf	525	3175	-0.3305242411265015	--
Psophocarpus tetragonolobus	Seed	334	5058	-0.07804981200774307	--
Psophocarpus tetragonolobus	Tuber	450	1056	-1.0779395175137283	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Psoralea esculenta	Root	500	500	-0.5302455262265966	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.
Pueraria montana	Root	180	575	-0.5170673277022045	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pueraria montana	Shoot	470	2440	-0.43012350286689155	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Punica granatum	Fruit	80	3182	-0.010325528528400199	--
Pyrus communis	Fruit	90	1332	-0.5722441370544421	--
Quararibea cordata	Fruit	170	1940	-0.3875703457118294	--
Quercus alba	Bark	15	64	-0.9577636884998315	--
Quercus alba	Stem	120	2432	-0.056223725074835744	--
Quercus phellos	Stem	168	1512	-0.7421356284839035	--
Quercus rubra	Stem	112	1254	-0.934489184005142	--
Quercus stellata	Stem	150	1512	-0.7421356284839035	--
Quercus velutina	Stem	105	1550	-0.713804484647442	--
Raphanus sativus	Fruit	240	10526	2.2203394774257896	--
Raphanus sativus	Leaf	300	2609	-0.43466087010548	--
Raphanus sativus	Root	160	5850	0.4097993018467051	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rauvolfia serpentina	Seed	700	2200	-0.8333020835498178	--
Rheum rhabarbarum	Leaf	160	3472	-0.2758801089590869	--
Rheum rhabarbarum	Pt	100	3462	-0.35624352955446276	--
Rhizophora mangle	Leaf	1400	1400	-0.6571011252920264	--
Rhodymenia palmata	Plant	3860	3860	0.13039051091638507	--
Rhus copallina	Leaf	243	3456	-0.2788239005910015	--
Rhus copallina	Stem	75	1464	-0.7779223364878548	--
Rhus glabra	Stem	126	2412	-0.07113485340981547	--
Rhynchosia minima	Shoot	2400	2400	-0.44826021665229215	--
Ribes nigrum	Fruit	490	3500	0.08626372418040051	--
Ribes rubrum	Fruit	418	3310	0.02855316438583405	--
Ribes uva-crispa	Fruit	150	2665	-0.16735899912729948	--
Ricinus communis	Leaf	4600	4600	-0.06834279890910817	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Robinia pseudoacacia	Leaf	2600	3200	-0.32592456670163494	--
Rollinia mucosa	Fruit	260	1140	-0.6305621764257935	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Rosa canina	Fruit	479	2560	-0.19925167690850726	--
Rosmarinus officinalis	Plant	490	1000	-0.7393816155319108	USDA's Ag Handbook 8 and sequelae)
Rubus chamaemorus	Fruit	320	2500	-0.21747606421205457	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rubus idaeus	Leaf	395	2340	-0.4841533669170441	--
Rubus idaeus	Fruit	110	955	-0.6867540372783977	Revised USDA data received 1993.
Rumex crispus	Leaf	560	7568	0.4777305488110486	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Rumex crispus	Root	1945	7570	0.71201932133943	--
Ruscus aculeatus	Root	504	1670	-0.32466562924608017	--
Salix alba	Bark	689	4100	2.414322016750521	--
Salvia officinalis	Leaf	201	1280	-0.6791795625313858	--
Sambucus canadensis	Fruit	369	2036	-0.3584113260261537	USDA's Ag Handbook 8 and sequelae)
Sambucus nigra	Fruit	540	3300	0.0255157665019095	--
Sassafras albidum	Stem	132	1776	-0.545308734462171	--
Sassafras albidum	Leaf	396	3264	-0.3141494001739766	--
Satureja hortensis	Plant	1538	1538	-0.9854166037868982	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Schisandra chinensis	Fruit	639	4260	0.31710596335866637	--
Sclerocarya caffra	Seed	190	2290	-0.8095187719897105	--
Scutellaria lateriflora	Plant	248	1810	-0.854710516276436	--
Secale cereale	Leaf	1970	1970	-0.552228548405069	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Secale cereale	Seed	3725	4225	-0.29817757344740303	--
Sechium edule	Fruit	260	3715	0.15156777868477836	--
Sechium edule	Shoot	470	6350	1.342740269656019	--
Senna alexandrina	Leaf	276	1360	-0.6644606043718129	--
Serenoa repens	Fruit	2105	16200	3.94375903676458	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Sesamum indicum	Leaf	14000	14000	1.6611347848407145	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Sesamum indicum	Seed	5000	8898	0.936704814556836	--
Sicana odorifera	Fruit	245	2065	-0.3496028721627725	--
Sida rhombifolia	Leaf	580	2930	-0.37560105049019366	--
Silybum marianum	Plant	7060	7060	1.6681091875100573	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Silybum marianum	Leaf	1553	7060	0.3842651644977603	--
Sinapis alba	Seed	8100	9330	1.0508647100453512	--
Smilax officinalis	Root	372	1770	-0.3070946978802241	--
Smilax spp	Root	372	1770	-0.3070946978802241	--
Solanum melongena	Fruit	189	5836	0.7957998698651753	--
Solanum melongena	Leaf	380	2794	-0.4006232793614677	--
Solanum nigrum	Leaf	540	4000	-0.17873498510590535	--
Solanum quitoensis	Fruit	120	3155	-0.018526502814996487	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Solanum sessiliflorum	Fruit	140	1400	-0.5515898314437552	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Solanum torvum	Fruit	700	4795	0.47960675014862986	--
Solanum tuberosum	Tuber	320	4200	0.7953217499555455	--
Sonchus oleraceus	Leaf	370	5440	0.08620626176640789	--
Sophora japonica	Seed	2723	2723	-0.6950946174838608	--
Sophora secundiflora	Seed	140	140	-1.377675659258941	--
Sorbus aucubaria	Fruit	360	1880	-0.4057947330153767	--
Spartium junceum	Stem	2600	2600	0.06902975293899401	--
Sphenostylis stenocarpa	Root	800	2273	-0.21871291310996788	--
Sphenostylis stenocarpa	Seed	3980	4393	-0.2537820585352027	--
Spinacia oleracea	Plant	250	6232	1.2702244799414446	--
Spirulina pratensis	Plant	3190	3190	-0.19156933699541506	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Spirulina spp.	Plant	--	3190	-0.19156933699541506	--
Spondias dulcis	Fruit	670	5115	0.5768034824342152	--
Spondias dulcis	Seed	700	700	-1.2296906095516065	--
Spondias mombin	Fruit	310	3250	0.010328777082286746	--
Spondias pinnata	Fruit	110	1135	-0.6320808753677557	--
Spondias purpurea	Fruit	350	1680	-0.4665426906938677	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Spondias tuberosa	Fruit	210	210	-0.9130401796307767	--
Stachys officinalis	Plant	302	1800	-0.8595158871407913	--
Stellaria media	Plant	372	4480	0.42832350450640905	--
Stevia rebaudiana	Leaf	3180	3180	-0.3296043062415282	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Stevia rebaudiana	Plant	--	980	-1.2535562980179198	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Stillingia sylvatica	Plant	2400	2400	-0.571193635279478	--
Symphoricarpos orbiculatus	Stem	228	4224	1.2798133737393482	--
Symphytum officinale	Root	2111	2111	-0.24717782192265478	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Symphytum officinale	Leaf	242	2200	-0.5099115436962968	--
Syzygium aromaticum	Flower	1000	1337	-0.9975269050748918	--
Syzygium aromaticum	Fruit	1000	1337	-0.5707254381124798	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Syzygium cumini	Fruit	130	127	-0.9382505820673505	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Syzygium jambos	Fruit	115	852	-0.7180392354828206	--
Syzygium malaccense	Fruit	30	1800	-0.4300939160867731	--
Tabebuia heptaphylla	Bark	21	120	-0.9109755815885283	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Tamarindus indica	Flower	2200	2200	-0.634683675940031	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Tamarindus indica	Fruit	1080	1647	-0.47656610371081876	--
Tamarindus indica	Leaf	1000	2281	-0.4950085985597291	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Tamarindus indica	Seed	2370	2370	-0.7883780506029484	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Tanacetum parthenium	Plant	--	5010	0.683008160317236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Taraxacum officinale	Leaf	590	4583	0.054560501723326035	--
Taraxacum officinale	Root	518	3620	0.01796753238811398	--
Tephrosia purpurea	Leaf	2600	5200	0.04204938728768902	--
Terminalia bellirica	Leaf	--	2700	-0.41791805519896574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Terminalia catappa	Seed	7890	9835	1.1843155137992867	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Tetragonia tetragonioides	Leaf	280	4665	-0.05638364540445514	--
Theobroma bicolor	Fruit	410	1970	-0.37845815206005573	--
Theobroma bicolor	Seed	5490	5695	0.09028318203434986	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Theobroma cacao	Seed	3600	5571	0.05751506388486866	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Theobroma cacao	Fruit	500	5000	0.5418734067690828	J Cell Biochem VOL. 22=1995
Theobroma speciosum	Fruit	1650	4230	0.30799376970689274	J Cell Biochem VOL. 22=1995
Thymus vulgaris	Leaf	160	950	-0.7398952649396242	--
Thymus vulgaris	Plant	1703	2502	-0.5221788524630546	USDA's Ag Handbook 8 and sequelae)
Trachyspermum ammi	Fruit	4430	4784	0.4762656124763128	--
Tragopogon porrifolius	Root	500	3262	-0.044936401901650866	--
Tribulus terrestris	Leaf	800	2500	-0.45471545059789814	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Trichosanthes anguina	Fruit	200	3700	0.14701168185889152	--
Trifolium pratense	Flower	580	3220	-0.2058307284109949	--
Trifolium pratense	Shoot	900	4500	0.5039172570812402	--
Trigonella foenum-graecum	Seed	374	2880	-0.6536059517623403	--
Triticum aestivum	Plant	400	7200	1.7353843796110304	--
Triticum aestivum	Seed	800	6800	0.3822893961890009	--
Tropaeolum majus	Shoot	850	6200	1.2747275929607667	--
Tropaeolum tuberosum	Root	220	3000	-0.09097224208019386	--
Turnera diffusa	Leaf	242	1150	-0.7030978695406919	--
Ullucus tuberosus	Root	350	2775	-0.1305068376533701	--
Ulmus rubra	Bark	36	220	-0.8274253906754868	--
Urtica dioica	Leaf	894	4470	-0.09226110591841423	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vaccinium corymbosum	Fruit	96	675	-0.7718011780282851	--
Vaccinium macrocarpon	Fruit	924	7700	1.3619708354287114	--
Vaccinium myrtillus	Fruit	856	10700	2.2731902006060767	--
Vaccinium vitis-idaea	Fruit	150	1130	-0.633599574309718	--
Valeriana officinalis	Root	39	330	-0.560116109548552	--
Valerianella radicata	Plant	4647	5552	0.9434592611652892	--
Vanilla planifolia	Fruit	700	700	-0.7642076833184737	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Verbascum thapsus	Leaf	2508	5700	0.13404287578502	--
Vetiveria zizanioides	Fruit	500	6000	0.8456131951615379	--
Viburnum opulus	Bark	650	650	-0.46815956974940875	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Vicia faba	Fruit	740	5070	0.5631351919565547	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Vicia faba	Seed	950	5000	-0.09337683501314556	USDA's Ag Handbook 8 and sequelae)
Vigna aconitifolia	Fruit	2500	2500	-0.21747606421205457	--
Vigna aconitifolia	Leaf	1800	1800	-0.5835063344941616	--
Vigna aconitifolia	Plant	1800	5400	0.8704176240270899	--
Vigna aconitifolia	Seed	2300	5418	0.01708343423268622	--
Vigna angularis	Seed	3810	4402	-0.251403727379192	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vigna mungo	Fruit	1900	1900	-0.3997199372475276	--
Vigna mungo	Plant	1600	1600	-0.9556233044278958	--
Vigna mungo	Seed	348	4321	-0.2728087077832886	--
Vigna radiata	Seed	3260	4500	-0.22550634368040845	--
Vigna radiata	Sprout Seedling	455	6560	0.11559491863278125	USDA's Ag Handbook 8 and sequelae)
Vigna subterranea	Seed	2240	6042	0.18198106104943032	--
Vigna unguiculata	Fruit	590	4856	0.4981348772405696	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	5342	6375	0.2699793138218274	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Shoot	90	881	-1.137001922652881	--
Vigna unguiculata	Seed	520	15593	2.705918935611486	--
Vigna unguiculata	Shoot	90	881	-1.137001922652881	USDA's Ag Handbook 8 and sequelae)
Viscum album	Leaf	2400	2400	-0.47311414829736437	--
Vitellaria paradoxa	Seed	--	430	-1.3010405442319284	--
Vitis vinifera	Fruit	117	1848	-0.41551440624393526	--
Vitis vinifera	Stem	1710	1710	-0.5945154579676041	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Xanthosoma sagittifolium	Leaf	610	38416	6.153360815142381	--
Xanthosoma sagittifolium	Root	470	4700	0.20773359113935988	--
Yucca baccata	Root	169	810	-0.4757756389924427	--
Zea mays	Seed	600	4066	-0.34019475720359266	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zea mays	Silk Stigma Style	287	287		--
Zingiber officinale	Rhizome	320	5323	0.4586280406131061	--
Zingiber officinale	Root	181	2580	-0.1647701538167895	--
Zizyphus jujuba	Fruit	270	2120	-0.3328971838011875	--
Zizyphus jujuba	Leaf	2000	2000	-0.5467089390952291	--
Zizyphus jujuba	Shoot	2300	2300	-0.4936020011157937	--
Zizyphus spina-christi	Fruit	--	--		--