

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

**List of Plants for TANNINS**

<b>Plant</b>	<b>Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference</b>
Acacia farnesiana	Fruit	110000	322000	2.5553598458512568	Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Aframomum melegueta	Plant	--	--		--
Aloe vera	Plant	--	--		--
Ammi visnaga	Plant	--	--		--
Anethum graveolens	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
Angelica archangelica	Root	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Artemisia dracunculus	Shoot	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Artemisia dracunculus	Leaf	--	--		--
Bixa orellana	Fruit	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Camellia sinensis	Leaf	33800	270000	2.2543514008830754	--
Carica papaya	Leaf	5000	6000	-1.136809680787192	--
Castanea dentata	Leaf	80000	90000	-0.05780388207392501	--
Catalpa longissima	Leaf	--	--		Tramil
Cephaelis ipecacuanha	Plant	--	--		--
Chamissoa altissima	Leaf	--	--		Tramil

Plant	Part	Low PPM	High PPM	StdDev	Reference
Chiococca alba	Root	--	--		--
Cinchona spp	Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Cinnamomum verum	Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Cnicus benedictus	Plant	80000	80000	-0.7353243133122137	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Crataegus laevigata	Flower	--	--		--
Crataegus monogyna	Flower	--	--		--
Crataegus rhipidophylla	Flower	--	--		--
Dryopteris filix-mas	Rhizome	78000	78000		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ephedra gerardiana	Plant	--	--		--
Eucalyptus globulus	Leaf	--	110000	0.19910226047685284	--
Euphrasia officinalis	Plant	124000	124000	0.01753827623374099	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Filipendula ulmaria	Plant	10000	125000	0.03464878963251269	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Frangula purshiana	Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Galega officinalis	Flower	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Galeopsis segetum	Shoot	50000	50000	1	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Geranium maculatum	Root	100000	280000	1.5184719776336744	--
Gnaphalium viscosum	Shoot	--	--		Tramil
Grindelia squarrosa	Plant	--	--		--
Guatteria discolor	Bark	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
Hamamelis virginiana	Leaf	10000	70000	-0.3147100246247029	--
Heliotropium indicus	Plant	--	--		--
Hemidesmus indicus	Leaf	25000	25000	-0.892748845363953	--
Humulus lupulus	Fruit	20000	40000	-0.45457956903500574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hypericum perforatum	Flower	--	162000	-1.414213562373095	--
Hypericum perforatum	Leaf	--	124000	0.3789365602623973	--
Hypericum perforatum	Plant	30000	160000	0.6335167585895222	--
Hypericum perforatum	Seed	121000	121000	1.4090882261939848	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	Stem	--	38000		--
Hypericum perforatum	Shoot	--	3300	-1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Inonotus obliquus	Plant	--	--		Hobbs, C. 1996. 3rd Ed. (1st Ed. 1986). Medicinal Mushrooms. Botanical Press, Santa Cruz. 251 pp. (With a useful tabular summary of 'all medicinal mushrooms species').
Juniperus sabina	Plant	--	--		--
Krameria spp	Root	--	--		--
Lawsonia inermis	Leaf	50000	100000	0.0706491892014639	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Limonia acidissima	Fruit	103000	39615	-0.4586888834844072	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Limonia acidissima	Seed	800	833	-1.0739966759687045	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Mentha spicata	Leaf	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Mentha x piperita	Plant	60000	120000	-0.050903777361345805	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Myrica cerifera	Bark	--	39000	-1	--
Nepeta cataria	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Nicotiana tabacum	Leaf	30000	60000	-0.4431630959000918	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Olea europaea	Leaf	--	--		Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Origanum vulgare	Plant	80000	80000	-0.7353243133122137	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pavonia spinifex	Plant	--	--		Tramil
Petiveria alliacea	Leaf	--	--		Tramil
Peumus boldus	Leaf	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Phoenix dactylifera	Plant	7500	44800	-1.3376143849489774	Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Physalis alkekengi	Root	110000	110000	-0.9475218721726366	--
Physalis peruviana	Root	125000	160000	-0.2222295634060746	--
Plantago ovata	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Pluchea carolinensis	Leaf	--	--		Tramil
Prosopis juliflora	Fruit	58100	58100	-0.2613884221930151	--
Psidium guajava	Seed	14000	14000	-0.8019188267523961	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Rheum palmatum	Root	50000	100000	-1.092580333925949	Abstract (See species file)
Rhus toxicodendron	Plant	250000	250000	2.1734629644789742	--
Ribes nigrum	Leaf	85000	85000	-0.12203041771161947	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Robinia pseudoacacia	Wood	33000	70000		--
Rosa canina	Leaf	100000	260000	2.1258983296076868	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosa centifolia	Flower	100000	240000	0.7071067811865467	--
Rosa gallica	Flower	100000	240000	0.7071067811865467	--
Rumex acetosa	Fruit	50000	50000	-0.34784412879081206	--
Rumex acetosa	Root	27800	226600	0.743859791870986	--
Salvia officinalis	Leaf	785	10000	-1.0854284522770363	--
Sorbus aucubaria	Bark	44700	44700	1	--
Sorbus aucubaria	Fruit	4000	6000	-0.8174800658652643	--
Stevia rebaudiana	Leaf	--	78000	-0.2119475676043917	--
Syzygium aromaticum	Fruit	--	100000	0.1858330724301565	--
Tagetes lucida	Plant	--	--		Tramil
Tanacetum parthenium	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Tanacetum vulgare	Plant	--	--		--
Terminalia chebula	Fruit	20000	45000	-0.4012118489129089	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Theobroma cacao	Seed	75400	75400	0.46682727652711586	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Thespesia populnea	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Turnera diffusa	Leaf	35000	35000	-0.7642957740885641	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

<b>Plant</b>	<b>Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference</b>
Uncaria catechu	Branches	--	--		--
Valeriana officinalis	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Zanthoxylum americanum	Bark	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Zanthoxylum clava-herculis	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.