

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for BORON

Plant	Part	Low PPM	High PPM	StdDev	Reference
Acacia catechu	Plant				--
Allium sativum var. sativum	Bulb	3.0	10.0	-1.0	--
Allium cepa	Bulb	1.0	45.0	1.0	--
Alocasia macrorrhiza	Root	1.0	3.3	-0.7671876184299082	--
Amorphophallus campanulatus	Root	1.7	7.7	-0.604506870425494	--
Anacardium occidentale	Seed		3.2	-0.9919327348390011	--
Ananas comosus	Fruit		0.2	-0.7998787652725032	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Anethum graveolens	Seed	28.0	50.0	1.2280232969498832	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Anethum graveolens	Plant	4.0	35.0	-0.4551354442400374	--
Annona squamosa	Leaf		107.0	1.2462766786046107	--
Annona muricata	Fruit		3.0	-0.7435041606401308	--
Apium graveolens	Root	4.0	103.0	2.919010239761024	--
Apium graveolens	Seed	43.0	61.0	1.7498078343361594	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Arachis hypogaea	Seed	5.0	18.0	-0.2898953572647384	--
Armoracia rusticana	Root	6.0	27.0	0.10907004695750487	ACTA AGRIC SCAND SUPPL 22: 1980
Artocarpus altilis	Fruit	5.2	23.0	-0.34082841326604174	--
Asparagus officinalis	Shoot	6.0	104.0	1.4929660518315542	--
Avena sativa	Seed	2.0	7.0	-0.8116798946510148	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Averrhoa carambola</i>	Fruit	0.6	8.0	-0.6428352237966085	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Bertholletia excelsa</i>	Seed		2.7	-1.0156502138111045	Furr, A.K., et al. 1979
<i>Beta vulgaris</i>	Root	1.0	80.0	2.0686336024652223	--
<i>Brassica oleracea</i> var. <i>italica</i>	Leaf	1.0	85.0	0.6469238451071857	--
<i>Brassica napus</i> var. <i>napobrassica</i>	Root	2.5	30.0	0.2199887387786964	ACTA AGRIC SCAND SUPPL 22: 1980
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Flower	1.0	76.0	1.2304541664359345	--
<i>Brassica rapa</i>	Root	2.0	20.0	-0.14974023395860875	--
<i>Brassica oleracea</i> var. <i>gemmifera</i>	Stem		21.0	-0.7419113414039952	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Leaf	1.0	85.0	0.6469238451071857	--
<i>Brassica napus</i> var. <i>napobrassica</i>	Leaf		52.0	-0.2521054051389519	--
<i>Brassica pekinensis</i>	Leaf	13.3	21.0	-1.096648034158051	--
<i>Brassica oleracea</i> var. <i>gemmifera</i>	Leaf		57.0	-0.11588885207135528	--
<i>Brassica oleracea</i> var. <i>italica</i>	Stem		21.0	-0.7419113414039952	--
<i>Brassica napus</i> var. <i>napobrassica</i>	Stem		24.0	-0.5283308037270876	--
<i>Brassica oleracea</i> var. <i>capitata</i> l.	Leaf	1.0	145.0	2.281522481918345	--
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Stem		21.0	-0.7419113414039952	--
<i>Capsicum frutescens</i>	Fruit	4.0	17.0	-0.4616311374782685	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
<i>Capsicum annuum</i>	Fruit	1.0	74.0	0.6859947425378856	--
<i>Carica papaya</i>	Fruit	5.0	15.0	-0.5018987122156774	--
<i>Carya ovata</i>	Shoot	2.0	63.0	0.04245401095255614	--
<i>Carya ovata</i>	Seed		8.5	-0.7405274577347044	--
<i>Carya illinoensis</i>	Seed	6.5	7.6	-0.7832189198844908	--
<i>Carya glabra</i>	Shoot	0.0	77.0	0.5377508053990433	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cichorium intybus	Root		20.0	-0.14974023395860875	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Cichorium endivia	Leaf	1.0	24.0	-1.014918102317493	--
Cinnamomum verum	Bark	7.0	15.0		Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Citrullus lanatus	Fruit	1.0	4.0	-0.7233703732714263	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Citrus reticulata	Fruit	1.0	14.0	-0.5220324995843817	--
Citrus paradisi	Fruit	1.0	33.0	-0.13949053957899715	--
Citrus sinensis	Fruit	1.89	27.5	-0.25022637010687165	--
Cocos nucifera	Seed	3.0	5.2	-0.8970628189505873	--
Colocasia esculenta	Root	0.9	7.0	-0.6303878985171054	--
Colocasia esculenta	Leaf		3.6	-1.570681638833287	--
Coriandrum sativum	Seed	9.0	29.0	0.23188918012153775	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Corylus avellana	Seed	15.0	21.0	-0.14759048343211764	--
Cucumis sativus	Fruit	1.0	46.0	0.1222486962141608	--
Cucumis melo	Fruit	1.0	16.5	-0.4716980311626207	--
Cucurbita pepo	Fruit		1.0	-0.7837717353775396	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Cuminum cyminum	Fruit	34.0	50.0	0.20278384568897864	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cuminum cyminum	Seed	34.0	50.0	1.2280232969498832	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Curcuma longa	Root	1.0	6.0	-0.667360795790836	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Cydonia oblonga	Fruit	85.0	160.0	2.417500456246469	--
Cynara cardunculus	Flower	2.0	5.0	-1.2189545947870004	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Cyrtosperma chamissonis	Root	0.8	4.0	-0.7413065903382969	--
Daucus carota	Root	1.0	36.0	0.4418261224210795	--
Dioscorea alata	Root	0.8	7.0	-0.6303878985171054	--
Diospyros virginiana	Leaf	4.0	50.0	-0.30659202636599053	--
Diospyros virginiana	Stem	1.0	38.0	0.46837837209848127	--
Elaeagnus umbellatus	Fruit	2.0	15.0	-0.5018987122156774	--
Elettaria cardamomum	Seed	1.0	14.0	-0.4796351890415661	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Erythroxylum coca	Leaf	53.0	57.0	-0.11588885207135528	--
Fagopyrum esculentum	Seed	4.0	8.0	-0.7642449367068078	--
Ficus carica	Fruit	1.0	100.0	1.2094732141242015	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Foeniculum vulgare	Leaf	1.0	36.0	-0.6879983749552611	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).

Plant	Part	Low PPM	High PPM	StdDev	Reference
Fragaria spp	Fruit	1.0	160.0	2.417500456246469	--
Genipa americana	Seed		15.0	-0.4322002310973592	--
Genipa americana	Fruit		14.0	-0.5220324995843817	--
Glycine max	Seed	4.0	18.0	-0.2898953572647384	--
Helianthus tuberosus	Root		3.0	-0.7782794876120274	--
Hordeum vulgare	Seed	2.0	6.0	-0.8591148525952217	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Ipomoea batatas	Root	0.8	20.0	-0.14974023395860875	--
Juglans regia	Seed	0.5	12.0	-0.57450510492998	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Juglans nigra	Seed		4.7	-0.9207802979226908	Furr, A.K., et al. 1979
Juglans cinerea	Seed		7.0	-0.8116798946510148	--
Juniperus virginiana	Shoot	4.0	44.0	-0.6297344957962479	--
Lactuca sativa	Leaf	0.9	87.0	0.7014104663342243	--
Laurus nobilis	Leaf	9.0	16.0	-1.2328645872256474	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Liquidambar styraciflua	Stem	2.0	60.0	2.0346356483958044	--
Liquidambar styraciflua	Leaf	6.0	84.0	0.6196805344936663	--
Lycopersicon esculentum	Fruit	0.0	96.0	1.1289380646493836	--
Malus domestica	Fruit	1.0	110.0	1.410811087811246	--
Mangifera indica	Fruit	0.5	17.5	-0.45156424379391624	--
Manihot esculenta	Root	0.6	7.5	-0.6119014498802402	--
Medicago sativa	Plant	17.0	45.0	-0.3577281795551712	--
Medicago sativa	Leaf		25.0	-0.9876747917039735	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Medicago sativa	Stem		14.0	-1.2402659293167797	--
Murraya sp	Fruit	2.8	8.5	-0.6327683301122562	--
Musa x paradisiaca	Fruit	2.8	8.5	-0.6327683301122562	--
Myristica fragrans	Seed	3.0	13.0	-0.527070146985773	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Nyssa sylvatica	Stem	1.0	31.0	-0.029976215814303167	--
Nyssa sylvatica	Leaf	2.0	136.0	2.036332686396671	--
Ocimum basilicum	Plant	18.0	31.0	-0.49409835011398384	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Oenothera biennis	Seed	38.0	41.0	0.8011086754520209	--
Olea europaea	Fruit	1.0	4.0	-0.7233703732714263	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Origanum vulgare	Plant	21.0	41.0	-0.3966910854291177	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Origanum onites	Plant	28.0	48.0	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Origanum majorana	Plant	28.0	48.0	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Panax quinquefolius	Plant	24.0	96.0	0.13904887033764624	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Papaver somniferum	Seed	15.0	95.0	3.362596404439195	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Pastinaca sativa	Root	4.0	25.0	0.035124252410043834	--
Persea americana	Fruit	5.0	13.0	-0.5421662869530862	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Petroselinum crispum	Plant	4.0	54.0	-0.2700616413387917	--
Phaseolus vulgaris	Fruit	0.1	45.0	0.10211490884545635	--
Phaseolus lunatus	Seed	1.0	30.0	0.2793241380657447	--
Phaseolus vulgaris	Seed	2.0	43.0	0.8959785913404347	--
Phoenix dactylifera	Fruit		7.0	-0.6629690111653129	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Phyllanthus emblica	Fruit	2.0	11.0	-0.582433861690495	--
Pimenta dioica	Fruit	9.0	25.0	-0.3005608385286328	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Pimpinella anisum	Seed		20.0	-0.19502544137632458	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Pimpinella anisum	Fruit		20.0	-0.4012297753721551	--
Pinus echinata	Shoot	2.0	21.0	-1.4434363723869053	--
Piper nigrum	Fruit	0.5	18.0	-0.44149735010956404	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Pistacia vera	Seed		11.0	-0.6219400628741869	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pisum sativum	Seed	2.0	23.0	-0.05272056754370379	--
Prunus serotina	Leaf	2.0	48.0	-0.36107864759302916	--
Prunus domestica	Fruit	1.0	255.0	4.330210256273393	--
Prunus persica	Fruit	1.0	150.0	2.2161625825594244	--
Prunus cerasus	Fruit	1.0	80.0	0.8067974667501124	--
Prunus serotina	Stem	0.0	54.0	1.607474573041989	--
Prunus dulcis	Seed	8.0	38.0	0.6588038016194001	--
Prunus armeniaca	Fruit	1.0	70.0	0.6054595930630678	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Pyrus communis	Fruit	1.0	82.0	0.8470650414875213	--
Quercus stellata	Stem	2.0	25.0	-0.45713729116811835	--
Quercus rubra	Stem	3.0	66.0	2.4617967237496194	--
Quercus alba	Stem	2.0	38.0	0.46837837209848127	--
Quercus rubra	Seed		18.0	-0.2898953572647384	--
Quercus velutina	Stem	2.0	31.0	-0.029976215814303167	--
Quercus phellos	Stem	1.0	21.0	-0.7419113414039952	--
Raphanus sativus	Root	0.6	64.0	1.477067246085534	--
Rheum rhabarbarum	Pt	0.1	36.0		--
Rhizophora mangle	Leaf		83.0	0.5924372238801471	--
Rhus copallina	Leaf	3.0	67.0	0.15654425406383793	--
Rhus glabra	Stem	2.0	34.0	0.18360432186260445	--
Rhus copallina	Stem	1.0	30.0	-0.10116972837327237	--
Ribes nigrum	Fruit	1.0	64.0	0.4846568688508411	--
Ribes uva-crispa	Fruit	1.0	15.0	-0.5018987122156774	--
Ribes rubrum	Fruit	1.0	80.0	0.8067974667501124	--
Rosa canina	Fruit	8.0	22.0	-0.3609622006347462	ACTA AGRIC SCAND SUPPL 22: 1980

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Plant	22.0	39.0	-0.4161725383660909	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Rubus fruticosus	Fruit	0.1	21.0	-0.3810959880034506	--
Rubus chamaemorus	Fruit	1.6	12.0	-0.5623000743217906	--
Rubus idaeus	Fruit	1.0	13.0	-0.5421662869530862	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Salvia officinalis	Leaf	25.0	41.0	-0.5517818218876644	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Sassafras albidum	Stem	1.0	26.0	-0.3859437786091492	--
Sassafras albidum	Leaf	2.0	48.0	-0.36107864759302916	--
Satureja montana	Plant	25.0	37.0	-0.43565399130306415	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Satureja hortensis	Plant	25.0	37.0	-0.43565399130306415	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Sesamum indicum	Seed	4.0	13.0	-0.527070146985773	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Solanum tuberosum	Tuber	1.0	8.0		--
Solanum melongena	Fruit	1.0	8.0	-0.6428352237966085	--
Sorbus aucubaria	Fruit	4.0	24.0	-0.32069462589733727	--
Spinacia oleracea	Leaf	2.4	40.0	-0.5790251325011837	ACTA AGRIC SCAND SUPPL 22: 1980
Spondias dulcis	Fruit		1.9	-0.7656513267457057	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Spondias tuberosa	Fruit		1.45	-0.7747115310616226	--
Symphoricarpos orbiculatus	Stem	3.0	26.0	-0.3859437786091492	--
Syzygium aromaticum	Fruit	10.0	40.0	0.0014459720019340586	--
Syzygium aromaticum	Flower	10.0	40.0	-0.011499571648933803	--
Taraxacum officinale	Leaf	4.0	125.0	1.7366562696479586	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Tephrosia candida	Plant		32.0	-0.4843576236454972	--
Thymus vulgaris	Plant	34.0	48.0	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Trifolium pratense	Stem		16.0	-1.0978789041988413	--
Trifolium pratense	Leaf		23.0	-1.0421614129310122	--
Triticum aestivum	Seed	1.0	16.0	-0.3847652731531523	--
Urtica dioica	Leaf	6.0	47.0	-0.3883219582065485	--
Vaccinium myrtillus	Fruit	0.6	10.0	-0.6025676490591996	ACTA AGRIC SCAND SUPPL 22: 1980
Vaccinium macrocarpon	Fruit	1.0	8.0	-0.6428352237966085	ACTA AGRIC SCAND SUPPL 22: 1980
Vaccinium vitis-idaea	Fruit	1.4	11.0	-0.582433861690495	--
Vaccinium corymbosum	Fruit	0.1	13.0	-0.5421662869530862	--
Valerianella locusta	Plant	275.0	350.0	2.6131933933332467	--
Valerianella radicata	Plant	13.8	16.6	-0.634364811260191	--
Valerianella locusta	Plant	275.0	350.0	2.6131933933332467	--
Vigna unguiculata	Seed	3.0	60.0	1.7023728763919526	--
Vigna unguiculata	Seed	3.0	60.0	1.7023728763919526	--
Vitis vinifera	Fruit	1.0	50.0	0.20278384568897864	--
Xanthosoma sagittifolium	Root	0.9	6.5	-0.6488743471539707	--
Zea mays	Seed	0.0	15.0	-0.4322002310973592	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Root	1.0	4.0	-0.7413065903382969	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
Zingiber officinale	Rhizome	1.0	4.0		--