

CITRONELLAL

Chemid

CITRONELLAL

*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
Aegle marmelos	Leaf	--	--		Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Aeolanthus myriantha	Flower	--	--		Wealth of India.
Aloysia citrodora	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.
Apium graveolens	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Apium graveolens	Shoot	--	--		--
Cinnamomum verum	Leaf	--	185	-0.3689303556693406	Mallavarupu, G. R. et al. 1995. Investigation of the essential oil of cinnamon leaf grown at Bangalore and Hyderabad. Flav. & Fragr. J., 10: 239-242.
Citrullus colocynthis	Plant	--	--		--
Citrus aurantiifolia	Fruit	140	140	0.8579977788182253	--
Citrus aurantium	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus limon	Leaf Essent. Oil	25000	89000	-1	Jim Duke's personal files.
Citrus limon	Essential Oil	--	--		Jim Duke's personal files.
Citrus limon	Pericarp	--	--		Jim Duke's personal files.
Citrus limon	Pericarp Essent. Oil	--	--		Jim Duke's personal files.
Citrus limon	Petiole	--	3		--
Citrus paradisi	Pericarp	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Citrus reticulata	Fruit	4	5	-0.9952774234291415	--
Citrus sinensis	Fruit	4	5	-0.9952774234291415	--
Cnicus benedictus	Shoot	--	--		Jim Duke's personal files.
Conyza canadensis	Plant	--	--		--
Cymbopogon citratus	Plant	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Cymbopogon flexuosus	Leaf	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Cymbopogon winterianus	Plant	1000	2289	1.048338057629653	--
Elettaria cardamomum	Plant	--	--		--
Eucalyptus albens	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus astringens	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus bosistoana	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus botryoides	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus brassiana	Leaf	--	645	-0.29121634829308574	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Chemical Constituents of the Leaf Essential Oil of Eucalyptus brassiana S. T. Blake. Journal of Essential Oil Res. 3: 45-7.
Eucalyptus camaldulensis	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus citriodora	Leaf	50	18020	2.6441768651034985	--
Eucalyptus citriodora	Shoot	--	563000	4.472076870734973	--
Eucalyptus citriodora	Leaf Essent. Oil	320000	851000	1	--
Eucalyptus citriodora	Essential Oil	--	--	--	--
Eucalyptus cladocalyx	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus dealbata	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus diversicolor</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus globulus</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus globulus</i>	Leaf Essent. Oil	--	--	--	--
<i>Eucalyptus maideni</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus melliodora</i>	Shoot	--	35	-0.22454794049972734	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus moluccana</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus occidentalis</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus oviformis</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus polyanthemos</i>	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus siderophloia	Shoot	--	0.1	-0.22483909928564133	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus sp	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Eugenia uniflora	Leaf	--	--		Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
Foeniculum vulgare	Seed Essent. Oil	--	--		Jim Duke's personal files.
Hedeoma drummondii	Plant	228	2180	0.9504632411143364	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Fruit	160	160	1.1325570680400574	--
Juniperus communis	Fruit Essent. Oil	--	--		--
Lavandula latifolia	Plant	1	7	-1.000747550516701	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Levisticum officinale	Plant	--	--		--
Melissa officinalis	Shoot	1	2900	-0.20064622354718603	--
Nepeta cataria	Plant	--	--		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.
Pelargonium citrosum	Shoot	--	1.8	-0.22482491676598365	Matsuda, B. M., et al. 1996. Essential Oil Analysis and Field Evaluation of the Citrosa Plant 'Pelargonium citrosum' as a Repellent Against Populations of Aedes Mosquitoes. J. Am. Mosq. Contr. Assoc. 12(1):69-74.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pelargonium graveolens	Essential Oil	--	--		--
Pinus sylvestris	Leaf Essent. Oil	--	--		--
Piper nigrum	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ravensara aromatica	Leaf	--	20	-0.39680603222821464	--
Satureja odora	Shoot	10	10	-0.2247565069652818	Zygodlo, J.A., Merino. E.F., Maestri, D.M., Guzman, C.A. and Espinar, L.A. 1993. The Essential Oils of Satureja odora and Satureja parvifolia from Argentina. J. Ess. Oil Res. 5: 549-51.
Satureja parvifolia	Shoot	15	15	-0.22471479367217093	Zygodlo, J.A., Merino. E.F., Maestri, D.M., Guzman, C.A. and Espinar, L.A. 1993. The Essential Oils of Satureja odora and Satureja parvifolia from Argentina. J. Ess. Oil Res. 5: 549-51.
Teucrium cyprium	Leaf	80	80	-0.3866694225704423	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium divaricatum	Leaf	0	0	-0.4001849021141388	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium kotschyannum	Leaf	0	0	-0.4001849021141388	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium micropodioides	Leaf	0	0	-0.4001849021141388	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Thymus x citriodorus	Plant	10	10	-0.9980537482272885	Stahl-Biskup, E. and Holthuijzen, J. 1995. Essential oil and glycosidally bound volatiles of lemon-scented thyme, Thymus x citriodorus (Pers.) Schreb. Flav. & Fragr. J. 10: 225-229.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Rhizome	--	10		--
Zingiber officinale	Rhizome Essent. Oil	--	2900		--