

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

**List of Plants for CITRAL**

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Cymbopogon citratus</i>	Plant	1080.0	25500.0	1.934185258029397	--
<i>Ocimum basilicum</i>	Essential Oil		700000.0	1.6605158904602735	--
<i>Pimenta racemosa</i>	Leaf	8000.0	31200.0	1.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Mentha x rotundifolia</i>	Shoot	9.0	150.0	1.0	--
<i>Ocimum basilicum</i>	Plant	560.0	7000.0	-0.02464955373944787	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Perilla frutescens</i>	Essential Oil		200000.0	-0.0890530595558191	--
<i>Aloysia citrodora</i>	Plant	180.0	2730.0	-0.4767698048882568	--
<i>Salvia sclarea</i>	Plant	75.0	920.0	-0.6684179675532087	Flavour and Fragrance Journal, 6: 154.
<i>Cymbopogon winterianus</i>	Plant	8.0	14.0	-0.7643479318484829	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Aniba rosaeodora</i>	Essential Oil		1500.0	-0.7836319327122078	--
<i>Citrus limon</i>	Essential Oil	250.0	300.0	-0.7878308981922465	--
<i>Cymbopogon flexuosus</i>	Leaf	250.0	4250.0	-1.0	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Satureja obovata</i>	Shoot	60.0	110.0	-1.0	Fitoterapia No.60: 277.
<i>Origanum majorana</i>	Plant				--
<i>Laurus nobilis</i>	Fruit Essent. Oil				--
<i>Ocimum tenuiflorum</i>	Plant				--
<i>Tagetes minuta</i>	Essential Oil				--
<i>Tagetes minuta</i>	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Thymus serpyllum</i>	Plant				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
Lantana camara	Leaf				--
Nepeta cataria	Plant				--
Citrus limon	Fruit Essent. Oil		6000.0		Jim Duke's personal files.
Citrus limon	Pericarp				--
Citrus medica	Pericarp				--
Humulus lupulus	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Foeniculum vulgare	Seed Essent. Oil				Jim Duke's personal files.
Rosa gallica	Flower				--
Humulus lupulus	Essential Oil				--
Cnicus benedictus	Essential Oil				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Conyza canadensis	Plant				--
Urtica dioica	Plant				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.
Tagetes filifolia	Essential Oil				Fester, G. A., Gargallo, M. A., Martinuzzi, E. A. 1947. Some Volatile Essential Oils From San Luis y Cordoba. An Soc Cient Argent 144: 457-471. Fac Quim Ind + Agr Santa Fe Argentina
Psidium guajava	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6. Springer-Verlag, Berlin, 1969-1979.
Pelargonium graveolens	Essential Oil				--
Stachytarpheta cayennensis	Plant				--
Ocimum gratissimum	Plant				Tramil
Anisomeles malabarica	Plant				Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum canum	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Sassafras albidum	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Fragaria spp	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Pinus sylvestris	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Citrus aurantiifolia	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus paradisi	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Eucalyptus globulus	Fruit Essent. Oil				--
Magnolia fargesii	Flower				--
Thymus vulgaris	Plant				Stitt, Paul. Why George should eat broccoli.
Melaleuca viridiflora	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Zingiber officinale	Rhizome Essent. Oil		130000.0		--
Zingiber officinale	Root	0.0	13500.0		--
Monarda citriodora	Plant				--
Eucalyptus citriodora	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Artemisia dracunculus	Plant				Stitt, Paul. Why George should eat broccoli.
Cnicus benedictus	Shoot				Jim Duke's personal files.
Magnolia kobus	Leaf Essent. Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Piper nigrum	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Skimmia arborescens	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Allium sativum var. sativum	Bulb				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Lippia alba	Plant				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
Lycopersicon esculentum	Fruit				--
Abelmoschus esculentus	Fruit				Wealth of India.
Abelmoschus esculentus	Leaf				Wealth of India.
Melissa officinalis	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Schisandra chinensis	Essential Oil				Chemical Constituents of Oriental Herbs (3 diff. books)
Perilla frutescens	Plant				Chemical Constituents of Oriental Herbs (3 diff. books)
Aegle marmelos	Leaf				Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Helianthus annuus	Flower				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.
Laurus nobilis	Leaf				--
Panax ginseng	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Rosa centifolia	Essential Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Daucus carota	Seed		200.0		--
Zingiber officinale	Rhizome	0.0	13500.0		--
Verbena officinalis	Plant				--
Elsholtzia nipponica	Plant				Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
Zanthoxylum alatum	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Citrullus colocynthis	Petiole				--
Panax ginseng	Root Essent. Oil				--
Salvia officinalis	Plant				Stitt, Paul. Why George should eat broccoli.
Citrus aurantium	Plant				--