

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

**List of Plants for FERULIC-ACID**

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Achillea millefolium</i>	Plant	--	--		Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
<i>Actaea cimicifuga</i>	Rhizome	--	--		--
<i>Actaea dahurica</i>	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
<i>Agrimonia eupatoria</i>	Plant	--	--		--
<i>Ajuga iva</i>	Shoot	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
<i>Ajuga iva</i>	Plant	1000	1000	0.8391367166661186	Jim Duke's personal files.
<i>Allium ampeloprasum</i>	Plant	--	--		--
<i>Allium cepa</i>	Bulb	--	0.5	-1	--
<i>Allium cepa</i>	Leaf	--	--		Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. <i>Curr. Sci.</i> , 33(15): 471-472.
<i>Allium cepa</i>	Root	--	--		Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. <i>Curr. Sci.</i> , 33(15): 471-472.
<i>Allium sativum</i> var. <i>sativum</i>	Bulb	7	27	1	--
<i>Allium schoenoprasum</i>	Leaf	--	0.5	-1.0842680798316504	--
<i>Althaea officinalis</i>	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
<i>Althaea officinalis</i>	Leaf	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Althaea officinalis</i>	Root	--	--		--
<i>Althaea officinalis</i>	Flower	--	--		--
<i>Ananas comosus</i>	Plant	200	760	0.30089312112081323	--
<i>Anethum graveolens</i>	Fruit	--	--		--
<i>Anethum graveolens</i>	Seed	--	--		--
<i>Angelica sinensis</i>	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
<i>Angelica sinensis</i>	Plant	--	940	0.7045758177797922	Jim Duke's personal files.
<i>Apium graveolens</i>	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Arachis hypogaea</i>	Seed	45	45	-0.3720643105185383	--
<i>Arctostaphylos uva-ursi</i>	Leaf	--	--		--
<i>Artemisia dracunculus</i>	Leaf	38	38	2.436082828712669	--
<i>Aspalathus linearis</i>	Shoot	--	0.66		--
<i>Astragalus membranaceus</i>	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Avena sativa</i>	Seed	--	--		--
<i>Ballota nigra</i>	Plant	--	--		--
<i>Basella alba</i>	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Beta vulgaris	Leaf	--	--		--
Brassica nigra	Seed	--	--		Jim Duke's personal files.
Brassica oleracea var. botrytis l.	Leaf	--	13	0.08918222301645602	--
Brassica oleracea var. capitata l.	Leaf	4	20	0.7463143926113956	--
Brassica oleracea var. gemmifera	Leaf	10	10	-0.19244584966708952	--
Brassica oleracea var. italica	Leaf	--	13	0.08918222301645602	--
Brassica pekinensis	Leaf	6	6	-0.5679499465784835	--
Capsicum frutescens	Fruit	--	--		--
Catalpa ovata	Wood	--	--		--
Celosia cristata	Flower	--	--		--
Centaurea cyanus	Flower	--	--		Jim Duke's personal files.
Centaurium erythraea	Plant	--	--		--
Ceratonia siliqua	Fruit	--	--		Wealth of India.
Chamaemelum nobile	Plant	--	--		--
Chenopodium album	Fruit	--	--		--
Chenopodium ambrosioides	Fruit	--	--		--
Cichorium intybus	Plant	--	--		--
Cichorium intybus	Leaf	--	0.5	-1.0842680798316504	--
Cimicifuga dahurica	Rhizome	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Citrullus colocynthis</i>	Fruit	--	--		--
<i>Citrus limon</i>	Fruit	14	40	-0.3813850356982369	--
<i>Citrus paradisi</i>	Fruit	25	34	-0.5720775535473553	--
<i>Citrus paradisi</i>	Pericarp	25	160	-1	--
<i>Citrus reticulata</i>	Pericarp	--	--		--
<i>Citrus sinensis</i>	Fruit	10	19	-0.7627700713964738	--
<i>Citrus sinensis</i>	Fruit Juice	--	--		Jim Duke's personal files.
<i>Citrus sinensis</i>	Pericarp	20	180	1	--
<i>Cnicus benedictus</i>	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Cnicus benedictus</i>	Shoot	--	--		Jim Duke's personal files.
<i>Cocos nucifera</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Coix lacryma-jobi</i>	Pericarp	--	--		--
<i>Commiphora wightii</i>	Resin, Exudate, Sap	--	--		Jim Duke's personal files.
<i>Convallaria majalis</i>	Plant	--	--		--
<i>Coptis chinensis</i>	Rhizome	--	--		--
<i>Coptis japonica</i>	Rhizome	--	--		--
<i>Coptis spp</i>	Rhizome	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Coriandrum sativum</i>	Plant	--	11	-1.3788754333101605	--
<i>Cucumis melo</i>	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
<i>Cucumis sativus</i>	Fruit	--	--		--
<i>Cucurbita pepo</i>	Plant	--	--		--
<i>Cydonia oblonga</i>	Fruit	--	--		--
<i>Cynara cardunculus</i>	Plant	--	--		--
<i>Datura stramonium</i>	Plant	--	--		--
<i>Daucus carota</i>	Root	--	--		--
<i>Digitalis purpurea</i>	Leaf	--	--		--
<i>Dioscorea alata</i>	Plant	--	--		--
<i>Dipteryx odorata</i>	Leaf	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. L'ORSTROM, Paris. 569 pp.
<i>Echinacea spp</i>	Plant	--	--		--
<i>Elaeagnus angustifolia</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Eleutherococcus senticosus</i>	Root	--	--		--
<i>Equisetum arvense</i>	Plant	--	--		--
<i>Equisetum hyemale</i>	Plant	--	--		--
<i>Eucalyptus citriodora</i>	Leaf	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus globulus	Leaf	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Euphorbia hirta	Leaf	--	--		--
Euphorbia lathyris	Leaf	--	--		--
Euphrasia officinalis	Plant	--	--		Tyler, V.E.. 1982. The Honest Herbal. George F. Stickley Co., Philadelphia PA. 263 pp.
Ferula assa-foetida	Essential Oil	--	--		--
Ferula assa-foetida	Resin, Exudate, Sap	13000	13000		--
Ferula assa-foetida	Gum	--	--		--
Ficus carica	Plant	--	--		--
Foeniculum vulgare	Fruit	--	--		--
Foeniculum vulgare	Seed	--	0.5	-0.432099551506119	--
Gaultheria procumbens	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Glechoma hederacea	Plant	--	--		--
Glycine max	Plant	1	4	-1.3945742048468985	--
Glycine max	Seed	1	4	-0.42737767861945536	--
Glycine max	Shoot	--	--		--
Glycyrrhiza glabra	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Helianthus annuus</i>	Pollen Or Spore	2	3		--
<i>Hierochloe odorata</i>	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Hordeum vulgare</i>	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Humulus lupulus</i>	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Huperzia spp</i>	Plant	--	--		--
<i>Hura crepitans</i>	Leaf	--	--		--
<i>Hypericum perforatum</i>	Plant	--	--		--
<i>Hyssopus officinalis</i>	Plant	--	--		Jim Duke's personal files.
<i>Juglans nigra</i>	Seed	--	--		--
<i>Juglans regia</i>	Seed	0.4	1	-0.43142499823659564	--
<i>Juglans regia</i>	Testa	10	65		--
<i>Juniperus communis</i>	Leaf	--	--		--
<i>Kalanchoe pinnata</i>	Plant	--	--		--
<i>Lactuca sativa</i>	Plant	--	--		--
<i>Lens culinaris</i>	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Levisticum officinale</i>	Fruit	--	--		Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals</i> . CRC Press. Boca Raton, FL. 566 pp.
<i>Ligustrum japonicum</i>	Flower	--	--		--
<i>Linum usitatissimum</i>	Seed	--	--		--
<i>Lycopersicon esculentum</i>	Fruit	--	--		--
<i>Lycopodium clavatum</i>	Plant	--	--		--
<i>Lycopodium selago</i>	Plant	--	--		--
<i>Lycopus europeus</i>	Plant	--	--		Jim Duke's personal files.
<i>Malus domestica</i>	Fruit	4	95	1.7162326606420661	--
<i>Medicago sativa</i>	Tissue Culture	--	--		--
<i>Medicago sativa</i>	Leaf	--	--		--
<i>Melia azedarach</i>	Plant	--	--		--
<i>Melilotus officinalis</i>	Plant	--	--		<i>Pharmazie</i> , 46: 156, 1991.
<i>Melilotus officinalis</i>	Shoot	--	--		--
<i>Mentha x rotundifolia</i>	Shoot	--	--		Jim Duke's personal files.
<i>Menyanthes trifoliata</i>	Leaf	--	--		List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Myroxylon balsamum</i>	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Nicotiana tabacum</i>	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Oenothera biennis</i>	Plant	--	--		--
<i>Ononis spinosa</i>	Root	--	--		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
<i>Opopanax chironium</i>	Resin, Exudate, Sap	--	--		--
<i>Oryza sativa</i>	Plant	--	--		--
<i>Panax ginseng</i>	Root	--	--		--
<i>Panax quinquefolius</i>	Plant	--	--		--
<i>Papaver somniferum</i>	Pericarp	--	--		--
<i>Phaseolus vulgaris</i>	Plant	--	--		--
<i>Pinus sylvestris</i>	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Pisum sativum</i>	Seed	--	--		--
<i>Plantago major</i>	Plant	--	--		--
<i>Polygala senega</i>	Root	--	--		--
<i>Portulaca oleracea</i>	Plant	--	--		--
<i>Prunus cerasus</i>	Plant	--	--		--

<b>Plant</b>	<b>Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference</b>
<i>Prunus domestica</i>	Fruit	--	--		Jim Duke's personal files.
<i>Prunus dulcis</i>	Plant	--	--		--
<i>Prunus persica</i>	Plant	--	--		--
<i>Prunus spinosa</i>	Plant	--	--		--
<i>Pteridium aquilinum</i>	Plant	--	--		--
<i>Punica granatum</i>	Fruit	--	--		Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
<i>Raphanus sativus</i>	Root	16	16		--
<i>Rheum officinale</i>	Root	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Rheum rhabarbarum</i>	Pt	8	8		--
<i>Rheum rhabarbarum</i>	Root	--	--		--
<i>Ribes nigrum</i>	Fruit	--	--		--
<i>Ribes uva-crispa</i>	Fruit	--	--		--
<i>Ricinus communis</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Rosa canina</i>	Stem	--	--		--
<i>Rosa canina</i>	Tissue Culture	--	--		--
<i>Rubus fruticosus</i>	Fruit	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rubus idaeus	Fruit	--	--		--
Rubus idaeus	Plant	--	--		--
Salvia officinalis	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
Salvia sp.	Seed	2136	2136	2.448917462628234	Phenolic Compounds in Food and Their Effects on Health, 67.
Sambucus nigra	Plant	--	--		--
Serenoa repens	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Sesamum indicum	Fruit	--	--		--
Sesamum indicum	Leaf	--	--		--
Solanum melongena	Root	--	--		--
Solanum tuberosum	Tuber	13	225		--
Solidago gigantea	Plant	--	1040	0.9288439825903361	--
Sophora japonica	Plant	--	--		--
Spinacia oleracea	Leaf	16	16	0.37081029570000157	--
Spinacia oleracea	Inflorescence	--	--		--
Stellaria media	Shoot	--	--		--
Taraxacum officinale	Flower	--	--		--
Taxus baccata	Leaf	0.1	3.5	-0.8026400071481049	--
Tecoma stans	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Theobroma cacao	Seed	--	--		--
Thymus vulgaris	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
Triticum aestivum	Seed	15	32	-0.3896026955261461	--
Urtica dioica	Plant	--	--		--
Vaccinium corymbosum	Plant	--	--		--
Vaccinium macrocarpon	Fruit	--	--		--
Vaccinium myrtillus	Fruit	--	--		--
Vaccinium myrtillus	Leaf	--	--		--
Vaccinium myrtillus	Fruit Juice	--	--		--
Vanilla planifolia	Root	--	--		--
Vicia faba	Plant	--	--		--
Viola odorata	Plant	--	--		--
Vitis vinifera	Fruit	--	--		--
Zea mays	Leaf	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Zea mays	Seed	6	27	-0.39634822822137994	--
Zea mays	Sprout Seedling	--	--		--
Zingiber officinale	Plant	--	--		Stitt, Paul. Why George should eat broccoli.