

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**List of Plants for ASCORBIC-ACID**

<b>Plant</b>	<b>Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference</b>
Abelmoschus esculentus	Plant	190	2340	-0.044349356222101836	--
Abelmoschus esculentus	Fruit	130	2340	-0.13899484248695484	--
Acacia farnesiana	Leaf	490	2636	-0.19933288649781924	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Acacia nilotica	Plant	--	--		--
Acacia senegal	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
Acalypha indica	Leaf	1470	7540	0.2556958237397604	Wealth of India.
Achillea millefolium	Leaf	580	3100	-0.15627959906914124	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Achillea millefolium	Plant	119	672	-0.4359276103428388	--
Acorus calamus	Plant	--	--		--
Actaea racemosa	Root	--	21	-0.6339690477813624	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Actinidia chinensis	Fruit	750	6370	0.11157843821243804	--
Aegle marmelos	Fruit	80	1330	-0.2017936051436265	--
Aesculus hippocastanum	Seed	--	24	-0.32404827353208815	Jim Duke's personal files.
Aesculus hippocastanum	Leaf	--	147.2	-0.4302618126885385	Jim Duke's personal files.
Agathosma betulina	Leaf	4900	4900	0.010737464231764774	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Albizia lebeck	Seed	--	17	-0.3282507151699402	Wealth of India.
Aleurites moluccana	Seed	--	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Alliaria petiolata	Plant	--	--		--
Allium ampeloprasum	Flower	400	2367	-0.10607508542239547	--
Allium ampeloprasum	Leaf	170	3019	-0.163795366917682	--
Allium ampeloprasum	Root	170	1241	0.06343722613033131	--
Allium cepa	Bulb	60	2703		--
Allium cepa	Leaf	390	5000	0.020016189970703997	--
Allium sativum var. sativum	Bulb	100	788		--
Allium sativum var. sativum	Flower	440	3793	0.3329412309680728	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Allium sativum var. sativum	Leaf	390	2868	-0.17780624278348023	--
Allium sativum var. sativum	Shoot	420	1883	-0.2799583750115791	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Allium sativum var. sativum	Root	--	--		--
Allium schoenoprasum	Leaf	57	9875	0.4723540697439913	--
Alocasia macrorrhiza	Leaf	50	50	-0.43928073410678753	--
Alocasia macrorrhiza	Root	572	572	-0.3189929355474745	--
Aloe spp.	Leaf	31	6260	0.13692813428133838	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Aloe vera	Leaf	6260	6260	0.13692813428133838	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Alpinia galanga	Rhizome	260	1844	1.9734671239129031	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Althaea officinalis	Seed	--	1640	0.6461153960063319	--
Althaea officinalis	Root	177	1640	0.29152337636866393	--
Amaranthus sp.	Leaf	345	6263	0.13720649605350654	--
Amaranthus spinosus	Leaf	98	5030	0.022799807692385765	--
Amorphophallus campanulatus	Root	15	279	-0.4864847701836436	--
Anacardium occidentale	Fruit	252	17500	0.8036083672904138	--
Anacardium occidentale	Leaf	890	2957	-0.16954817687582432	--
Anacardium occidentale	Seed	20	21	-0.32584931994831046	--
Ananas comosus	Fruit	148	4178	-0.024713529850358282	--
Anethum graveolens	Plant	1214	1440	-0.2556325868627872	--
Anethum graveolens	Seed	--	1150	0.35194448135668727	--
Angelica sinensis	Root	67	304	-0.4721936580133219	--
Annona cherimola	Fruit	50	725	-0.23941068574490013	--
Annona diversifolia	Fruit	140	140	-0.2757842264915863	J Cell Biochem VOL. 22=1995
Annona glabra	Fruit	210	1590	-0.18562758703398824	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Annona muricata	Fruit	190	1540	-0.18873643667045714	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Annona reticulata</i>	Fruit	150	1400	-0.19744121565257006	--
<i>Annona squamosa</i>	Fruit	340	1600	-0.18500581710669448	--
<i>Apium graveolens</i>	Plant	17	129	-0.563401826162719	--
<i>Apium graveolens</i>	Pt	58	2778	-0.2550992791713734	--
<i>Apium graveolens</i>	Seed	171	182	0.6821363243307782	--
<i>Apium graveolens</i>	Shoot	17	129	-0.3648933330728539	--
<i>Apium graveolens</i>	Fruit	357	1700	-0.17878811783375667	--
<i>Arachis hypogaea</i>	Leaf	980	4558	-0.02099577779540737	--
<i>Arachis hypogaea</i>	Seed	0	190	-0.22439037183445343	--
<i>Aralia cordata</i>	Leaf	50	1065	-0.34510166785655444	--
<i>Arctium lappa</i>	Root	20	85	-0.5973838006253391	--
<i>Arctostaphylos uva-ursi</i>	Leaf	22	191	-0.4261977308148832	--
<i>Areca catechu</i>	Seed	--	--		--
<i>Armoracia rusticana</i>	Plant	1220	18200	3.6789306859570874	--
<i>Armoracia rusticana</i>	Root	1800	10000	5.070471286124204	--
<i>Armoracia rusticana</i>	Leaf	2440	4560	-0.020810203280628586	--
<i>Arracacia xanthorrhiza</i>	Root	310	1070	-0.034313981114668365	--
<i>Artemisia absinthium</i>	Leaf	1200	2600	-0.20267322776383737	--
<i>Artemisia dracunculus</i>	Leaf	588	588	-0.3893611896312945	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia vulgaris	Leaf	720	5670	0.08218365242159696	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Artocarpus altilis	Fruit	150	985	-0.22324466763526188	--
Artocarpus altilis	Seed	65	275	-0.1733607233748212	--
Artocarpus heterophyllus	Fruit	45	435	-0.2574420136364197	--
Asimina triloba	Fruit	76	893	-0.22896495096636463	--
Aspalathus linearis	Shoot	157	94000	4.1806764777423835	--
Asparagus officinalis	Shoot	100	5714	-0.09444764278082439	--
Asparagus officinalis	Root	398	3976	1.6268848975635133	--
Astragalus membranaceus	Root	--	--		--
Avena sativa	Plant	26	120	-0.5655146584691259	--
Averrhoa bilimbi	Fruit	160	4665	0.005566665608848747	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Averrhoa carambola	Fruit	200	4935	0.022354453645780776	--
Bacopa monnieri	Shoot	--	630	-0.34063311985238715	Wealth of India.
Bactris gasipaes	Fruit	110	828	-0.2330064554937742	--
Balanites aegyptiacus	Fruit	390	390	-0.2602399783092417	--
Barosma betulina	Leaf	4900	4900	0.010737464231764774	--
Basella alba	Leaf	1020	14785	0.9279395035259072	--
Benincasa hispida	Fruit	130	6750	0.13520569544960165	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Berberis vulgaris	Root	--	0	-0.6459735820044326	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Berberis vulgaris	Fruit	1560	3800	-0.048216433102063125	--
Berberis vulgaris	Leaf	--	--		Jim Duke's personal files.
Berberis vulgaris	Bark	--	--		--
Bertholletia excelsa	Seed	7	7	-0.3342542032240146	USDA's Ag Handbook 8 and sequelae)
Beta vulgaris	Leaf	120	3696	-0.10097839366506348	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Beta vulgaris	Root	50	868	-0.14978616745086681	--
Bixa orellana	Fruit	20	130	-0.2764059964188801	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Blighia sapida	Aril	260	1530		--
Blighia sapida	Seed	780	2735	1.3034973379274766	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Boehmeria nivea	Leaf	730	5615	0.07708035326518038	--
Borago officinalis	Leaf	30	5005	0.020480126257650957	--
Borago officinalis	Shoot	39	39	-0.3692514552082671	Jim Duke's personal files.
Brassica chinensis	Leaf	450	9713	0.45732253404690976	--
Brassica napus var. napobrassica	Root	250	2415	0.7345478536486332	USDA's Ag Handbook 8 and sequelae)
Brassica nigra	Leaf	234	4013	-0.07156483307262614	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea	Stem	620	6890	1.2602259509666862	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Brassica oleracea var. botrytis l.	Leaf	911	10360	0.5173558895778465	--
Brassica oleracea var. botrytis l.	Flower	660	9300	2.0283569773652044	--
Brassica oleracea var. capitata l.	Leaf	190	6774	0.18462078457948597	--
Brassica oleracea var. gemmifera	Leaf	720	6069	0.11920576811996446	--
Brassica oleracea var. italica	Leaf	911	10360	0.5173558895778465	--
Brassica oleracea var. sabellica l.	Leaf	1200	7720	0.272397530069851	--
Brassica oleracea var. viridis l.	Leaf	233	3819	-0.08956556100616822	--
Brassica rapa	Root	210	2580	0.8288691939727557	--
Brassica rapa	Leaf	450	9713	0.45732253404690976	USDA's Ag Handbook 8 and sequelae)
Bromelia pinguin	Shoot	192	3430	-0.20504709786175462	--
Brosimum alicastrum	Fruit	280	1750	-0.1756792681972878	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Bupleurum chinense	Root	132	1200	0.039999802171003906	--
Byrsonima crassifolia	Fruit	840	9275	0.2922026020912808	--
Cajanus cajan	Fruit	320	1601	-0.18494364011396508	--
Cajanus cajan	Seed	0	1279	0.4293894772542468	--
Calathea macrosepala	Flower	70	910	-0.5546352347778739	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Calendula officinalis	Flower	1330	3100	0.11959038436316784	--
Camellia sinensis	Leaf	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Canavalia ensiformis	Fruit	320	1488	-0.19196964029238478	--
Canavalia ensiformis	Seed	0	23	-0.3246486223374956	--
Canna indica	Root	70	210	-0.5259282397737313	--
Cannabis sativa	Seed	--	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Capparis spinosa	Flower	260	2300	-0.12670207924999813	--
Capparis spinosa	Fruit	--	1335	-0.20148272017997962	Wealth of India.
Capparis spinosa	Leaf	--	710	-0.3780411442297887	Wealth of India.
Capsella bursa-pastoris	Plant	360	5500	0.6974895424718603	--
Capsicum annum	Fruit	230	20982	1.0201086559741077	--
Capsicum frutescens	Fruit	350	19992	1.1455818273019922	--
Carica papaya	Fruit	640	4741	0.010292117056281466	--
Carica papaya	Leaf	1400	6222	0.13340221850054146	--
Carica pentagona	Fruit	290	4265	-0.019304131482902408	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Carthamus tinctorius	Seed	--	0	-0.33845664486186666	--
Carthamus tinctorius	Flower	14	100	-0.8040063541862045	--
Carya illinoensis	Seed	20	21	-0.32584931994831046	--
Casimiroa edulis	Fruit	230	1395	-0.19775210061621692	--
Catha edulis	Leaf	1610	1610	-0.29453261257933566	--



Plant	Part	Low PPM	High PPM	StdDev	Reference
Caulophyllum thalictroides	Root	5.7	51.5	-0.6165338909335701	--
Centella asiatica	Leaf	40	374	-0.40921766271262444	--
Centella asiatica	Plant	138	138	-0.5612889938563121	--
Cephaelis ipecacuanha	Plant	--	--		--
Chamaemelum nobile	Flower	267	267	-0.7525928024069561	--
Chenopodium album	Plant	600	9000	1.5191465505189703	--
Chenopodium ambrosioides	Leaf	110	1020	-0.34927709443907706	--
Chondrus crispus	Plant	130	130	-0.5631670670175627	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Chrysanthemum coronarium	Bud	370	4975		--
Chrysanthemum coronarium	Leaf	270	4155	-0.058389042523332435	--
Chrysanthemum parthenium	Plant	--	330	-0.5162152379862993	--
Chrysanthemum parthenium	Leaf	59	330	-0.4133003020377577	--
Chrysobalanus icaco	Fruit	90	1420	-0.19619767579798247	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Chrysophyllum cainito	Fruit	30	640	-0.24469573012689724	--
Cicer arietinum	Seed	30	56	-0.30483711175905015	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	462	9302	0.41918697125986953	--
Cichorium intybus	Leaf	100	2040	-0.254634091901897	--
Cichorium intybus	Root	50	250	-0.5030624603012167	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cimicifuga racemosa	Root	28	135	-0.568801576284696	--
Cinnamomum aromaticum	Bark	309	309	0.13185661758936892	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cinnamomum verum	Bark	309	309	0.13185661758936892	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Citrullus colocynthis	Fruit	122	122	-0.2769034123607151	--
Citrullus lanatus	Fruit	--	94	-0.27864436815713767	--
Citrus aurantiifolia	Fruit	291	4444	-0.008174449784343766	--
Citrus aurantium	Fruit	420	3947	-0.03907641517084457	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Citrus aurantium	Leaf	--	3000	-0.16555832480808047	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
Citrus limon	Fruit	5208	5566	0.061588136058018224	--
Citrus limon	Fruit Juice	--	--		Jim Duke's personal files.
Citrus mitis	Fruit Juice	300	445	1	--
Citrus mitis	Fruit	884	11130	0.40754092360427674	--
Citrus paradisi	Fruit	337	3862	-0.044361459552841695	--
Citrus reticulata	Fruit	280	3684	-0.05542896425867096	--
Citrus sinensis	Fruit	500	4071	-0.03136646807240172	--
Cnicus benedictus	Plant	4	30	-0.5866429815331944	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cnidioscolus chayamansa	Leaf	1960	12200	0.6880844431743283	--
Coccinia grandis	Fruit	280	4058	-0.03217476897788363	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Cocos nucifera	Seed	20	88	-0.2856259499860121	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Coix lacryma-jobi	Seed	--	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cola acuminata	Seed	540	1456	0.5356512158113633	--
Colocasia esculenta	Leaf	69	3625	-0.10756628893971032	--
Colocasia esculenta	Root	0	325	-0.4601891237902518	--
Corchorus olitorius	Leaf	370	4080	-0.06534808682753686	--
Coriandrum sativum	Leaf	780	6290	0.13971175200302013	--
Coriandrum sativum	Fruit	--	920	-0.22728617216267144	--
Corylus avellana	Seed	10	22	-0.325248971142903	--
Corylus avellana	Leaf	--	--		--
Crataegus laevigata	Fruit	24	85	-0.2792039610917021	--
Crataegus laevigata	Leaf	166.4	1800	-0.27690303367535113	--
Crataegus rhipidophylla	Leaf	--	1800	-0.27690303367535113	--
Crataegus rhipidophylla	Fruit	--	85	-0.2792039610917021	--
Cucumis melo	Fruit	397	4370	-0.012775547246317728	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cucurbita pepo	Flower	280	5773	0.9425150784106588	USDA's Ag Handbook 8 and sequelae)
Cucurbita pepo	Fruit	90	1071	-0.21789744626053537	USDA's Ag Handbook 8 and sequelae)
Cucurbita spp	Fruit	148	2340	-0.13899484248695484	--
Cuminum cyminum	Fruit	0	76	-0.27976355402626646	--
Cuminum cyminum	Seed	0	76	-0.2928301356509014	--
Cuminum cyminum	Tissue Culture	--	--		--
Curcuma longa	Rhizome	0	293	-0.34465428565155654	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Curcuma longa	Plant	--	--		--
Cyamopsis tetragonoloba	Fruit	--	490	-0.2540222790363039	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyamopsis tetragonoloba	Shoot	--	2800	-0.23555395280964694	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyclanthera pedata	Fruit	140	2800	-0.110393425831441	--
Cydonia oblonga	Fruit	100	960	-0.2247990924534963	--
Cynara cardunculus	Flower	0	828	-0.5798802122982235	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyperus rotundus	Root	90	90	-0.5945255781912748	--
Cyphomandra betacea	Fruit	223	2060	-0.15640440045118065	--
Cyrtosperma chamissonis	Root	0	762	-0.21038048305303036	--
Datura metel	Leaf	2220	2220	-0.2379323855718064	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Datura stramonium	Plant	--	--		--
Daucus carota	Root	91	775	-0.20294910472446315	--
Dioscorea alata	Root	100	100	-0.5888091333231462	--
Dioscorea pentaphylla	Root	26	140	-0.5659433538506317	--
Dioscorea sp.	Root	194	194	-0.5350745515627371	--
Dioscorea villosa	Rhizome	--	149	-0.5598763894409068	--
Dioscorea villosa	Root	110	460	-0.3830171180705152	--
Diospyros digyna	Fruit	1915	9330	0.2956223366913966	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Diospyros virginiana	Fruit	660	1855	-0.1691506839607031	--
Duchesnea indica	Leaf	--	--		--
Durio zibethinus	Fruit	240	1270	-0.20552422470738918	--
Echinacea purpurea	Root	212	843	-0.16407727962118843	--
Echinacea spp	Leaf	2140	2140	-0.24535536616295778	Economic & Medicinal Plant Research, 5: 253.
Echinacea spp	Root	843	843	-0.16407727962118843	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Elaeagnus angustifolia	Fruit	40	500	-0.25340050910901013	--
Elaeagnus commutata	Fruit	100	725	-0.23941068574490013	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Elaeagnus umbellatus	Fruit	10	57	-0.2809449168881247	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Elaeis guineensis</i>	Fruit	120	163	-0.2743541556588106	--
<i>Eleocharis dulcis</i>	Tuber	40	317	-0.6898431213593998	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Eleutherococcus senticosus</i>	Root	42	200	-0.5316446846418599	--
<i>Ephedra sinica</i>	Plant	151	721	-0.42442441223017924	--
<i>Equisetum arvense</i>	Plant	45	208	-0.5448558536953699	--
<i>Eriobotrya japonica</i>	Fruit	10	840	-0.23226033158102166	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Eriodictyon californicum</i>	Leaf	0.4	1.7	-0.4437623586386951	--
<i>Eryngium floridanum</i>	Shoot	1958	1958	-0.2763266065654014	--
<i>Erythrina berteroana</i>	Shoot	370	2340	-0.25782879927953656	--
<i>Erythrina fusca</i>	Leaf	30	780	-0.3715460362125312	--
<i>Erythroxylum coca</i>	Leaf	14	15	-0.4425282881154163	--
<i>Eugenia brasiliensis</i>	Fruit	188	1290	-0.2042806848528016	--
<i>Eugenia floribunda</i>	Fruit	230	1785	-0.17350307345175955	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Eugenia uniflora</i>	Fruit	140	2115	-0.15298466585106485	--
<i>Eupatorium perfoliatum</i>	Plant	--	--		--
<i>Euphorbia hirta</i>	Leaf	443	443	-0.40281534195275637	--
<i>Euphrasia officinalis</i>	Plant	10	67	-0.5779568931624107	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Fagopyrum esculentum	Seed	--	0	-0.33845664486186666	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Feijoa sellowiana	Fruit	280	1750	-0.1756792681972878	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Ficus carica	Fruit	20	2013	-0.1593267191094614	--
Ficus carica	Leaf	1050	3300	-0.1377221475912628	--
Filipendula ulmaria	Plant	--	--		--
Filipendula ulmaria	Flower	--	--		--
Foeniculum vulgare	Fruit	--	--		--
Foeniculum vulgare	Plant	340	3148	0.1453360330642024	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Foeniculum vulgare	Seed	--	0	-0.33845664486186666	--
Foeniculum vulgare	Leaf	--	123600	11.024584916352621	Jim Duke's personal files.
Fragaria spp	Fruit	400	6948	0.14751674001001847	--
Fragaria spp	Leaf	3190	4350	-0.04029552733240095	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Frangula purshiana	Bark	--	0	-1.0104899665727316	--
Fucus vesiculosus	Plant	30	258	-0.5331178964375541	--
Garcinia mangostana	Fruit	10	255	-0.26863387232770786	--
Genipa americana	Fruit	330	1020	-0.22106847288973364	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Gentiana lutea	Root	40	183	-0.5413626409176785	--
Ginkgo biloba	Seed	150	545	-0.011266545914812775	--
Ginkgo biloba	Fruit	--	640	-0.24469573012689724	Jim Duke's personal files.
Ginkgo biloba	Leaf	--	--		--
Gliricidia sepium	Leaf	440	3145	-0.1521041724866186	--
Glycine max	Fruit	290	942	-0.22591827832262512	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycine max	Seed	0	849	0.17123949092904842	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycine max	Sprout Seedling	100	949	-0.32572024497431507	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Glycyrrhiza glabra	Root	98	626	-0.2881241332595798	--
Gymnema sylvestre	Leaf	152	800	-0.3696902910647434	--
Harpagophytum procumbens	Root	--	--		--
Helianthus tuberosus	Tuber	40	306	-0.7242310715177989	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hibiscus rosa-sinensis	Flower	40	405	-0.710107352433685	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hibiscus sabdariffa	Flower	22	200	-0.7732197962345587	--
Hibiscus sabdariffa	Fruit	540	3750	-0.05132528273853201	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses



Plant	Part	Low PPM	High PPM	StdDev	Reference
Hippophae rhamnoides	Fruit	500	14000	0.5859888927375912	--
Hippophae rhamnoides	Leaf	1500	3400	-0.12844342185232357	--
Hordeum vulgare	Seed	--	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hordeum vulgare	Stem	3300	3300	-0.07434961362635317	--
Humulus lupulus	Fruit	1782	1782	-0.17368960442994769	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Humulus lupulus	Flower	332	1782	-0.2861764494395231	--
Hydrangea arborescens	Root	--	--		--
Hydrastis canadensis	Root	189	681	-0.25668368648487233	--
Hylocereus guatemalensis	Fruit	80	515	-0.2524678542180695	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Hylocereus undatus	Fruit	80	515	-0.2524678542180695	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hypericum perforatum	Plant	1300	1300	-0.28849886718467166	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hypericum perforatum	Seed	395	395	-0.10131886672592849	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
Hypericum perforatum	Leaf	--	--		--
Hypericum perforatum	Shoot	--	16.5	-0.3703409857421204	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Inga edulis	Seed	130	355	-0.12533281894222614	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Inula helenium	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Inula helenium	Root	4.4	20	-0.6345406922681753	--
Ipomoea aquatica	Leaf	320	7300	0.2334268819663063	--
Ipomoea batatas	Leaf	210	4234	-0.05105884918957045	--
Ipomoea batatas	Root	201	1186	0.03199677935562381	--
Iris x germanica	Flower	4200	4200	0.458242521831271	--
Iris x germanica	Leaf	4860	4860	0.007025973936189085	--
Iris x germanica	Root	870	870	-0.14864287847724109	--
Juglans nigra	Hull Husk	--	--		--
Juglans nigra	Fruit	--	0	-0.2844890054736992	--
Juglans nigra	Pericarp	--	--		--
Juglans regia	Fruit	4500	15000	0.6481658854669692	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Juglans regia	Leaf	8000	13000	0.762314249085842	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Juglans regia	Seed	0	52	-0.3072385069806799	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juniperus communis	Fruit	--	--		--
Juniperus communis	Leaf	600	600	-0.3882477425426218	--
Justicia pectoralis	Leaf	280	1867	-0.27068628743026185	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Lablab purpureus	Fruit	7.7	63.6	-0.2805345487361107	--
Lablab purpureus	Seed	0	1063	0.29971413528624014	--
Lactuca sativa	Leaf	180	3000	-0.16555832480808047	--
Lagenaria siceraria	Fruit	101	2265	-0.14365811694165817	--
Lagenaria siceraria	Leaf	50	330	-0.4133003020377577	--
Larrea tridentata	Plant	250	760	-0.4152688055690829	--
Lens culinaris	Seed	42	70	-0.296432228483346	--
Lens culinaris	Sprout Seedling	148	605	-0.6011185419891155	USDA's Ag Handbook 8 and sequelae)
Leonurus cardiaca	Plant	42	42	-0.5838258717913186	--
Lepidium meyenii	Root	25	2860	0.9889296502803575	--
Lepidium sativum	Leaf	690	6510	0.16012494862868643	--
Licania platypus	Fruit	110	1005	-0.2220011277806743	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Limonia acidissima	Fruit	20	65	-0.2804475009462896	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
Lobelia inflata	Leaf	255	2252	-0.23496319333534585	--
Luffa aegyptiaca	Fruit	120	2400	-0.13526422292319215	--
Luffa aegyptiaca	Leaf	950	9596	0.44646642493235084	--
Lycium chinense	Leaf	80	769	-0.37256669604381454	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Lycium chinense	Fruit	--	425	-0.25806378356371346	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	50	2952	-0.10094252293657557	--
Lycopus europeus	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Macadamia spp	Seed	0	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Maclura pomifera	Fruit	30	150	-0.2751624565642925	Smith, J. L. and Perino, J. V. 1981. Osage Orange (Maclura pomifera): History and Economic Uses. Economic Botany 35(1): 24-41
Malpighia glabra	Fruit	16228	172231	10.424316629299783	--
Malus domestica	Fruit	20	402	-0.2594938543964892	--
Malva neglecta	Leaf	1175	1175	-0.3348950695437213	--
Malva parviflora	Plant	454	4745	0.5202463878788408	--
Malva sylvestris	Leaf	240	2855	-0.17901247712954232	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Mammea americana	Fruit	100	1515	-0.1902908614886916	--
Mangifera indica	Fruit	30	1760	-0.175057498269994	--
Mangifera indica	Leaf	530	2430	-0.21844706152003404	--
Manihot esculenta	Leaf	800	10000	0.4839524769176653	--
Manihot esculenta	Root	97	1530	0.2286424828192489	--
Manilkara zapota	Fruit	90	625	-0.2456283850178379	--
Maranta arundinacea	Root	70	215	-0.523070017339667	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Marrubium vulgare	Plant	--	--		--
Marrubium vulgare	Flower	--	--		--
Matricaria recutita	Plant	--	--		Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
Mauritia flexuosa	Fruit	0	0	-0.2844890054736992	J Cell Biochem VOL. 22=1995
Medicago sativa	Plant	276	1470	-0.24858981250809772	--
Medicago sativa	Leaf	--	--		--
Melicoccus bijugatas	Fruit	8	230	-0.2701882971459423	--
Mentha spicata	Leaf	135	9200	0.4097226710061515	USDA's Ag Handbook 8 and sequelae)
Mentha x piperita	Leaf	30	201	-0.4252698582409893	--
Menyanthes trifoliata	Leaf	2047	2047	-0.25398458110017125	--
Mimosa pudica	Leaf	180	2570	-0.20545684548551912	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Mimulus glabratus	Shoot	220	2200	-0.2646081003790682	--
Momordica charantia	Fruit	570	36447	1.9816758485339367	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Momordica charantia	Leaf	1700	12412	0.7077553417408794	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Morinda citrifolia	Leaf	520	2320	-0.22865365983286717	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Moringa oleifera	Leaf	2200	8800	0.37260776805039464	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Moringa oleifera	Shoot	517	2425	-0.25371279504053523	USDA's Ag Handbook 8 and sequelae)
Moringa oleifera	Fruit	--	1200	-0.2098766141984456	=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
Morus alba	Fruit	50	1040	-0.21982493303514608	--
Morus alba	Leaf	2000	3000	-0.16555832480808047	--
Muntingia calabura	Fruit	805	3795	-0.048527318065710014	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Murraya koenigii	Leaf	40	445	-0.4026297674379776	--
Murraya sp	Fruit	161	596	-0.24743151780698985	--
Musa x paradisiaca	Fruit	161	596	-0.24743151780698985	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Musa x paradisiaca	Hull Husk	--	1380		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Myrciaria cauliflora	Fruit	170	1770	-0.1744357283427002	--
Myrciaria dubia	Fruit	--	--		Jim Duke's personal files.
Myrica cerifera	Bark	143	656	1.4146859532018246	--
Nandina domestica	Leaf	--	100	-0.43464137123731794	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Nasturtium officinale	Herb	430	13690	1	--
Nasturtium officinale	Shoot	--	370	-0.35322325046580305	--
Nelumbo nucifera	Rhizome	15	15	-0.760152513800441	--
Nelumbo nucifera	Seed	--	--		--
Nepeta cataria	Plant	--	--		--
Nigella sativa	Leaf	2577	2577	-0.20480733468379336	--
Ocimum basilicum	Leaf	27	612	-0.25834558219747267	--
Ocimum sanctum	Leaf	830	830	-0.3669066733430616	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ocimum tenuiflorum	Leaf	--	830	-0.3669066733430616	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Opuntia ficus-indica	Fruit	65	1690	-0.17940988776105046	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Opuntia ficus-indica	Flower	--	940	-0.5453992673923802	--
Origanum majorana	Plant	514	555	-0.4633944303261279	USDA's Ag Handbook 8 and sequelae)
Origanum vulgare	Plant	--	--		--
Oryza sativa	Seed	--	--		--
Oxalis tuberosa	Root	370	2284	0.6596624258761481	--
Pachira macrocarpa	Seed	240	255	-0.18536769948296997	--
Pachyrhizus erosus	Plant	140	1845	-0.1605551330744788	--
Panax ginseng	Root	--	0	-0.6459735820044326	--
Panax ginseng	Leaf	--	--		--
Panax quinquefolius	Plant	39	39	-0.5845301492267876	--
Papaver somniferum	Seed	--	0	-0.33845664486186666	--
Papaver somniferum	Fruit	--	1120	-0.21485077361679586	--
Papaver somniferum	Tissue Culture	--	--		--
Parthenium integrifolium	Root	--	--		--
Passiflora edulis	Fruit	300	1205	-0.20956572923479874	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Passiflora foetida	Fruit	150	835	-0.23257121654466856	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Passiflora incarnata	Flower	11	100	-0.8040063541862045	--
Passiflora ligularis	Fruit	108	950	-0.2254208623807901	--



Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Passiflora mollissima</i>	Fruit	700	8750	0.2595596809083574	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
<i>Passiflora quadrangularis</i>	Fruit	150	2680	-0.11785466495896635	--
<i>Passiflora quadrangularis</i>	Seed	150	695	0.07878577489630294	--
<i>Pastinaca sativa</i>	Root	160	830	-0.17150865794975564	--
<i>Peperomia pelucida</i>	Leaf	100	1280	-0.3251524075178351	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Peperomia pereskiiifolia</i>	Leaf	50	335	-0.41283636575081073	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Pereskia aculeata</i>	Fruit	20	1250	-0.20676776456197674	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Perideridia gairdneri</i>	Root	112	302	-0.47333694698694767	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>Perilla frutescens</i>	Leaf	460	3286	-0.13902116919471427	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Perilla frutescens</i>	Seed	0	200	-0.21838688378037904	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Perilla frutescens</i>	Flower	--	--		Lamparska, K. 1966. Studies on Vitamin C Dynamics in <i>Perilla ocymoides</i> and in <i>Calendula officinalis</i> Grown in Short and Long Day Conditions. Zesz Nauk Uniw Mikolaja Kopernika Toruniu Biol, 8: 69-.
<i>Persea americana</i>	Fruit	65	994	-0.22268507470069746	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Persea schiedeana	Fruit	57	698	-0.2410894645485933	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Petasites japonicus	Pt	315	5725	1.657820760823633	USDA's Ag Handbook 8 and sequelae)
Petroselinum crispum	Plant	430	7695	1.2127858660899764	--
Petroselinum crispum	Shoot	--	--		--
Petroselinum crispum	Fruit	--	1220	-0.20863307434385805	--
Petroselinum crispum	Leaf	--	--		--
Phaseolus acutifolius	Seed	0	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus coccineus	Fruit	270	270	-0.26770121743676717	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Phaseolus coccineus	Seed	0	23	-0.3246486223374956	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus lunatus	Seed	0	952	0.23307541788601452	--
Phaseolus lunatus	Sprout Seedling	70	194	-0.9301554608062169	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus vulgaris	Fruit	10	2389	-0.1359481698432153	--
Phaseolus vulgaris	Leaf	1100	8333	0.32927611884954844	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus vulgaris	Seed	0	177	-0.23219490630475012	--
Phaseolus vulgaris	Sprout Seedling	387	4161	2.245731295756901	USDA's Ag Handbook 8 and sequelae)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Phoenix dactylifera	Fruit	0	750	-0.23785626092666567	--
Phragmites australis	Leaf	2000	9100	0.40044394526721233	--
Phyllanthus acidus	Fruit	20	1279	-0.20496463177282476	--
Phyllanthus emblica	Fruit	110	27293	1.4125076570892114	--
Phyllanthus emblica	Plant	--	15610	3.070904500002226	--
Physalis alkekengi	Fruit	4000	4000	-0.035781034556187544	--
Physalis ixocarpa	Fruit	20	460	-0.25588758881818524	--
Physalis peruviana	Fruit	365	2865	-0.10635192130403144	--
Phytolacca americana	Shoot	1360	16184	0.4125472323055765	--
Pimenta dioica	Leaf	2012	2067	-0.2521288359523834	--
Pimenta dioica	Fruit	--	426	-0.2580016065709841	--
Pimpinella anisum	Fruit	8	9	-0.2839294125391348	--
Pimpinella anisum	Seed	8	9	-0.33305350561319974	--
Pinus cembroides	Seed	0	10	-0.3324531568077923	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pinus edulis	Seed	20	21	-0.32584931994831046	USDA's Ag Handbook 8 and sequelae)
Pinus sylvestris	Leaf	3000	3000	-0.16555832480808047	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Piper auritum	Leaf	490	3370	-0.13122703957400533	--
Piper betel	Leaf	43	2130	-0.2462832387368517	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Piper nigrum	Fruit	10	10	-0.2838672355464054	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pisum sativum	Fruit	600	5935	0.08453144637515866	--
Pisum sativum	Seed	44	1892	0.7974032949690063	--
Pisum sativum	Sprout Seedling	1650	1650	0.23548384283782145	--
Plantago major	Plant	--	--		--
Plantago major	Seed	--	--		--
Plantago psyllium	Seed	--	0	-0.33845664486186666	--
Platonia insignis	Fruit	180	1190	-0.2104983841257394	--
Platycodon grandiflorum	Root	--	--		--
Plectranthus amboinicus	Leaf	120	2145	-0.2448914298760108	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Polygonum multiflorum	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Polymnia edulis	Root	250	1400	0.15432869953357664	--
Portulaca oleracea	Herb	105	7000	-1	--
Pothomorphe sp.	Plant	--	--		--
Pourouma cecropiaefolia	Fruit	10	55	-0.2810692708735834	J Cell Biochem VOL. 22=1995
Pouteria caimito	Fruit	490	1890	-0.16697448921517488	--
Pouteria campechiana	Fruit	400	1475	-0.1927779411978667	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pouteria viridis</i>	Fruit	430	1360	-0.19992829536174517	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Prunus armeniaca</i>	Fruit	100	745	-0.23816714589031257	USDA's Ag Handbook 8 and sequelae)
<i>Prunus cerasus</i>	Fruit	70	873	-0.23020849082095218	--
<i>Prunus domestica</i>	Fruit	86	699	-0.24102728755586394	USDA's Ag Handbook 8 and sequelae)
<i>Prunus dulcis</i>	Seed	0	13	-0.33065211039157	USDA's Ag Handbook 8 and sequelae)
<i>Prunus persica</i>	Fruit	14	1127	-0.2144155346676902	--
<i>Prunus salicifolia</i>	Fruit	222	1415	-0.19650856076162937	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
<i>Psidium cattleianum</i>	Fruit	150	2100	-0.15391732074200554	--
<i>Psidium guajava</i>	Fruit	24	18315	0.8542826163648568	--
<i>Psidium guajava</i>	Seed	--	8	-0.3336538544186072	--
<i>Psophocarpus tetragonolobus</i>	Fruit	190	190	-0.2726753768551174	--
<i>Psophocarpus tetragonolobus</i>	Seed	--	--		--
<i>Psoralea esculenta</i>	Root	4	171	-0.5482223747594329	--
<i>Punica granatum</i>	Fruit	40	636	-0.24494443809781474	--
<i>Punica granatum</i>	Fruit Juice	--	--		--
<i>Pyrus communis</i>	Fruit	40	250	-0.2689447572913547	--
<i>Quararibea cordata</i>	Fruit	90	660	-0.2434521902723097	--
<i>Quercus alba</i>	Bark	29	127	-0.5409818235675965	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Raphanus sativus	Fruit	690	7822	0.20185943165549472	--
Raphanus sativus	Leaf	810	7043	0.20958055681723248	--
Raphanus sativus	Root	226	6216	2.907368548024328	--
Rhamnus cathartica	Fruit	--	--		--
Rhamnus cathartica	Leaf	--	--		--
Rheum rhabarbarum	Leaf	110	1833	-0.2738410541815012	--
Rheum rhabarbarum	Pt	80	2581	-0.38297347254735453	--
Rhodymenia palmata	Plant	120	120	-0.5655146584691259	--
Ribes nigrum	Fruit	150	10030	0.3391462316019611	--
Ribes nigrum	Leaf	--	--		--
Ribes rubrum	Fruit	300	2554	-0.12568896604286797	--
Ribes uva-crispa	Fruit	263	2397	-0.13545075390138028	--
Rollinia mucosa	Fruit	330	1450	-0.19433236601610115	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Rosa canina	Fruit	1384	7400	0.17562074072369727	--
Rosa canina	Flower	3000	13000	3.167459621576097	--
Rosa gallica	Fruit	5450	8470	0.2421501229441316	--
Rosa multiflora	Leaf	2000	2000	-0.25834558219747267	--
Rosa rubiginosa	Seed	12500	12500	7.16590342273111	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosa spp	Fruit	1000	12500	0.49272340364352446	--
Rosmarinus officinalis	Plant	612	673	-0.4356928511976825	USDA's Ag Handbook 8 and sequelae)
Rosmarinus officinalis	Leaf	11	675	-0.3812886982384174	USDA's Ag Handbook 8 and sequelae)
Rubus fruticosus	Leaf	--	--		--
Rubus idaeus	Leaf	620	3670	-0.10339086235718767	--
Rubus idaeus	Seed	300	300	-0.15835200323963525	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Rubus idaeus	Fruit	70	1870	-0.16821802906976244	--
Rumex acetosa	Leaf	630	12400	0.7066418946522066	--
Rumex acetosella	Leaf	500	12000	0.6695269916964498	--
Rumex crispus	Leaf	300	4054	-0.06776055551966105	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Rumex crispus	Root	1042	4054	1.6714731675349168	--
Ruscus aculeatus	Root	77	256	-0.4996325933803395	--
Ruta graveolens	Leaf	4790	4790	0.0005308659189316285	--
Salix alba	Bark	11	68	-0.7590997797668324	--
Salvia officinalis	Leaf	55	350	-0.4114445568899699	--
Sambucus canadensis	Fruit	360	1782	-0.17368960442994769	USDA's Ag Handbook 8 and sequelae)
Sambucus nigra	Leaf	739	11000	0.5767397343070575	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sambucus nigra	Fruit	128	1515	-0.1902908614886916	--
Schisandra chinensis	Fruit	153	1022	-0.22094411890427487	--
Sclerocarya caffra	Fruit	540	8190	0.2247405649799058	--
Scutellaria lateriflora	Plant	140	1025	-0.35305763210265884	--
Sechium edule	Fruit	110	1570	-0.1868711268885758	--
Sechium edule	Shoot	330	4460	-0.1551708112009148	--
Senna alexandrina	Leaf	1130	5566	0.0725337776531	--
Serenoa repens	Fruit	11	88	-0.27901743011351393	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Sicana odorifera	Fruit	139	1270	-0.20552422470738918	--
Sida rhombifolia	Leaf	900	4545	-0.022202012141469468	--
Silybum marianum	Leaf	26	120	-0.4327856260895301	--
Sinapis alba	Plant	--	--		--
Smilax officinalis	Root	--	--		--
Smilax spp	Root	--	--		--
Solanum melongena	Fruit	13	947	-0.22560739335897823	--
Solanum melongena	Leaf	790	5809	0.09508108119872248	--
Solanum nigrum	Leaf	110	4067	-0.06655432117359895	--
Solanum quitoensis	Fruit	310	7925	0.20826366190662066	--
Solanum torvum	Fruit	40	275	-0.2673903324731203	--



Plant	Part	Low PPM	High PPM	StdDev	Reference
Solanum tuberosum	Tuber	170	990	1.4140741928771987	--
Sonchus oleraceus	Leaf	50	625	-0.385928061107887	--
Sophora japonica	Leaf	470	470	-0.4003100860032428	--
Sorbus aucubaria	Fruit	39	2650	-0.1197199747408477	--
Spinacia oleracea	Plant	239	7595	1.1893099515743446	--
Spinacia oleracea	Leaf	--	--		--
Spinacia oleracea	Fruit Juice	--	55	-1	--
Spirulina pratensis	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Spirulina spp.	Plant	--	--		--
Spondias dulcis	Fruit	360	2750	-0.1135022754679099	--
Spondias mombin	Fruit	160	1615	-0.1840731622157538	--
Spondias pinnata	Fruit	210	2165	-0.14987581621459597	--
Spondias purpurea	Fruit	450	2025	-0.15858059519670886	--
Stachys officinalis	Plant	1.3	8	-0.5918076827266334	--
Stellaria media	Plant	6	69	-0.577487374872098	--
Stellaria media	Shoot	0	0	-0.3711399748002795	--
Stevia rebaudiana	Leaf	110	110	-0.433713498663424	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Symphytum officinale	Root	132	132	-0.5705165097451346	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Symphytum officinale	Leaf	88	800	-0.3696902910647434	--
Syringa vulgaris	Leaf	1315	1315	-0.3219048535092064	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Syzygium aromaticum	Bark	810	810	1.9840107880269489	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Syzygium cumini	Fruit	57	1330	-0.2017936051436265	--
Syzygium jambos	Fruit	30	2385	-0.13619687781413284	--
Syzygium malaccense	Fruit	65	4615	0.0024578159723798528	--
Tabebuia heptaphylla	Bark	32	181	-0.34134843992761776	--
Tamarindus indica	Flower	600	600	-0.6500735644279758	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Tamarindus indica	Fruit	24	585	-0.248115464727013	--
Tamarindus indica	Leaf	263	263	-0.41951704828284697	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Tanacetum parthenium	Plant	--	330	-0.5162152379862993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Taraxacum officinale	Leaf	18	6520	0.16105282120258035	--
Taraxacum officinale	Root	54	376	-0.4310352549627957	--
Terminalia catappa	Seed	--	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Plant	Part	Low PPM	High PPM	StdDev	Reference
Terminalia chebula	Fruit	920	920	-0.22728617216267144	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Tetragonia tetragonioides	Leaf	300	5000	0.020016189970703997	--
Theobroma bicolor	Fruit	210	1010	-0.22169024281702743	--
Theobroma bicolor	Seed	0	0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Theobroma cacao	Fruit	30	70	-0.2801366159826427	J Cell Biochem VOL. 22=1995
Theobroma cacao	Seed	31	31	-0.3198458318942361	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Theobroma speciosum	Fruit	90	230	-0.2701882971459423	J Cell Biochem VOL. 22=1995
Thuja occidentalis	Branches	--	--		--
Thymus vulgaris	Leaf	--	0	-0.4439200969762572	--
Tilia sp.	Leaf	--	--		--
Tragopogon porrifolius	Root	80	491	-0.3652961389793164	--
Tribulus terrestris	Leaf	420	420	-0.4049494488727124	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Trichosanthes anguina	Fruit	--	--		--
Trifolium pratense	Flower	534	2966	0.07833639670796254	--
Trigonella foenum-graecum	Leaf	520	520	-0.3956707231337732	--
Trigonella foenum-graecum	Seed	78	600	0.02175263838259632	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Trigonella foenum-graecum	Shoot	--	--		--
Triticum aestivum	Seed	--	--		--
Tropaeolum majus	Flower	1300	1300	-0.43456765876645553	--
Tropaeolum majus	Leaf	2000	4650	-0.012459350115583284	--
Tropaeolum majus	Pt	1000	1600	-1.0197480091049047	--
Tropaeolum tuberosum	Root	670	4800	2.097919954697313	--
Tulipa gesneriana	Stem	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Turnera diffusa	Leaf	206	983	-0.3527102229624846	--
Ullucus tuberosus	Root	230	1750	0.3544042699180789	--
Ulmus rubra	Bark	--	0	-1.0104899665727316	--
Urtica dioica	Leaf	166	830	-0.3669066733430616	--
Urtica dioica	Plant	640	2200	-0.07721563654398624	Jim Duke's personal files.
Vaccinium corymbosum	Fruit	125	878	-0.2298976058573053	--
Vaccinium macrocarpon	Fruit	144	1200	-0.2098766141984456	--
Vaccinium myrtillus	Fruit	132	1650	-0.18189696747022557	--
Vaccinium vitis-idaea	Fruit	280	1865	-0.16852891403340933	--
Valeriana officinalis	Root	--	0	-0.6459735820044326	--
Verbascum thapsus	Leaf	341	776	-0.3719171852420888	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Viburnum opulus	Fruit	126100	126100	7.556029777700852	--
Vicia faba	Fruit	120	820	-0.23350387143560922	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Vicia faba	Seed	330	1735	0.7031485325200385	USDA's Ag Handbook 8 and sequelae)
Vigna aconitifolia	Seed	20	44	-0.3120412974239394	--
Vigna angularis	Seed	--	--		--
Vigna mungo	Seed	0	22	-0.325248971142903	--
Vigna mungo	Sprout Seedling	426	426	-0.7444217256101888	--
Vigna radiata	Seed	48	53	-0.30663815817527246	--
Vigna radiata	Sprout Seedling	113	1506	0.12020083478511438	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Fruit	56	2633	-0.12077698361724712	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	16	17	-0.3282507151699402	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Shoot	360	3523	-0.20054370498849433	--
Vigna unguiculata	Seed	15	75	-0.2934304844563088	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Shoot	360	3523	-0.20054370498849433	USDA's Ag Handbook 8 and sequelae)
Viscum album	Fruit	7500	7500	0.18183843999663504	--
Vitis vinifera	Fruit	99	600	-0.24718280983607235	USDA's Ag Handbook 8 and sequelae)
Vitis vinifera	Leaf	3490	3870	-0.08483341087930922	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
Vitis vinifera	Stem	310	310	-1.1858763373403332	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Yucca baccata	Root	27	131	-0.5710881542319475	--
Zea mays	Seed	0	85	-0.28742699640223446	--
Zea mays	Silk Stigma Style	11	11		--
Zingiber officinale	Rhizome	0	317	-0.3087839350199982	--
Zingiber officinale	Root	20	288	-0.48133996980232785	--
Zizyphus jujuba	Fruit	460	3882	-0.04311791969825413	--
Zizyphus spina-christi	Fruit	300	330	-0.26397059787300436	--