Dr. Duke's Phytochemical and Ethnobotanical Database

List of Plants for ZINC

Plant	Part	Low PPM	High PPM	StdDev	Reference
Abelmoschus esculentus	Fruit	6	60	0.8935039976101535	USDA's Ag Handbook 8 and sequelae)
Abelmoschus manihot	Leaf	12.5	108	0.136029778251821	--
Acanthopanax gracilistylis	Root Bark	19	19	0.4103913408340613	--
Achillea millefolium	Plant	--	--		--
Achyranthes bidentata	Root	16	51	1.1747363149474581	--
Aconitum carmichaelii	Tuber	13	13	-0.8165520080950929	--
Acorus calamus	Rhizome	--	--		Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Actaea dahurica	Rhizome	--	18	-0.3944378740006705	Suziki, A., Morimoto, I., and Okitzu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
Actaea racemosa	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Agathosma betulina	Leaf	84	84	-0.01125863721237699	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Akebia quinata	Stem	10	10	-1.5798716186082722	--
Albizia julibrissin	Bark	7	8	-0.4644439198315651	--
Alisma plantago-aquatica	Rhizome	54	68	-0.12850079606062845	--
Allium ampeloprasum	Plant	--	--		--
Allium cepa	Bulb	2	53	1.4104984605249231	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Allium cepa	Seed	34	34	-0.31604114389068755	--
Allium sativum var. sativum	Bulb	15.3	15.3	-0.616532999263753	--
Allium sativum var. sativum	Root	--	--		--
Alocasia macrorrhiza	Root	15	51	1.1747363149474581	--
Aloe spp.	Leaf	--	1.1	-0.5200173722949603	--
Aloe vera	Leaf	11	770	4.198735238139277	--
Althaea officinalis	Root	--	--		--
Amaranthus sp.	Leaf	9	108	0.136029778251821	--
Amomum xanthioides	Seed	48	48	0.08142163294753811	--
Amorphophallus campanulatus	Root	10	50	1.1309386194117264	--
Amorphophallus konjac	Root	--	--		--
Amphicarpaea bracteata	Shoot	40	40	-0.7372574394002785	--
Anacardium occidentale	Seed	48	57	0.336933418057826	--
Ananas comosus	Fruit	0.7	6	-0.7311333825482068	USDA's Ag Handbook 8 and sequelae)
Anemarrhena asphodeloides	Rhizome	19	27	-0.3465691999714629	--
Anethum graveolens	Fruit	43	66	1.0740192620721936	--
Anethum graveolens	Plant	11	150	0.9651488572052452	--
Anethum graveolens	Seed	43	66	0.592445203168114	USDA's Ag Handbook 8 and sequelae)
Angelica dahurica	Root	29	29	0.21118701316135757	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Angelica laxiflora	Root	15	15	-0.4019807243388883	--
Angelica sinensis	Root	--	--		--
Annona cherimola	Fruit	3	15	-0.4603604858551467	--
Annona muricata	Fruit	4	4	-0.7913051373688869	--
Anthriscus cerefolium	Leaf	9	10	-0.4653979182269869	--
Apium graveolens	Leaf	1	44	-0.2567393296527067	USDA's Ag Handbook 8 and sequelae)
Apium graveolens	Root	2.8	70	2.0068925301263634	ACTA AGRIC SCAND SUPPL 22: 1980
Apium graveolens	Seed	0.2	89	1.2454197651166274	--
Apium graveolens	Fruit	0.3	1.2	-0.8755455941178387	--
Arachis hypogaea	Seed	31	35	-0.2876509455451	--
Arctium lappa	Root	0.5	2.2	-0.9625912271962561	--
Arctostaphylos uva-ursi	Leaf	--	--		--
Areca catechu	Seed	16	16	-0.8270647141112636	--
Arisaema consanguineum	Rhizome	14	14	-0.41571284023587385	--
Aristolochia debilis	Fruit	40	40	0.29178644940335335	--
Armoracia rusticana	Root	0.5	2.9	-0.9319328403212439	--
Artemisia capillaris	Plant	22	22	-0.2973055462924508	--
Artemisia cina	Plant	--	--		--
Artemisia dracunculus	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia herba-alba	Plant	10	21	-0.30716847131977654	--
Artemisia vulgaris	Plant	50	90	0.3733733555657003	Chem. & Pharm. Bull. 38: 2205.
Artocarpus altilis	Fruit	1.2	8	-0.6709616277275268	--
Artocarpus heterophyllus	Fruit	4	16	-0.4302746084448067	--
Asiasarum heterotropoides	Root	38	59	1.5251178792333129	--
Asiasarum sieboldii	Root	38	59	1.5251178792333129	--
Asimina triloba	Fruit	9	38	0.23161469458267334	--
Asparagus lucidus	Root	7	8	-0.7085645930890114	--
Asparagus officinalis	Shoot	12	124	-0.49520977085345347	--
Asparagus officinalis	Root	0.2	2.3	-0.9582114576426829	--
Astragalus membranaceus	Root	0.8	5	-0.8399576796962069	--
Atractylodes lancea	Rhizome	33	33	-0.3146567506186579	--
Atractylodes ovata	Rhizome	26	32	-0.3199754921774587	--
Avena sativa	Plant	--	--		--
Averrhoa carambola	Fruit	1	12	-0.5506181180861668	USDA's Ag Handbook 8 and sequelae)
Barosma betulina	Leaf	84	84	-0.01125863721237699	--
Belamcanda chinensis	Rhizome	17	17	-0.39975661555947134	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Berberis vulgaris	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Berberis vulgaris	Bark	--	--		--
Bertholletia excelsa	Seed	41	53	0.22337262467547583	--
Beta vulgaris	Root	3	70	2.0068925301263634	--
Blechnum orientale	Rhizome	17	17	-0.39975661555947134	--
Bletilla striata	Tuber	16	16	-0.6586794393978675	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Boehmeria nivea	Plant	32	43	-0.09018412071860993	--
Borago officinalis	Plant	--	--		Abstract (See species file)
Brassica juncea	Leaf	6	65	-0.12786196612153358	--
Brassica napus var. napobrassica	Root	1.7	33	0.38637779530428495	USDA's Ag Handbook 8 and sequelae)
Brassica nigra	Leaf	2	40	-0.28128739889673965	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. botrytis l.	Leaf	4	118	0.19739995136190341	--
Brassica oleracea var. botrytis l.	Flower	3	97	3.0606347490514247	--
Brassica oleracea var. capitata l.	Leaf	2	36	-0.2751503815857314	--
Brassica oleracea var. gemmifera	Leaf	10	157	0.43674362649122483	USDA's Ag Handbook 8 and sequelae)
Brassica oleracea var. italica	Leaf	4	118	0.19739995136190341	--
Brassica oleracea var. sabellica l.	Leaf	4	28	-0.35493160662883855	--
Brassica oleracea var. viridis l.	Leaf	10	157	0.43674362649122483	--
Brassica pekinensis	Leaf	66.5	80	-0.03580670645640996	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Brassica rapa	Seed	15	15	-0.8554549124568511	--
Brassica rapa	Root	2	23	-0.05159916005303352	--
Broussonetia papyrifera	Fruit	23	23	-0.21967346657242662	--
Bupleurum chinense	Root	--	--		--
Cajanus cajan	Seed	25	34	-0.31604114389068755	--
Camellia sinensis	Leaf	30	30	-0.34265757200682206	--
Canavalia ensiformis	Seed	20	20	-0.7135039207289134	--
Capsicum annuum	Fruit	2	7.7	-0.6799873909506287	--
Capsicum frutescens	Fruit	3	24	-0.1895875891620866	USDA's Ag Handbook 8 and sequelae)
Carica papaya	Fruit	--	--		--
Carthamus tinctorius	Flower	--	--		--
Carum carvi	Fruit	47	61	0.9235898750204936	--
Carum carvi	Seed	47	61	0.592445203168114	--
Carya glabra	Shoot	4	1100	2.317153616071562	--
Carya illinoensis	Seed	56	56	0.30854321971223847	--
Carya ovata	Seed	46	46	0.024641236256363018	--
Carya ovata	Shoot	7	342	0.1329615594228307	--
Cassia tora	Seed	31	31	-0.40121173892745016	--
Castanea dentata	Seed	10	24	-0.5999431273465632	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Castanea mollisima	Seed	8	17	-0.798674515765676	--
Castanea sativa	Seed	4	10	-0.9974059041847889	--
Catalpa ovata	Fruit	21	21	-0.27984522139310664	--
Caulophyllum thalictroides	Root	--	--		--
Celosia cristata	Flower	39	39	0.2510160873322747	--
Centella asiatica	Bark	34	3.4	-0.9069023286651865	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Centella asiatica	Leaf	0.4	3.4	-0.5059022324796413	--
Chaenomeles lagenaria	Fruit	21	21	-0.27984522139310664	--
Chamaemelum nobile	Flower	--	--		--
Chamissoa altissima	Leaf	4	36	-0.3058354681407726	Tramil
Chenopodium album	Seed	24	24	-0.5999431273465632	--
Chondrus crispus	Plant	44	44	-0.08032119569128418	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Chrysanthemum parthenium	Plant	--	--		--
Chrysanthemum parthenium	Leaf	--	--		--
Cicer arietinum	Seed	33	50	0.1382020296387132	USDA's Ag Handbook 8 and sequelae)
Cichorium endivia	Leaf	8	146	0.3692364360701342	--
Cichorium intybus	Root	--	--		--
Cimicifuga dahurica	Rhizome	--	18	-0.3944378740006705	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cimicifuga racemosa	Root	--	--		--
Cinnamomum aromaticum	Bark	4	10	-0.27207069859955574	--
Cinnamomum burmannii	Bark	10	10	-0.27207069859955574	--
Cinnamomum sieboldii	Bark	40	40	2.6135276198805846	--
Cinnamomum sieboldii	Root Bark	20	20	0.7181848464596076	--
Cinnamomum verum	Bark	11.4	20	0.6897954075604908	--
Cinnamomum verum	Leaf	34	34	-0.3181095027627891	--
Cistanche salsa	Plant	13	13	-0.3860718715383825	--
Citrullus lanatus	Fruit	8	8	-0.6709616277275268	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus aurantiifolia	Fruit	1	9	-0.6408757503171868	USDA's Ag Handbook 8 and sequelae)
Citrus aurantium	Fruit	--	16	-0.4302746084448067	--
Citrus medica	Fruit	14	14	-0.49044636326548674	--
Citrus paradisi	Fruit	0	9	-0.24975934398276664	--
Citrus reticulata	Fruit	0.8	8	-0.6709616277275268	ACTA AGRIC SCAND SUPPL 22: 1980
Citrus sinensis	Fruit	0.9	13	-0.5205322406758267	--
Cnicus benedictus	Plant	--	--		--
Cnidium officinale	Rhizome	16	16	-0.40507535711827214	--
Cocos nucifera	Seed	9	17	-0.5715529290009757	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Coix lacryma-jobi	Seed	--	20	-0.7135039207289134	Suziki, A., Morimoto, I., and Okitzu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
Colocasia esculenta	Leaf	6.6	6.6	-0.486263777084415	--
Colocasia esculenta	Root	5	66	1.8317017479834359	--
Coptis chinensis	Rhizome	90	600	2.701069713221419	--
Coptis japonica	Rhizome	90	600	2.701069713221419	--
Coptis spp	Rhizome	90	600	2.701069713221419	--
Coriandrum sativum	Fruit	34	52	0.6528169783274335	--
Cornus officinalis	Fruit	12	12	-0.5506181180861668	--
Corylus avellana	Seed	20	39	-0.1740901521627498	--
Crataegus cuneata	Fruit	14	14	-0.49044636326548674	--
Crataegus laevigata	Fruit	--	--		--
Crataegus laevigata	Flower	--	--		--
Crataegus rhipidophylla	Fruit	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Cucumis melo	Fruit	1.5	31	0.021013552710293256	--
Cucumis sativus	Fruit	2	157	3.8118341064131345	--
Cucurbita maxima	Leaf	7.6	54	-0.19536915654262424	--
Cucurbita pepo	Seed	75	83	4.396731781476845	--
Cucurbita spp	Fruit	2	41	0.3218723268136934	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cuminum cyminum	Fruit	41	58	0.8333322427894736	--
Cuminum cyminum	Seed	41	58	0.3653236164034136	--
Curcuma longa	Rhizome	--	22	-0.3731629077654671	--
Curcuma longa	Plant	0.5	1.5	-0.49949550935262865	--
Cymbopogon citratus	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Cynanchum atratum	Root	31	31	0.29878240423282126	--
Cynara cardunculus	Flower	4	36	0.1056909841399049	USDA's Ag Handbook 8 and sequelae)
Cyperus rotundus	Rhizome	33	33	-0.3146567506186579	--
Cypripedium pubescens	Root	67	67	1.8754994435191676	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Cyrtosperma chamissonis	Root	10	50	1.1309386194117264	--
Daucus carota	Root	2	79	2.40107178994795	--
Dendrobium nobile	Stem	26	26	-1.342191817578709	--
Dioscorea alata	Root	2	17	-0.3143853332674246	--
Dioscorea bulbifera	Rhizome	12	12	-0.4263503233534755	--
Dioscorea sp.	Root	56	56	1.3937247926261174	--
Dioscorea villosa	Root	1.3	5.6	-0.813679062374768	--
Diospyros virginiana	Leaf	5	25	-0.37334265856186327	--
Diospyros virginiana	Stem	9	162	0.6780864911725766	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Drynaria fortunei	Rhizome	17	17	-0.39975661555947134	--
Echinacea purpurea	Root	1.3	5.1	-0.8355779101426338	--
Echinacea spp	Root	51	5.1	-0.8355779101426338	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Elaeagnus umbellatus	Fruit	3	20	-0.30993109880344666	--
Elettaria cardamomum	Fruit	23	28	-0.06924407952072656	--
Eleutherococcus senticosus	Root	0.9	4.2	-0.8749958361247925	--
Elytrigia repens	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Ephedra sinica	Plant	0.4	2.1	-0.49357775433623324	--
Ephedra spp	Plant	8	8	-0.4353864966750113	--
Equisetum arvense	Plant	--	--		--
Equisetum hyemale	Plant	10	10	-0.4156606466203598	--
Eriobotrya japonica	Leaf	28	28	-0.35493160662883855	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Eriocaulon sp	Leaf	21	21	-0.39789072780589624	--
Eriodictyon californicum	Leaf	0.4	1.7	-0.5163351619083554	--
Erythroxylum coca	Leaf	18	29	-0.3487945893178303	--
Erythroxylum novogranatense	Leaf	16	33	-0.32424652007379734	--
Erythroxylum novogranatense	Leaf	19	22	-0.391753710494888	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucommia ulmoides	Bark	14	14	0.11267574386446289	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Euodia rutaecarpa	Fruit	18	18	-0.37010285362412665	--
Eupatorium perfoliatum	Plant	0.2	2	-0.49456404683896577	--
Euphrasia officinalis	Plant	0.5	3.5	-0.47976965929797716	--
Fallopia japonica	Plant	42	49	-0.031006570554655437	Chem. & Pharm. Bull. 38: 2205.
Ficus carica	Fruit	1	7	-0.7010475051378668	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Firmiana simplex	Seed	25	25	-0.5715529290009757	--
Foeniculum vulgare	Fruit	7.1	33	0.08118530753097328	--
Foeniculum vulgare	Seed	0.1	0.7	-1.261434748798753	--
Forsythia suspensa	Fruit	17	17	-0.40018873103446667	--
Fragaria spp	Fruit	1.1	17	-0.40018873103446667	--
Frangula purshiana	Bark	--	--		--
Fraxinus rhynchophylla	Bark	17	17	0.40123557571247687	--
Fritillaria thunbergii	Bulb	12	12	-0.7939654612611702	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Fucus vesiculosus	Plant	0.1	0.6	-0.5083721418772219	--
Gardenia jasminoides	Fruit	10	17	-0.40018873103446667	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Gastrodia elata	Rhizome	12	12	-0.4263503233534755	--
Genipa americana	Fruit	3	14	-0.49044636326548674	--
Genipa americana	Seed	16	16	-0.8270647141112636	--
Gentiana lutea	Root	0.6	2.9	-0.9319328403212439	--
Gentiana scabra	Root	18	18	-0.27058763773169275	--
Geranium thunbergii	Plant	28	28	-0.23812799612849617	--
Ginkgo biloba	Seed	3	8	-1.054186300875964	USDA's Ag Handbook 8 and sequelae)
Ginkgo biloba	Leaf	0.6	2.3	-0.5126529515217503	--
Glechoma hederacea	Plant	46	53	0.00844512955464756	Chem. & Pharm. Bull. 38: 2205.
Glehnia littoralis	Root	26	26	0.07979392655416202	--
Glycine max	Seed	22	90	1.273809963462215	--
Glycyrrhiza glabra	Root	0.1	0.3	-1.0458068487141465	--
Glycyrrhiza uralensis	Root	11	13	-0.489576115410352	--
Gymnema sylvestre	Leaf	--	--		--
Harpagophytum procumbens	Root	0.3	1.8	-0.9801103054105488	--
Helianthus annuus	Seed	46	54	0.2517628230210634	--
Helianthus tuberosus	Tuber	16	64	1.8672816597577366	Bonness, M. S., Promising new drugs from plants: poisons that heal, Herbarist, #56, 1990, 59-68
Hibiscus sabdariffa	Flower	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Hordeum vulgare	Seed	20	30	-0.42960193727303775	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Hordeum vulgare	Sprout Seedling	20	20	-1.394755939064127	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Hordeum vulgare	Stem	21	21	-1.4164667554004475	--
Houttuynia cordata	Plant	56	56	0.03803390463662481	Suziki, A., Morimoto, I., and Okitzu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
Humulus lupulus	Fruit	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Humulus lupulus	Flower	--	--		--
Hydrangea arborescens	Root	--	--		--
Hydrastis canadensis	Root	0.4	1.6	-0.9888698445176951	--
Hyoscyamus niger	Seed	48	48	0.08142163294753811	--
Inula helenium	Plant	--	--		--
Inula helenium	Root	1	3.9	-0.888135144785512	--
Ipomoea aquatica	Leaf	12.3	92	0.037837501275688946	--
Ipomoea batatas	Root	2	11	-0.5771715064818157	--
Isatis tinctoria	Root	40	40	0.6929616640544078	--
Juglans cinerea	Seed	26	37	-0.2308705488539249	--
Juglans nigra	Hull Husk	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juglans nigra	Seed	46	46	0.024641236256363018	--
Juglans nigra	Fruit	--	--		--
Juglans nigra	Pericarp	--	--		--
Juglans regia	Seed	25	30	-0.42960193727303775	USDA's Ag Handbook 8 and sequelae)
Juncus effusus	Pith	38	38	-1	--
Juniperus communis	Fruit	--	--		--
Juniperus virginiana	Shoot	7	317	0.060923562831513706	--
Jussiaea repens	Plant	40	40	-0.11977289580058717	--
Lablab purpureus	Seed	75	93	1.3589805584989778	--
Lactuca sativa	Leaf	2.7	974	5.450686769584958	--
Lagenaria siceraria	Fruit	7	157	3.8118341064131345	--
Larrea tridentata	Plant	--	--		--
Lens culinaris	Seed	37	42	-0.08891955712598718	USDA's Ag Handbook 8 and sequelae)
Lens culinaris	Sprout Seedling	14	54	0.8998425413316947	USDA's Ag Handbook 8 and sequelae)
Lepidium meyenii	Root	--	38	0.6053662729829442	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Ligustrum japonicum	Fruit	24	24	-0.1895875891620866	--
Ligustrum lucidum	Fruit	24	24	-0.1895875891620866	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Linum usitatissimum	Seed	85	155	3.1191728559254055	Cunane, S. and Thompson, L. U., eds. 1995. Flaxseed in Human Nutrition. AOCS Press, Champaign IL. 384 pp.
Liquidambar styraciflua	Leaf	12	98	0.07465960514173857	--
Liquidambar styraciflua	Stem	4	240	1.8367755211916963	--
Lobelia inflata	Leaf	0.1	0.4	-0.524313284412666	--
Lonicera japonica	Flower	21	21	-0.6209345318219442	--
Lophatherum gracile	Plant	25	25	-0.26771677121047355	--
Lupinus albus	Seed	47	53	0.22337262467547583	--
Lycium chinense	Fruit	20	20	-0.30993109880344666	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Lycium chinense	Root Bark	23	23	1.6415653633362461	--
Lycopersicon esculentum	Fruit	1	120	2.6986566422305542	--
Lycopodium clavatum	Plant	28	28	-0.23812799612849617	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Lygodium japonicum	Pollen Or Spore	23	23		--
Macadamia spp	Seed	17	18	-0.7702843174200885	USDA's Ag Handbook 8 and sequelae)
Magnolia denudata	Flower	25	25	-0.4271677275654511	--
Magnolia fargesii	Flower	25	25	-0.4271677275654511	--
Magnolia kobus	Flower	25	25	-0.4271677275654511	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Magnolia officinalis	Bark	9	9	-0.36825730921556044	--
Malus domestica	Fruit	0	35	0.1413570623516533	--
Mangifera indica	Fruit	0.4	11.4	-0.5686696445323708	--
Manihot esculenta	Root	4	19	-0.2267899421959609	--
Medicago sativa	Plant	--	--		--
Mentha arvensis var. piperascens	Plant	28	28	-0.23812799612849617	Suziki, A., Morimoto, I., and Okitzu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
Mentha pulegium	Plant	56	56	0.03803390463662481	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Mentha spicata	Leaf	11	75	-0.06649179301145117	USDA's Ag Handbook 8 and sequelae)
Mentha x piperita	Leaf	--	--		--
Morinda sp	Root	15	15	-0.4019807243388883	--
Morus alba	Root Bark	9	14	-1.12857618729367	--
Murraya sp	Fruit	1	7	-0.7010475051378668	--
Musa x paradisiaca	Fruit	1	6.5	-0.7160904438430368	USDA's Ag Handbook 8 and sequelae)
Myrica cerifera	Bark	--	--		--
Myristica fragrans	Aril	20	20		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Myristica fragrans	Seed	13	20	-0.7135039207289134	--
Nardostachys chinensis	Rhizome	22	22	-0.3731629077654671	--
Nasturtium officinale	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Nelumbo nucifera	Seed	28	28	-0.48638233396421304	--
Nepeta cataria	Plant	--	--		--
Notopterygium incisum	Rhizome	16	16	-0.40507535711827214	--
Nyssa sylvatica	Leaf	2	55	-0.189232139231616	--
Nyssa sylvatica	Stem	6	132	0.2324368642421459	--
Ocimum basilicum	Leaf	5	6	-0.48994598747101986	USDA's Ag Handbook 8 and sequelae)
Oenothera biennis	Seed	70	90	1.273809963462215	--
Ophiopogon japonicus	Tuber	7	16	-0.6586794393978675	--
Opuntia ficus-indica	Seed	15	15	-0.8554549124568511	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Origanum majorana	Plant	32	43	-0.09018412071860993	--
Origanum vulgare	Plant	39	49	-0.031006570554655437	USDA's Ag Handbook 8 and sequelae)
Paeonia lactiflora	Root	15	24	-0.007801464517301675	--
Paeonia moutan	Root Bark	10	15	-0.8207826816681236	--
Paeonia suffruticosa	Root Bark	10	15	-0.8207826816681236	--
Panax ginseng	Root	--	--		--
Panax ginseng	Leaf	--	--		--
Panax ginseng	Fruit	--	--		--
Panax ginseng	Petiole	--	--		--
Panax ginseng	Stem	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Panax japonicus	Rhizome	20	20	-0.3838003908830688	--
Panax quinquefolius	Plant	10	114	0.6100835562215182	--
Papaver somniferum	Seed	24	130	2.4094178972857168	--
Parthenium integrifolium	Root	0.6	3.7	-0.8968946838926584	--
Passiflora incarnata	Flower	--	--		--
Pastinaca sativa	Root	5	70	2.0068925301263634	--
Perilla frutescens	Plant	50	50	-0.021143645527329686	Suziki, A., Morimoto, I., and Okitzu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
Persea americana	Fruit	4	16	-0.4302746084448067	--
Petasites japonicus	Plant	21	60	0.0774856047459278	Chem. & Pharm. Bull. 38: 2205.
Petroselinum crispum	Plant	--	--		--
Peucedanum decursivum	Plant	23	42	-0.10004704574593568	--
Phaseolus acutifolius	Seed	25	34	-0.31604114389068755	--
Phaseolus coccineus	Seed	2	2	-1.2245274909494892	--
Phaseolus lunatus	Seed	7	100	1.5577119469180905	--
Phaseolus vulgaris	Fruit	2	150	3.6012329645407544	--
Phaseolus vulgaris	Seed	19	50	0.1382020296387132	--
Phellodendron amurense	Bark	26	26	1.2669150712565191	--
Phoenix dactylifera	Fruit	3	4	-0.7913051373688869	USDA's Ag Handbook 8 and sequelae)
Phoenix dactylifera	Seed	0.6	29	-0.4579921356186253	Abstract (See species file)

Plant	Part	Low PPM	High PPM	StdDev	Reference
Phyllanthus emblica	Fruit	18	89	1.7659944425100138	--
Physalis ixocarpa	Fruit	35	71	1.2244486491238937	--
Phytelephas aequatorialis	Flower	7	24	-0.4756094286295744	KOZIOL & PEDERSEN. 1993. PHYTELEPHAS AEQUATORIALIS(ARECACEAE) IN HUMAN AND ANIMAL NUTRITION. ECON. BOT. 47:401-307.
Phytelephas aequatorialis	Mesocarp	13	37		KOZIOL & PEDERSEN. 1993. PHYTELEPHAS AEQUATORIALIS(ARECACEAE) IN HUMAN AND ANIMAL NUTRITION. ECON. BOT. 47:401-307.
Pimenta dioica	Fruit	11	20	-0.30993109880344666	--
Pimpinella anisum	Fruit	--	59	0.8634181201998136	--
Pimpinella anisum	Seed	59	59	0.39371381474900113	--
Pinellia ternata	Tuber	14	18	-0.5534310602663841	--
Pinus echinata	Shoot	6	88	-0.59894448594495	--
Pinus edulis	Seed	40	50	0.1382020296387132	--
Pinus pinea	Seed	42	46	0.024641236256363018	USDA's Ag Handbook 8 and sequelae)
Piper nigrum	Fruit	11.2	35.7	0.16241717653889182	--
Pistacia vera	Seed	3	30	-0.42960193727303775	--
Pisum sativum	Seed	11	60	0.42210401309458867	--
Plantago asiatica	Plant	31	31	-0.20853922104651892	--
Plantago major	Seed	0.8	2.5	-1.2103323917766955	--
Plantago psyllium	Seed	0.5	2.1	-1.2216884711149305	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Platycodon grandiflorum	Root	13	18	-0.27058763773169275	--
Polygala tenuifolia	Root	12	12	-0.5333738109460838	--
Polygonum multiflorum	Rhizome	8	8	-0.44762528958867887	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Polygonum multiflorum	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Polygonum multiflorum	Plant	--	24.5	-0.27264823372413644	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Polystichum polyblepharum	Plant	34	60	0.0774856047459278	--
Portulaca oleracea	Shoot	3	60	-0.679627042127225	Laferriere, J.E., 1988, Nutricomp Program, Nutricomp Database; reviewed in J. Ethnobiology 9(1):27-29.
Prunella vulgaris	Flower	25	25	-0.4271677275654511	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Prunus armeniaca	Seed	2	38	-0.20248035050833735	--
Prunus cerasus	Fruit	1	7	-0.7010475051378668	--
Prunus domestica	Fruit	0.66	131	3.029601293744294	--
Prunus dulcis	Seed	26	37	-0.2308705488539249	--
Prunus persica	Bark	--	--		--
Prunus persica	Fruit	0.45	37.5	0.21657175587750332	--
Prunus persica	Seed	31	31	-0.40121173892745016	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Prunus serotina	Leaf	3	192	0.6515392323765133	--
Prunus serotina	Stem	0.5	216	1.4802558196473519	--
Psidium guajava	Fruit	2	20	-0.30993109880344666	USDA's Ag Handbook 8 and sequelae)
Psophocarpus tetragonolobus	Seed	43	51	0.16659222798430076	--
Pueraria pseudohirsuta	Root	21	30	0.2549847086970894	--
Pulsatilla chinensis	Root	24	24	-0.007801464517301675	--
Pyrus communis	Fruit	0.15	26.6	-0.11136430789520253	--
Quercus alba	Bark	0.6	2.4	-1.003088939281191	--
Quercus alba	Stem	2	182	0.9751862424595303	--
Quercus phellos	Stem	2	92	-0.3617626383317617	--
Quercus rubra	Seed	17	17	-0.798674515765676	--
Quercus rubra	Stem	4	138	0.32156678962823204	--
Quercus stellata	Stem	4	52	-0.9559621409056692	--
Quercus velutina	Stem	5	93	-0.346907650767414	--
Quisqualis indica	Fruit	22	22	-0.24975934398276664	--
Raphanus sativus	Root	2	72	2.094487921197827	--
Raphanus sativus	Seed	29	29	-0.4579921356186253	--
Rehmannia glutinosa	Root	14	14	-0.44577841987462014	--
Rheum palmatum	Rhizome	9	10	-0.4369878064710772	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rheum rhabarbarum	Pt	1	46		--
Rhizophora mangle	Leaf	43	43	-0.2628763469637149	--
Rhodymenia palmata	Plant	39	39	-0.12963582082791292	--
Rhus copallina	Leaf	5	96	0.062385570519722086	--
Rhus copallina	Stem	7	128	0.17301691398475513	--
Rhus glabra	Stem	3	208	1.3614159191325703	--
Ribes nigrum	Fruit	2	21	-0.27984522139310664	--
Ribes rubrum	Fruit	2	16	-0.4302746084448067	--
Ribes uva-crispa	Fruit	1	16	-0.4302746084448067	--
Rosa canina	Fruit	--	--		--
Rosa laevigata	Fruit	15	15	-0.4603604858551467	--
Rosmarinus officinalis	Plant	30	38	-0.13949874585523866	USDA's Ag Handbook 8 and sequelae)
Rosmarinus officinalis	Leaf	9	38	-0.29356143351875613	USDA's Ag Handbook 8 and sequelae)
Rubia cordifolia	Root	39	39	0.6491639685186761	--
Rubus chamaemorus	Fruit	5.3	40	0.29178644940335335	--
Rubus chingii	Fruit	28	28	-0.06924407952072656	--
Rubus idaeus	Leaf	--	--		--
Rubus idaeus	Fruit	4	37	0.2015288171723333	Revised USDA data received 1993.
Rumex acetosa	Leaf	2	20	-0.4040277451169045	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rumex crispus	Root	--	--		--
Ruscus aculeatus	Bark	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Ruscus aculeatus	Root	0.6	2.1	-0.9669709967498292	--
Salix alba	Bark	0.4	2.1	-1.0319449224659927	--
Salvia miltiorrhiza	Root	12	12	-0.5333738109460838	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
Salvia officinalis	Leaf	1	5.9	-0.4905596892021207	--
Sambucus nigra	Fruit	3	17	-0.40018873103446667	--
Santalum acuminatum	Fruit	2	9	-0.6408757503171868	--
Sassafras albidum	Stem	4	111	-0.07951787460915558	--
Sassafras albidum	Leaf	10	136	0.30786626296005176	--
Schisandra chinensis	Fruit	--	--		--
Schizonepeta tenuifolia	Plant	28	28	-0.23812799612849617	--
Scrophularia buergeriana	Root	13	13	-0.489576115410352	--
Scutellaria baicalensis	Root	17	18	-0.27058763773169275	--
Scutellaria lateriflora	Plant	1.2	8.6	-0.42946874165861587	--
Secale cereale	Seed	35	45	-0.00374896208922453	USDA's Ag Handbook 8 and sequelae)
Sechium edule	Leaf	0.5	73	-0.07876582763346765	--
Senna alexandrina	Leaf	0.4	1.9	-0.5151077584461536	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Senna obtusifolia	Seed	10	76	0.8763471866239895	--
Senna occidentalis	Seed	41	41	-0.11730975547157471	--
Serenoa repens	Fruit	0.7	5.2	-0.7552020844764787	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Sesamum indicum	Seed	24	102	1.6144923436092655	--
Siegesbeckia orientalis	Plant	17	17	-0.3466201714290795	--
Silybum marianum	Plant	33	3.3	-0.4817422443034423	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Silybum marianum	Leaf	0.7	3.3	-0.506515934210742	--
Simmondsia chinensis	Seed	16	16	-0.8270647141112636	--
Sinapis alba	Seed	27	61	0.4504942114401762	--
Sinomenium acutum	Rhizome	15	15	-0.410394098677073	--
Smilax officinalis	Root	0.5	2.6	-0.9450721489819633	--
Smilax spp	Root	0.5	2.6	-0.9450721489819633	--
Solanum melongena	Fruit	18	25.6	-0.14145018530554254	--
Solanum tuberosum	Tuber	1.9	44.1	0.8200602873994755	--
Sophora angustifolia	Root	10	24	-0.007801464517301675	--
Sophora subprostrata	Root	14	14	-0.44577841987462014	--
Sorbus aucubaria	Fruit	1	18	-0.37010285362412665	--
Spinacia oleracea	Plant	4	185	1.3103512331616465	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Spirulina spp.	Plant	--	5.3	-0.4620163942487908	--
Spondias dulcis	Fruit	1.9	1.9	-0.8544854799306009	--
Spondias tuberosa	Fruit	1.33	1.33	-0.8716344300544947	--
Stachys officinalis	Plant	0.1	0.8	-0.5063995568717568	--
Stellaria media	Plant	0.4	5.2	-0.46300268675152334	--
Stevia rebaudiana	Leaf	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Stevia rebaudiana	Plant	--	26	-0.2578538461831478	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Symphoricarpos orbiculatus	Stem	2	92	-0.3617626383317617	--
Symphytum officinale	Root	2.8	2.8	-0.9363126098748169	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Symphytum officinale	Leaf	--	--		--
Syzygium aromaticum	Flower	10	30	-0.18495922224483477	--
Syzygium aromaticum	Fruit	10	30	-0.009072324700046541	--
Tabebuia heptaphylla	Bark	0.1	0.7	-1.166606177328399	--
Tanacetum parthenium	Plant	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Taraxacum mongolicum	Plant	34	34	-0.17895044596454168	--
Taraxacum officinale	Root	0.2	1.3	-1.0020091531784148	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Taraxacum officinale	Leaf	21	230	0.8847458901948265	--
Tephrosia candida	Plant	26	26	-0.2578538461831478	--
Tetrapanax papyrifera	Pith	42	42	1	--
Thymus vulgaris	Leaf	0.3	1.5	-0.517562565370557	--
Thymus vulgaris	Plant	55	74	0.2155665551284883	USDA's Ag Handbook 8 and sequelae)
Trachyspermum ammi	Fruit	43	43	0.38204408163437337	--
Tragopogon porrifolius	Root	2	2	-0.9713507663034024	--
Trifolium pratense	Flower	--	--		--
Trigonella foenum-graecum	Seed	--	--		--
Triticum aestivum	Seed	12	19	-0.741894119074501	--
Turnera diffusa	Leaf	0.8	3.7	-0.5040611272863389	--
Tussilago farfara	Flower	25	25	-0.4271677275654511	--
Ulmus rubra	Bark	--	--		--
Urtica dioica	Leaf	0.9	4.7	-0.49792410997533065	--
Urtica dioica	Root	--	19	-0.2267899421959609	--
Urtica dioica	Seed	--	19	-0.741894119074501	--
Vaccinium corymbosum	Fruit	1	7	-0.7010475051378668	--
Vaccinium macrocarpon	Fruit	--	--		--
Vaccinium myrtillus	Fruit	1	8.7	-0.6499015135402889	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vaccinium vitis-idaea	Fruit	1.7	14	-0.49044636326548674	--
Valeriana officinalis	Root	--	--		--
Valerianella locusta	Plant	62	64.5	0.12186876736889367	--
Valerianella radicata	Plant	572	701	6.399620547261733	--
Verbascum thapsus	Leaf	0.2	0.4	-0.524313284412666	--
Viburnum opulus	Bark	17	17	0.40123557571247687	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Vigna aconitifolia	Seed	19	21	-0.6851137223833258	--
Vigna angularis	Seed	50	58	0.3653236164034136	--
Vigna radiata	Seed	26	31	-0.40121173892745016	USDA's Ag Handbook 8 and sequelae)
Vigna radiata	Sprout Seedling	3.5	48	0.4949133977324324	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	35	38	-0.20248035050833735	USDA's Ag Handbook 8 and sequelae)
Vigna unguiculata	Seed	10	144	2.8068806741239425	--
Viscum album	Leaf	86	86	0.0010153974096394941	--
Vitis vinifera	Fruit	0.4	27	-0.09932995693106657	--
Vitis vinifera	Stem	75	75	-0.6142974269256724	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Xanthosoma sagittifolium	Root	5	19	-0.2267899421959609	--
Yucca baccata	Root	0.3	1.4	-0.9976293836248417	--
Zea mays	Seed	4	20	-0.7135039207289134	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Rhizome	--	57	-0.18700695320743768	--
Zingiber officinale	Root	--	--		--
Zizyphus jujuba	Fruit	21	21	-0.27984522139310664	--