

Chemid

NERAL

*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
Aloysia citrodora	Plant	120	840	0.008086064007136419	--
Apium graveolens	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Apium graveolens	Shoot	--	--		--
Camellia sinensis	Leaf	--	--		--
Cinnamomum camphora	Leaf	--	5	-0.3854017168522382	--
Citrullus lanatus	Fruit Juice	--	--		--
Citrus aurantiifolia	Fruit	40	460	1.5487945633363407	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus aurantium	Leaf	1	1	-0.386496325306488	--
Citrus aurantium	Plant	--	--		--
Citrus limon	Leaf Essent. Oil	4000	172700	1	Jim Duke's personal files.
Citrus limon	Essential Oil	27	130	1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus limon	Pericarp Essent. Oil	--	--		Jim Duke's personal files.
Citrus limon	Petiole	--	60		--
Citrus paradisi	Fruit	0	210	0.21477685159099982	--
Citrus reticulata	Fruit	3	4	-0.8844537428871607	--
Citrus sinensis	Fruit	4	5	-0.8791176720401793	--
Cymbopogon citratus	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cymbopogon parkeri	Plant	42	583	-0.2288715699534182	Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Cymbopogon winterianus	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Elsholtzia blanda	Shoot	3	3	-0.56518244220641	Bestman, H.J., Rauscher, J., Vostrowsky O., Pant, A.K., Dev. V., Perihar, R. and Mathela, C.S. 1992. Constituents of the Essential Oil of Elsholtzia blanda Benth. (Labiatae). J. Ess. Oils Res. 4: 121-124
Elsholtzia eriostachya	Shoot	390	390	0.6692873661428396	Pant, A.K., Dev, V., Parihar, R., Mathela,C.S., Rauscher, J., Vostrowsky, O. and Bestmann, H.J. 1992. The Essential Oil from Elsholtzia eriostachya var. pusilla. J. Ess. Oil Res. 4: 547-549.
Elsholtzia polystachya	Leaf	4	4	-0.3856753689658006	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from Elsholtzia polystachya from Two Different Locations in India. Planta Medica 58: 376-379.
Elsholtzia polystachya	Leaf	--	4	-0.3856753689658006	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from Elsholtzia polystachya from Two Different Locations in India. Planta Medica 58: 376-379.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Hedeoma drummondii	Plant	36	2690	1.71381222286716	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hypericum perforatum	Plant	0.35	6.3	-0.7605971244477834	--
Laurus nobilis	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula angustifolia	Flower	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lippia alba	Plant	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
Melissa officinalis	Shoot	10	900	2.9340769370161395	--
Mentha x piperita	Leaf	0.001	0.01	-0.38676724089891473	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Micromeria varia	Shoot	190	190	0.031318472939093	Pedro, L.G., et al. 1995. Composition of the Essential oil of Micromeria varia Benth. ssp. thymoides (Sol. ex Lowe) Perez var. thymoides, and endemic species of the Madeira Archipelago. flav. & Fragr. J. 10(3): 199-202.
Micromeria varia	Shoot	--	190	0.031318472939093	--
Monarda fistulosa	Plant	24	589	-0.22333948511387217	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda punctata	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Monarda russeliana	Plant	54	54	-0.7166170499733925	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myrtus communis	Shoot	1	2	-0.5683722866724288	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum basilicum	Plant	5	5	-0.761795742829685	Die Nahrung. Pino, J., Rosado, A., Goire, I., Roncal, E., and Garcia, I. 1993. Analysis of the Essential Oil from Cuban Basil. Die Nahrung 37:(5): 501-504.
Ocimum basilicum	Shoot Essent. Oil	--	2000		--
Ocimum basilicum	Leaf Essent. Oil	--	1000	-1	--
Ocimum gratissimum	Flower	466	695	1	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of Ocimum gratissimum L. J. Ess. Oil Res. 4: 231-234.
Ocimum gratissimum	Leaf	150	210	-0.32930303357193585	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of Ocimum gratissimum L. J. Ess. Oil Res. 4: 231-234.
Ocimum tenuiflorum	Plant	350	3150	2.137938727232355	--
Pelargonium graveolens	Essential Oil	2	12	-1	--
Pelargonium roseum	Shoot	--	18	-0.517334775216129	--
Petroselinum crispum	Leaf	2.9	2.9	-0.3859763862907193	--
Pimenta racemosa	Leaf	0	11080	2.645295440851897	--
Rosa damascena	Essential Oil	--	--		--
Salvia sclarea	Plant	0.4	340	-0.4529210059550321	Flavour and Fragrance Journal, 6: 154.
Telosma cordata	Flower	71	71	-1	K. Furukawa, T. Arai, S. Hashimoto, (1993); Volatile components of Telosma cordata Merrill flowers, Flavour Fragr. J., Vol 8, 221-223.
Thymus capitatus	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus funkii	Shoot	5	5	-0.5588027532743726	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of Thymus funkii Cousson. Flav. & Fragr. J. 10(6): 379-383.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus funkii	Shoot	--	--		Vila, R., et al. 1995. Composition and study of the variability of the essential oil of Thymus funkii Cousson. Flav. & Fragr. J. 10(6): 379-383.
Thymus longicaulis	Shoot	42	42	-0.44077850803167945	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus longicaulis	Shoot	--	0	-0.5747519756044662	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus longicaulis	Shoot	--	42	-0.44077850803167945	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus x citriodorus	Plant	55	55	-0.7156950358334682	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.
Zingiber officinale	Rhizome	--	410		--
Zingiber officinale	Rhizome Essent. Oil	81000	260000		--