

C FORMIC-ACID

Chemid

FORMICACID

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Achillea millefolium	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Actaea racemosa	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.
Aloe vera	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
Anamirta cocculus	Fruit	--	--		--
Arctostaphylos uva-ursi	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Arnica montana	Rhizome	--	--		--
Artemisia absinthium	Plant	--	--		--
Boronia megastigma	Flower	--	--		--
Cananga odorata	Flower	--	--		--
Ceratonia siliqua	Fruit	--	--		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
Chelidonium majus	Plant	--	--	--	
Cimicifuga racemosa	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.
Cinnamomum camphora	Plant	--	--	--	
Citrus aurantium	Pericarp	--	--	--	
Citrus aurantium	Plant	--	--	--	
Citrus aurantium	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Commiphora myrrha	Resin, Exudate, Sap	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Croton tiglium	Seed	2400	4000	--	
Datura stramonium	Plant	--	--	--	
Daucus carota	Plant	--	--	--	
Digitalis purpurea	Leaf	--	--	--	
Eriodictyon californicum	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ginkgo biloba	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ginkgo biloba	Pollen Or Spore	--	--		Jim Duke's personal files.
Glycine max	Root	--	--		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
Hedeoma pulegioides	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Hibiscus sabdariffa	Fruit	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Hibiscus sabdariffa	Seed	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Juniperus communis	Fruit	1550	5000	1	--
Laurus nobilis	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lycopersicon esculentum	Fruit	--	--		--
Malus domestica	Plant	--	--		--
Mentha aquatica	Leaf	--	--		Jim Duke's personal files.
Mentha arvensis var. piperascens	Plant	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Mentha pulegium	Essential Oil	--	--		--
Menyanthes trifoliata	Plant	--	--		Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Musa x paradisiaca	Fruit	--	--		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.
Myristica fragrans	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Myristica fragrans	Seed Essent. Oil	--	--		--
Nicotiana tabacum	Leaf	--	--		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
Ocimum gratissimum	Plant	--	--	--	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ocimum tenuiflorum	Plant	--	--	--	
Panax quinquefolius	Plant	--	--	--	
Passiflora incarnata	Plant	--	--	--	
Pelargonium graveolens	Essential Oil	--	--	--	
Peucedanum ostruthium	Essential Oil	--	--	--	
Polygonum hydropiper	Plant	--	--	--	
Prunus persica	Fruit	--	--	--	
Ribes nigrum	Fruit	--	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ribes uva-crispa	Fruit	--	--	--	
Rubus idaeus	Fruit	--	--	--	
Stevia rebaudiana	Plant	--	8710	--	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Tagetes minuta	Essential Oil	--	--	--	
Taxus baccata	Leaf	--	--	--	
Theobroma cacao	Seed	--	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Thuja occidentalis	Branches	--	--	--	
Umbellularia californica	Plant	--	--	--	

Plant	Part	Low PPM	High PPM	StdDev PPM	Reference
Urtica dioica	Plant	--	--	--	
Valeriana jatamansi	Root	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Valeriana officinalis	Root	--	--	--	
Vanilla planifolia	Fruit	--	62	-1	
Viburnum opulus	Root Bark	--	--	--	
Viburnum prunifolium	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Vitis vinifera	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.