

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for P-CYMENE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Abies alba	Leaf	25.0	35.0	-0.37103559986814266	--
Achillea millefolium	Leaf	9.0	1185.0	0.584380733883737	--
Acinos suaveolens	Shoot		4.0	-0.49823174186130514	Tumen, G. 1991. The Volatile Constituents of Acinos suaveolens (Sibt. et Smith). G. Don fil. Growing in Turkey. J. Ess. Oil Res. 3:191-2.
Acorus calamus	Rhizome	0.0	50.0	-0.49356441935275247	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Aegle marmelos	Leaf		1020.0	0.4472992599106412	--
Agathosma betulina	Leaf Essent. Oil				--
Allium cepa	Fruit Juice				Schmidt, N. E., et. al. 1996. Rapid Extraction Method of Quantitating the Lachrymatory Factor of Onion Using Gas Chromatography. J. Agric. Food Chem., 44(9): 2690-2693.
Aloysia citrodora	Plant	1.0	7.0	-0.4184328840402544	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Alpinia galanga	Rhizome				--
Alpinia officinarum	Rhizome				Wealth of India.
Amomum compactum	Seed				Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Anethum graveolens	Root Essent. Oil				--
Anethum graveolens	Leaf Essent. Oil		21700.0	-0.45620901588660095	--
Anethum graveolens	Seed	40.0	3775.0	0.2503968578555244	--
Anethum graveolens	Leaf	30.0	4460.0	3.3052402930466984	--
Anethum graveolens	Seed Essent. Oil				--
Anethum graveolens	Shoot				--
Anethum graveolens	Fruit	336.0	3773.0	-0.08029864689784445	--
Anethum graveolens	Essential Oil				--
Angelica archangelica	Root Essent. Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Angelica archangelica	Root	40.0	980.0	1.731986088156794	--
Angelica archangelica	Seed	800.0	5050.0	0.5834563158237798	Wealth of India.
Angelica sinensis	Root				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
Apium graveolens	Stem Essent. Oil		17000.0	-1.0	--
Apium graveolens	Root Essent. Oil		31000.0	1.4362919950712267	--
Apium graveolens	Leaf Essent. Oil		4000.0	-0.7192886194278051	--
Apium graveolens	Seed	20.0	930.0	-0.49278287384619057	--
Apium graveolens	Fruit Essent. Oil	2000.0	31000.0	1.1182650591230865	--
Apium graveolens	Seed Essent. Oil	2000.0	31000.0	-0.0997830422638124	--
Apium graveolens	Et		17000.0	1.0	--
Aralia cordata	Root		5.0	-0.5908288168677922	--
Artemisia dracunculus	Essential Oil		24700.0	-0.4294696002319138	--
Artemisia dracunculus	Shoot				--
Artemisia annua	Shoot	10.0	400.0	-0.1843115107377468	--
Artemisia salsoloides	Shoot		6500.0	4.651328413135248	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of Artemisia salsoloides Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
Artemisia capillaris	Essential Oil				--
Artemisia herba-alba	Plant				--
Artemisia annua	Plant				--
Boswellia serrata	Resin, Exudate, Sap		22400.0	-1.0	Sabinsa: A series of well documented proprietary PR booklets, e.g. Sabinsa Corps. 1998. Bronchial Asthma - Its etiology and control with traditional herbal extracts. Sabinsa Corporation. Piscataway, NJ. 49 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Boswellia sacra	Resin, Exudate, Sap		35300.0	1.0	Chiavari, G., Gtalletti, G. C., Piccaglia, R., Mohamud, M. A. 1991. Differentiation Between Resins Boswellia carterii and Boswellia frereana (Frankincense) of Somali Origin. J. Essent. Oil Res. 3 (3):185-186.
Boswellia sacra	Essential Oil	3925.0	87000.0	0.08487859835357342	--
Boswellia sacra	Resin Essent. Oil		0.5		Abdel Wahab, S. M., Aboutabl, E. A., El-Zalabani, S. M., Fouad, H. A., De Pooter, H. L., El-Fallaha, B. 1987. The Essential Oil of Olibanum. Plant Med. 53 (4): 382-384.
Boswellia serrata	Essential Oil		140000.0	0.522446086716829	--
Calamintha nepeta	Plant		65.0	-0.40333474653128587	J. Ethnopharmacology, 39: 167.
Calamintha nepeta	Leaf		1.0	-0.39928269147471995	Akgul, A., De Pooter, H.L., and De Buyck, L.F. 1991. The Essential Oils of Calamintha nepeta subsp. glandulosa and Ziziphora clinopodioides from Turkey. J. Ess. Oil Res., 3: 7-10.
Calamintha nepeta	Shoot		9.0	-0.49426810257944204	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuoglu, M. 1992. Composition of the Essential Oil of Calamintha nepeta subsp. glandulosa. J. Ess. Oil Res. 4:189-190
Callicarpa americana	Leaf		7.0	-0.39429791060297104	--
Canarium indicum	Essential Oil	1500.0	3750.0	-0.602432597990597	--
Capsicum annuum	Fruit				--
Carthamus tinctorius	Leaf		0.03	-0.4000885643823194	--
Carthamus tinctorius	Bud		0.01		--
Carum carvi	Seed	0.1	1320.0	-0.39090586317354775	--
Chamaemelum nobile	Plant				--
Chenopodium ambrosioides	Leaf	365.0	4400.0	3.2553924843292092	--
Chrysanthemum x morifolium	Plant	3.0	14.0	-0.4166106950305513	Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Chrysanthemum parthenium	Shoot		9.0	-0.49426810257944204	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
Cinnamomum verum	Leaf	55.0	140.0	-0.2838019346125363	--
Cinnamomum verum	Bark Essent. Oil		5500.0		--
Cinnamomum aromaticum	Plant				--
Cinnamomum verum	Bark	39.0	448.0		--
Cinnamomum verum	Root Bark				--
Cinnamomum verum	Stem Bark				--
Cinnamomum camphora	Leaf		5.0	-0.39595950422688736	--
Cinnamomum verum	Leaf Essent. Oil				--
Cistus ladaniferus	Leaf	16.0	1120.0	0.5303789411064568	--
Citrullus colocynthis	Petiole				--
Citrus aurantium	Plant				--
Citrus sinensis	Fruit	3590.0	4070.0	-0.04098189676522262	--
Citrus aurantium	Leaf	100.0	270.0	-0.17579834905797595	--
Citrus paradisi	Leaf		385.0	-0.08025671568278799	--
Citrus limon	Pericarp Essent. Oil				Jim Duke's personal files.
Citrus reticulata	Fruit	0.0	0.1	-0.5797537532122179	--
Citrus reticulata	Leaf Essent. Oil		162900.0	1.64248251066809	--
Citrus aurantiifolia	Fruit	50.0	1160.0	-0.4262066202868709	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Petiole		7.5		--
Citrus limon	Leaf Essent. Oil	4100.0	20000.0	-0.4814765484301064	Jim Duke's personal files.
Citrus limon	Essential Oil	12.0	31.0	-0.6331366260891432	--
Citrus paradisi	Pericarp				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cleonia lusitanica	Leaf	2.0	3.0	-0.39762109785080363	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.
Cnicus benedictus	Shoot				Jim Duke's personal files.
Cnicus benedictus	Essential Oil				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Coleus barbatus	Root Essent. Oil		2000.0	-1.00023727413413	Jim Duke's personal files.
Coleus barbatus	Stem Essent. Oil		24600.0	1.0	Jim Duke's personal files.
Coleus barbatus	Leaf Essent. Oil		24600.0	-0.413105578018268	Jim Duke's personal files.
Coriandrum sativum	Fruit	74.0	728.0	-0.4833946204797754	--
Coriandrum sativum	Essential Oil				--
Coriandrum sativum	Seed Essent. Oil		900.0	-1.547238257753332	--
Coridothymus capitatus	Shoot		1275.0	0.5093253635882976	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. Z. Lebensm Unters Forsch 197: 20-23.
Crocus sativus	Silk Stigma Style				--
Croton eluteria	Bark				--
Croton lechleri	Plant				Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Cuminum cyminum	Fruit	810.0	12639.0	1.093379153357459	--
Cuminum cyminum	Essential Oil				--
Cuminum cyminum	Seed	810.0	12639.0	2.5658784542716937	--
Cuminum cyminum	Seed Essent. Oil		57400.0	1.1697457846107164	--
Cunila organoides	Shoot		3388.0	2.1843593241036476	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Curcuma longa	Rhizome	210.0	5184.0	1.9997542158504666	--
Curcuma longa	Leaf		310.0	-0.1425664765796497	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cymbopogon nardus	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cymbopogon parkeri	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Daucus carota	Root		12.0	-0.5741521970368465	--
Daucus carota	Seed	10.0	160.0	-0.6939246641485881	--
Elettaria cardamomum	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
Elettaria cardamomum	Root Essent. Oil		7000.0	-0.5801460208228617	--
Elettaria cardamomum	Fruit	130.0	28000.0	3.1268626509574724	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Elettaria cardamomum	Seed Essent. Oil				--
Elsholtzia pilosa	Shoot		0.6	-0.5009270165729721	--
Elsholtzia nipponica	Plant				Chemical Constituents of Oriental Herbs (3 diff. books)
Elsholtzia polystachya	Leaf		3.6	-0.39712261976362884	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 blanda	Shoot		0.5	-0.5010062893586094	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 polystachya	Leaf		4.2	-0.3966241416764538	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
Elytrigia repens	Rhizome		7.0	-0.5144472984555453	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Elytrigia repens	Plant		5.0	-0.41895350947159815	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Eryngium foetidum	Plant	4.5	22.5	-0.4143980369473404	--
Eucalyptus cladocalyx	Shoot		275.0	-0.28340249278432456	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 sideroxylon	Shoot		0.1	-0.5013233805011584	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 globulus	Leaf Essent. Oil	3400.0	146000.0	1.3912935106767708	--
Eucalyptus desquamata	Leaf		1015.0	0.4431452758508504	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus camaldulensis	Shoot		0.1	-0.5013233805011584	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 punctata	Shoot		0.1	-0.5013233805011584	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 odorata	Leaf		1095.0	0.5096090208075029	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus bridgesiana</i>	Leaf		580.0	0.08174866264905246	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Volatile Constituents of the Essential Oil of <i>Eucalyptus bridgesiana</i> Growing in India. <i>Journal of Essential Oil Res.</i> 3: 449-450.
<i>Eucalyptus polyanthemos</i>	Shoot		630.0	-0.0019841037720437003	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven <i>Eucalyptus</i> Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus grandis</i>	Leaf Essent. Oil		161000.0	1.6142423272371134	--
<i>Eucalyptus nova-anglica</i>	Leaf	140.0	240.0	-0.20072225341672062	Brophy, J. L., Lassak, E. V., & Boland, D. J. 1992. The Leaf Essential Oils of <i>Eucalyptus nova-anglica</i> . Deane & Maiden. <i>Journal of Essential Oil Res.</i> 4: 29-32.
<i>Eucalyptus moluccana</i>	Shoot		0.1	-0.5013233805011584	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven <i>Eucalyptus</i> Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus intertexta</i>	Leaf		41.0	-0.3660508189963937	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphomyrtus</i> , Section <i>Adnataria</i> . <i>Flavour and Fragrance J.</i> 10(6):359-364
<i>Eucalyptus bosistoana</i>	Shoot		0.1	-0.5013233805011584	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven <i>Eucalyptus</i> Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus maculata</i>	Shoot		15.0	-0.4895117354412063	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven <i>Eucalyptus</i> Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus largisparsa	Leaf		39.0	-0.36771241262031	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus forrestiana	Leaf		195.0	-0.23810810995483767	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Eucalyptus diversicolor	Shoot		0.1	-0.5013233805011584	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 tereticornis	Shoot		0.1	-0.5013233805011584	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 siderophloia	Shoot		0.1	-0.5013233805011584	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 leucoxydon	Leaf		22.0	-0.3818359584235987	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus citriodora	Shoot		4000.0	2.6695087722036925	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus porosa	Leaf		220.0	-0.21733818965588375	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus brassiana	Leaf		90.0	-0.32534177521044405	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 oviformis	Shoot		0.1	-0.5013233805011584	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 Essent. Oil	1000.0	5800.0	-0.692534761440564	--
Eucalyptus melliodora	Shoot		0.1	-0.5013233805011584	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 behriana	Leaf		575.0	0.0775946785892617	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus fasciculosa	Leaf		125.0	-0.29626388679190857	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus blakelyi	Shoot		0.1	-0.5013233805011584	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 incrassata	Leaf		245.0	-0.19656826935692986	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J.9(3):113-7
Eucalyptus globulus	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Eucalyptus sparsa	Leaf		115.0	-0.30457185491149014	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus angulosa	Leaf		7.5	-0.39388251219699194	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J.9(3):113-7
Eucalyptus erythrandra	Leaf		23.0	-0.3810051616116405	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J.9(3):113-7
Eucalyptus dealbata	Shoot		1180.0	0.43401621723289846	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 stoatei	Leaf		225.0	-0.21318420559609297	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J.9(3):113-7
Eucalyptus globulus	Essential Oil		5000.0	-0.5921126100575014	--
Eucalyptus melanophloia	Leaf		21.0	-0.3826667552355568	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus ceratocorys	Leaf		90.0	-0.32534177521044405	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J.9(3):113-7
Eucalyptus saligna	Shoot		800.0	0.13277963181130206	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 lansdowneana	Leaf		185.0	-0.24641607807441923	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus botryoides	Shoot		0.1	-0.5013233805011584	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 occidentalis</i>	Shoot		1955.0	1.0483803059216805	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 maideni</i>	Shoot		0.1	-0.5013233805011584	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 ochrophloia</i>	Leaf		42.0	-0.36522002218443556	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus cuprea</i>	Leaf		32.0	-0.3735279903040171	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus viridis</i>	Leaf		2.0	-0.3984518946627618	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus astringens</i>	Shoot		0.1	-0.5013233805011584	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	-0.5013233805011584	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 citriodora</i>	Leaf	10.0	180.0	-0.25057006213421	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus populnea	Leaf		22.0	-0.3818359584235987	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus albens	Shoot		0.1	-0.5013233805011584	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 dolichorhyncha	Leaf		160.0	-0.26718599837337315	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Eucalyptus tetraptera	Leaf		630.0	0.12328850324696028	Bignell, C.M., Dunlop, P.J., Brophy, J. J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Ficus carica	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.
Foeniculum vulgare	Root Essent. Oil		30000.0	1.352273744408973	Jim Duke's personal files.
Foeniculum vulgare	Essential Oil	1000.0	10000.0	-0.5508326583251186	Jim Duke's personal files.
Foeniculum vulgare	Fruit	20.0	480.0	-0.516224768738665	--
Foeniculum vulgare	Seed	20.0	480.0	-0.6103332707761631	--
Ginkgo biloba	Essential Oil				Jim Duke's personal files.
Ginkgo biloba	Wood				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Glechoma hederacea	Plant				Chemical Constituents of Oriental Herbs (3 diff. books)
Glycyrrhiza glabra	Root				--
Hedeoma hispida	Plant		10.0	-0.41765194589323884	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedychium flavum	Shoot		10.0	-0.4934753747230694	--
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.
Houttuynia cordata	Shoot Essent. Oil				--
Houttuynia cordata	Essential Oil				--
Humulus lupulus	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hypericum perforatum	Plant	0.5	9.0	-0.4179122586089107	--
Hyptis suaveolens	Shoot		90.0	-0.43005714621325963	Mallvarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Hyptis suaveolens	Shoot		90.0	-0.43005714621325963	Mallvarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Hyssopus officinalis	Plant	6.0	180.0	-0.3733987842290206	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hyssopus officinalis	Shoot				Tsankova, E.T., Konatchiev, A.N. and Genova, E.M. 1993. Chemical Composition of the Essential Oils of Two Hyssopus officinalis cultivars. J. Ess. Oil Res. 5: 609-611.
Hyssopus officinalis	Shoot		0.1	-0.5013233805011584	Tsankova, E.T., Konatchiev, A.N. and Genova, E.M. 1993. Chemical Composition of the Essential Oils of Two Hyssopus officinalis cultivars. J. Ess. Oil Res. 5: 609-611.
Hyssopus officinalis	Essential Oil				--
Illicium verum	Fruit	1.0	100.0	-0.5665290281676088	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juniperus communis	Fruit	48.0	480.0	-0.516224768738665	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Juniperus communis	Fruit Essent. Oil				--
Lantana camara	Shoot		7.0	-0.49585355829218725	--
Lantana camara	Leaf				--
Laurus nobilis	Leaf Essent. Oil		198300.0	2.1686417177504986	--
Laurus nobilis	Leaf	62.0	540.0	0.04851679017072622	--
Lavandula latifolia	Plant	26.0	98.0	-0.3947444269141141	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula x intermedia	Plant	32.0	69.0	-0.4022934956685984	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula x hybrida	Shoot	7.0	13.0	-0.49109719115395156	Tucker, A.O., Maciarello, M.J., Angell, S., Espaillat, J.R., and French, E.C. 1993. The Essential Oil of Lavandula x hybrida Balb. ex Ging., a Distinct Hybrid from L. x heterophylla Poir. (Labiatae). J. Ess. Oil Res. 5: 443-445.
Leonotis leonurus	Se		22.0		Pedro, L.G., Barroso, J.G., Marques, N.T., Ascensao, L., Pais, M.S.S. and Scheffer, J.J.C. 1991. Composition of the Essential Oil from Sepals of Leonotis leonurus R. Br. J. Ess. Oil Res. 3: 451-3
Lepechinia calycina	Plant		35.0	-0.411144128001442	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Levisticum officinale	Root				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lindera benzoin	Fruit	90.0	135.0	-0.5618957411149429	--
Lindera benzoin	Twig	0.0	4.0		--
Lippia javanica	Essential Oil				--
Litsea glaucescens	Shoot	30.0	40.0	-0.46969353903189076	Tucker, et al, EB46(1):21-24.1992
Magnolia denudata	Twig				--
Magnolia denudata	Bulb				--



Plant	Part	Low PPM	High PPM	StdDev	Reference
Magnolia denudata	Leaf				--
Magnolia denudata	Bark				--
Magnolia denudata	Flower				--
Marrubium vulgare	Plant				--
Marrubium vulgare	Essential Oil				--
Melaleuca cajuputi	Leaf		420.0	-0.05117882726425252	--
Melaleuca alternifolia	Root Essent. Oil		8430.0	-0.4599999223758389	--
Melaleuca linariifolia	Leaf	150.0	200.0	-0.23395412589504688	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Melaleuca alternifolia	Essential Oil	2000.0	49600.0	-0.22389544060464844	--
Melaleuca alternifolia	Leaf	300.0	2855.0	1.971811409853858	--
Melaleuca alternifolia	Resin, Exudate, Sap				--
Melaleuca alternifolia	Leaf Essent. Oil		21000.0	-0.46661329399275026	--
Mentha pulegium	Essential Oil	300.0	30500.0	-0.38158485622235	--
Mentha aquatica	Shoot		2.0	-0.4998171975740504	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of Mentha aquatica Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
Mentha spicata	Essential Oil		2000.0	-0.6168805810969309	--
Mentha x rotundifolia	Shoot	14.0	230.0	-0.3190752463210925	--
Mentha pulegium	Plant	3.0	610.0	-0.26146431649011576	--
Mentha aquatica	Shoot		1.0	-0.500609925430423	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of Mentha aquatica Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
Mentha aquatica	Shoot		2.0	-0.4998171975740504	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of Mentha aquatica Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Mentha x piperita</i>	Leaf	2.5	30.0	-0.37518958392793345	--
<i>Mentha longifolia</i>	Shoot	1.0	23.0	-0.4831699125902253	--
<i>Mentha aquatica</i>	Shoot		2.0	-0.4998171975740504	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. <i>Nippon Nogeikagaku Kaishi</i> 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot		1.0	-0.500609925430423	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. <i>Nippon Nogeikagaku Kaishi</i> 67(10): 1417-1419.
<i>Mentha spicata</i>	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Mentha arvensis</i> var. <i>piperascens</i>	Leaf	9.0	29.0	-0.3760203807398916	--
<i>Micromeria myrtifolia</i>	Shoot		0.1	-0.5013233805011584	Ozek, T., Kirimer, N., and Baser, K.H.C. 1992. Composition of the Essential Oil of <i>Micromeria myrtifolia</i> Boiss. et Hohen. <i>J. Ess. Oil Res.</i> , 4: 79-80.
<i>Micromeria fruticosa</i>	Shoot		2.0	-0.4998171975740504	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of <i>Micromeria fruticosa</i> (L.) Druce subsp. <i>barbata</i> (Boiss et. Ky.), P.H. Davis. <i>Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res</i> 3: 477-479.
<i>Micromeria varia</i>	Shoot		3.0	-0.4990244697176778	Pedro, L.G., et al. 1995. Composition of the Essential oil of <i>Micromeria varia</i> Benth. ssp. <i>thymoides</i> (Sol. ex Lowe) Perez var. <i>thymoides</i> , and endemic species of the Madeira Archipelago. <i>flav. &amp; Fragr. J.</i> 10(3): 199-202.
<i>Micromeria teneriffae</i>	Leaf		50.0	-0.3585736476887703	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . <i>J. Ess. Oil Res.</i> , 3: 387-393.
<i>Micromeria croatica</i>	Leaf		15.0	-0.3876515361073058	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . <i>J. Ess. Oil Res.</i> , 3: 387-393.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Micromeria fruticosa	Shoot		2.0	-0.4998171975740504	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of <i>Micromeria fruticosa</i> (L.) Druce subsp. <i>barbata</i> (Boiss et. Ky.), P.H. Davis. Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res 3: 477-479.
Micromeria juliana	Leaf		0.0	-0.4001134882866781	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
Micromeria congesta	Leaf	1.0	5.0	-0.39595950422688736	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
Micromeria thymifolia	Leaf		0.0	-0.4001134882866781	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
Micromeria varia	Shoot		3.0	-0.4990244697176778	--
Micromeria fruticosa	Leaf		150.0	-0.2754939664929547	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
Micromeria dalmatica	Leaf		13.0	-0.38931312973122206	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
Momordica charantia	Seed Essent. Oil				Jim Duke's personal files.
Monarda media	Plant	14.0	528.0	-0.28280995917520924	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda citriodora	Plant	859.0	1038.0	-0.15005047418255463	--
Monarda lindheimeri	Plant		1315.0	-0.07794385194144615	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda didyma	Leaf	140.0	270.0	-0.17579834905797595	--
Monarda russeliana	Plant		923.0	-0.17998643648481988	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda fistulosa	Plant	3.0	15810.0	3.6952889617223352	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Monarda citriodora	Leaf		1600.0	0.9291614108463718	Collins, J.E., Bishop, C.D., Deans, S.G. and Svoboda, K.P. 1994. Composition of the Essential Oil from the Leaves and Flowers of Monarda citriodora var. citriodora grown in the United Kingdom. J. Ess. Oil Res. 6: 27-9.
Monarda didyma	Flower		405.0	0.9531089965802728	Flavour and Fragrance Journal, 6: 80.
Monarda punctata	Plant	65.0	3384.0	0.4606431567836565	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda didyma	Plant	120.0	1850.0	0.061323450943005245	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda citriodora	Flower		420.0	1.0348040534300105	Collins, J.E., Bishop, C.D., Deans, S.G. and Svoboda, K.P. 1994. Composition of the Essential Oil from the Leaves and Flowers of Monarda citriodora var. citriodora grown in the United Kingdom. J. Ess. Oil Res. 6: 27-9.
Monarda clinopodia	Plant		218.0	-0.3635069010334895	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Murraya koenigii	Leaf		23.0	-0.3810051616116405	--
Myrciaria dubia	Fruit				--
Myristica fragrans	Seed	120.0	960.0	-0.48494618071752577	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myristica fragrans	Seed Essent. Oil	6000.0	43000.0	0.477275515406428	--
Myristica fragrans	Essential Oil	5000.0	8000.0	-0.5673446390180718	--
Myristica fragrans	Leaf Essent. Oil				--
Myroxylon balsamum	Plant				--
Myrtus communis	Plant	30.0	106.0	-0.3926619251887391	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Nepeta racemosa	Shoot		155.0	-0.3785298355490392	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.
Nepeta racemosa	Shoot		155.0	-0.3785298355490392	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum basilicum	Tissue Culture				--
Ocimum basilicum	Essential Oil		2400.0	-0.6135781849583403	--
Ocimum basilicum	Leaf Essent. Oil		300.0	-0.7742826608460229	--
Ocimum basilicum	Shoot Essent. Oil		300.0	-1.3971068639782231	--
Ocimum gratissimum	Plant	160.0	1945.0	0.08605315893183306	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ocimum basilicum	Plant	1.0	16.0	-0.4160900695992076	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Origanum syriacum	Shoot		1880.0	0.988925716693734	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum sipyleum	Shoot		5150.0	3.5811458070322084	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Origanum sipyleum	Shoot		870.0	0.1882705817573856	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Origanum majorana	Essential Oil		47000.0	-0.2453610155054874	--
Origanum vulgare	Plant		3.0	-0.41947413490294194	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum onites	Plant		227.0	-0.36116408659244265	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant		1.0	-0.4199947603342857	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum syriacum	Shoot		3135.0	1.9837991764413743	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Origanum sipyleum	Shoot		3345.0	2.150272026279625	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Origanum minutiflorum	Shoot	760.0	2290.0	1.313944137806509	Baser, K.H.C., Tumen, G., Sezik, E. 1991. The Essential Oil of Origanum minutiflorum O. Schwarz and P.H. Davis. J. Ess. Oil Res. 3: 445-446.
Origanum vulgare	Shoot Essent. Oil	23500.0	87600.0	0.5086342176670718	--
Origanum onites	Shoot		1160.0	0.41816166010544603	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Origanum vulgare	Plant		2600.0	0.2565579876969091	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum majorana	Plant	21.0	210.0	-0.3655894027588645	--
Origanum majorana	Leaf Essent. Oil		20000.0	-0.4814765484301064	--
Origanum syriacum	Shoot		3135.0	1.9837991764413743	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum sipyleum	Shoot		3345.0	2.150272026279625	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Origanum vulgare	Plant	3.0	3237.0	0.4223771875798914	--
Origanum vulgare	Essential Oil		323700.0	2.039071513364566	--
Origanum vulgare	Plant		1.0	-0.4199947603342857	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Origanum onites	Shoot		1160.0	0.41816166010544603	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Origanum vulgare	Shoot		3420.0	2.2097266155075714	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. Z. Lebensm Unters Forsch 197: 20-23.
Pastinaca sativa	Root				--
Pelargonium citrosum	Shoot		1.4	-0.5002928342878739	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.
Pelargonium graveolens	Essential Oil	1.0	2.0	-0.633376049809191	--
Perilla frutescens	Shoot Essent. Oil				Nguyen, X. D., La, D. M., Lu'u, D. C., Leclercq, P. A. 1995. Essential Oil Constituents from the Aerial Parts of Perilla frutescens (L.) Britton. J. Essent. Oil Res., 7(4): 429-432.
Petroselinum crispum	Seed		34.0	-0.7268387752889803	--
Petroselinum crispum	Fruit Essent. Oil		28000.0	0.8742799553144132	--
Petroselinum crispum	Leaf		1.44	-0.39891714087745833	--
Peumus boldus	Leaf	1380.0	8580.0	6.728123158314302	--
Pimenta racemosa	Leaf	16.0	750.0	0.222984120681939	--
Pimenta dioica	Leaf		78.0	-0.33531133695394194	--
Pimenta dioica	Fruit		87.0	-0.5682499633585989	--
Pimenta dioica	Leaf Essent. Oil				--
Pinus palustris	Resin, Exudate, Sap				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pinus walliciana</i>	Resin, Exudate, Sap				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Pinus sylvestris</i>	Leaf Essent. Oil		1600.0	-0.7549604300774599	--
<i>Pinus sylvestris</i>	Resin, Exudate, Sap				--
<i>Piper cubeba</i>	Fruit Essent. Oil				--
<i>Piper nigrum</i>	Fruit		150.0	-0.5599100466638004	--
<i>Piper nigrum</i>	Fruit Essent. Oil				--
<i>Piper betel</i>	Leaf	25.0	1050.0	0.4722231642693859	--
<i>Piper nigrum</i>	Seed Essent. Oil				--
<i>Porophyllum ruderales</i>	Plant	40.0	65.0	-0.40333474653128587	Loayza, I., de Groot, W., Lorenzo, D. et al. 1999. Composition of the essential oil of <i>Porophyllum ruderales</i> (Jacq.) Cass. from Bolivia. <i>Flav. &amp; Fragr. J.</i> 14: 393-8.
<i>Prunus armeniaca</i>	Leaf				--
<i>Ptychopetalum olacoides</i>	Root Essent. Oil		5000.0	-0.748182522147369	Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of <i>Ptychopetalum olacoides</i> Root Oil. <i>Planta Med.</i> 53, 2: 231.
<i>Pycnanthemum virginianum</i>	Shoot	6.0	290.0	-0.27151157493873523	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum tenuifolium</i>	Shoot	1.0	140.0	-0.3904207533946285	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum loomisii</i>	Shoot	33.0	84.0	-0.4348135133514954	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum californicum</i>	Shoot				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum verticillatum</i>	Shoot		42.0	-0.4681080833191455	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pycnanthemoides</i>	Shoot	39.0	58.0	-0.45542443761718354	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum incanum</i>	Shoot	22.0	38.0	-0.47127899474463597	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.



Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pycnanthemum beadlei</i>	Shoot		21.0	-0.48475536830297056	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum torreyi</i>	Shoot		30.0	-0.477620817595617	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum muticum</i>	Shoot				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum clinopodioides</i>	Shoot	63.0	66.0	-0.4490826147662026	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Ravensara aromatica</i>	Leaf		80.0	-0.3336497433300256	--
<i>Rheum palmatum</i>	Rhizome		0.5	-0.5176040127385256	--
<i>Ribes nigrum</i>	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Rosmarinus officinalis</i>	Shoot	190.0	480.0	-0.12089328222793702	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the <i>Rosmarinus eriocalyx-tomentosus</i> Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
<i>Rosmarinus officinalis</i>	Plant	25.0	950.0	-0.17295799316167934	--
<i>Rosmarinus officinalis</i>	Leaf		25.0	-0.37934356798772423	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaïd, M.H. 1994. Analysis and Biological Activity of the Essential Oil of <i>Rosmarinus officinalis</i> L. from Egypt. Flavour and Fragrance J. 9: 29-33.
<i>Rosmarinus tomentosus</i>	Shoot	55.0	210.0	-0.334929803448545	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the <i>Rosmarinus eriocalyx-tomentosus</i> Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
<i>Rosmarinus officinalis</i>	Shoot Essent. Oil		105000.0	0.8884726463111513	--
<i>Rosmarinus eriocalyx</i>	Shoot	295.0	645.0	0.009906814073545631	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the <i>Rosmarinus eriocalyx-tomentosus</i> Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Essential Oil		50000.0	-0.22059304446605782	--
Rosmarinus officinalis	Shoot	100.0	465.0	-0.13278420007352634	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Leaf		25.0	-0.37934356798772423	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaid, M.H. 1994. Analysis and Biological Activity of the Essential Oil of Rosmarinus officinalis L. from Egypt. Flavour and Fragrance J. 9: 29-33.
Rosmarinus x mendizabalii	Shoot	43.0	60.0	-0.4538389819044383	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus eriocalyx	Shoot	160.0	305.0	-0.25962065709314586	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Resin, Exudate, Sap				--
Rosmarinus officinalis	Shoot		6.0	-0.4966462861485599	Tucker, A. O. and Maciarello, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Rosmarinus x lavandulaceus	Shoot	60.0	275.0	-0.28340249278432456	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Leaf Essent. Oil		19000.0	-0.4963398028674626	--
Salvia officinalis	Leaf Essent. Oil	7000.0	17700.0	-0.5156620336360256	--
Salvia dorisiana	Shoot	9.6	10.6	-0.4929997380092459	Tucker, A.O. & Maciarello, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Salvia officinalis	Essential Oil	3100.0	5400.0	-0.5888102139189108	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia canariensis	Leaf		42.0	-0.36522002218443556	Casnigueral,S., Iglesias,J., Vila,R., Virgili,A. and Ibanez,C.1994. The Essential Oil from Leaves of Salvia canariensis L. Flav. & Frag. J. 9:201-204. S. Canigueral, Facultat de Farmacia, Universitat de Barcelona, Ave.Diagonal 643,E-08028, Barcelone Spain
Salvia sclarea	Plant	1.0	27.0	-0.413226629726817	Flavour and Fragrance Journal, 6: 154.
Salvia officinalis	Shoot	15.0	495.0	-0.10900236438234769	--
Salvia officinalis	Et		11000.0	-1.0	--
Salvia gilliesii	Shoot		52.0	-0.4601808047554193	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Sassafras albidum	Leaf		0.0	-0.4001134882866781	--
Satureja cuneifolia	Shoot		2980.0	1.8609263587036178	Tumen, G. 1991. The Volatile Constituents of Satureja cuneifolia. J. Ess. Oil Res., 3: 365-366.
Satureja obovata	Leaf		1230.0	0.621766590421854	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja montana	Plant	45.0	6210.0	1.196286891272366	--
Satureja parvifolia	Shoot		0.0	-0.5014026532867957	Zygadlo, 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 cilicica	Shoot		1150.0	0.4102343815417198	Tumen, G. Baser, K.H.C. and Kirimer, N. 1993. The Essential Oil of Satureja cilicica P.H. Davis. J. Ess. Oil Res. 5: 547-548.
Satureja montana	Essential Oil	163700.0	273000.0	1.6204928027982062	--
Satureja obovata	Shoot	50.0	1235.0	0.4776162493333927	Fitoterapia No.60: 277.
Satureja obovata	Leaf		990.0	0.4223753555518965	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja hortensis	Plant	200.0	3060.0	0.3763018369059701	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Satureja thymbra	Shoot		5070.0	3.5177275785223983	Lagouri, V., Blekas, G., Tsimidou, M., Kokkini, S., and Boskou, D. 1993. Composition and Antioxidant Activity of Essential Oils from Oregano Plants Grown Wild in Greece. Z. Lebensm Unters Forsch 197: 20-23.
Satureja odora	Shoot		50.0	-0.46176626046816455	Zygadlo, 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 obovata	Leaf		100.0	-0.3170338070908625	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja obovata	Leaf		100.0	-0.3170338070908625	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja douglasii	Plant		26.0	-0.41348694244248885	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja subspicata	Plant		50.0	-0.40723943726636397	Stanic, G., Petricic, J., and Blazevic, N. 1991. Gas Chromatographic Investigations of Essential Oils of Satureja montana and Satureja subspicata from Yugoslavia. J. Ess. Oil Res., 3: 153-158.
Saussurea lappa	Root Essent. Oil				--
Sideritis mugronensis	Leaf	3.0	5.0	-0.39595950422688736	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
Sideritis athoa	Shoot		2.0	-0.4998171975740504	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of Sideritis athoa Papanikolaou Et Kokkini. J. Ess. Oil Res. 5: 669-670.
Sideritis mugronensis	Flower	35.0	75.0	-0.8441822541139559	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sideritis pauli	Shoot		3.0	-0.4990244697176778	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of Sideritis pauli Pau. FFJ7: 47-8. 1992.
Sideritis germanicolpitana	Plant		2.0	-0.4197344476186138	J. Essential Oil, 4: 533.
Stachys germanica	Plant		13.0	-0.4168710077462232	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Stevia rebaudiana	Leaf		8.0	-0.39346711379101285	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Stevia rebaudiana	Flower		20.0	-1.1437307958963272	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Tagetes minuta	Plant				--
Tagetes minuta	Flower Essent. Oil		100.0		--
Tanacetum parthenium	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
Tanacetum parthenium	Shoot		9.0	-0.49426810257944204	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
Tanacetum parthenium	Essential Oil		31000.0	-0.3774568610491117	--
Teucrium polium	Shoot	3.0	19.0	-0.4863408240157158	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian Teucrium Species. J. Ess. Oil Res. 5: 397-402.
Teucrium micropodioides	Leaf		0.0	-0.4001134882866781	Arnold, N., Bellomaria, B., Valentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium arduini	Shoot		4.0	-0.49823174186130514	Blazevic, N., Kalodera, Z., Petricic, J., and Plazibat, M. 1992. Essential Oil Content and Composition of Teucrium arduini L. J. Ess. Oil Res. 4: 223-225.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Teucrium arduini	Shoot		16.0	-0.48871900758483366	Blazevic, N., Kalodera, Z., Petricic, J., and Plazibat, M. 1992. Essential Oil Content and Composition of Teucrium arduini L. J. Ess. Oil Res. 4: 223-225.
Teucrium kotschyianum	Leaf		0.0	-0.4001134882866781	Arnold, N., Bellomaria, B., Velentini G. and Razaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium cyprum	Leaf		170.0	-0.2588780302537916	Arnold, N., Bellomaria, B., Velentini G. and Razaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium polium	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Teucrium salviastrum	Shoot		0.25	-0.5012044713227025	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
Teucrium oxylepis	Shoot		1.36	-0.500324543402129	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
Teucrium gnaphalodes	Shoot		0.0	-0.5014026532867957	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian Teucrium Species. J. Ess. Oil Res. 5: 397-402.
Teucrium asiaticum	Shoot		0.61	-0.5009190892944084	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
Teucrium scorodonia	Shoot		0.06	-0.5013550896154133	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium pseudoscorodonia</i>	Shoot		0.08	-0.5013392350582859	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium oxylepis</i>	Shoot		0.78	-0.500784325558825	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium divaricatum</i>	Leaf		0.0	-0.4001134882866781	Arnold, N., Bellomaria, B., Velentini G. and Razaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
<i>Thymus broussonettii</i>	Shoot		1350.0	0.5687799528162442	Tantaoui-Elaraki, A., Lattaoui, N., Errifi, A. and Benjilali, B. 1993. Composition and Antimicrobial Activity of the Essential Oils of <i>Thymus broussonettii</i> , <i>T. zygis</i> and <i>T. saturejoides</i> . <i>J. Ess. Oil Res.</i> 5: 45-53.
<i>Thymus vulgaris</i>	Plant	146.0	20800.0	4.994249412924975	--
<i>Thymus funkii</i>	Shoot		50.0	-0.46176626046816455	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. <i>Flav. &amp; Fragr. J.</i> 10(6): 379-383.
<i>Thymus mastichina</i>	Plant	130.0	340.0	-0.33174874972152113	Lawrence, B.M., <i>Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.</i>
<i>Thymus vulgaris</i>	Essential Oil	78300.0	441300.0	3.0099759781102042	--
<i>Thymus zygis</i>	Shoot	940.0	4220.0	2.8439089006056695	De Cunha, A.P. and Salguiero, L.R. 1991. The Chemical Polymorphism of <i>Thymus zygis</i> ssp. <i>sylvestris</i> from Central Portugal. <i>J. Ess. Oil Res.</i> 3: 409-12.
<i>Thymus longicaulis</i>	Shoot		3.0	-0.4990244697176778	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of <i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> in the same Population. <i>J. Ess. Oil Res.</i> 5: 291-5.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus riatarum	Shoot		2100.0	1.1633258450957107	Iglesias, J., Vila, R., Canigueral, S., Bellakdhar, and I Idrissi, A. 1991. Analysis of the Essential Oil of Thymus riatarum. J. Ess. Oil Res. 3: 43-4.
Thymus serpyllum	Plant	237.0	3285.0	0.43487219793214127	--
Thymus capitatus	Shoot		45.0	-0.46572989975002765	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Fragr. J. 8: 331-7.
Thymus x citriodorus	Plant		10.0	-0.41765194589323884	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.
Thymus zygis	Shoot		825.0	0.1525978282206176	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.
Thymus longicaulis	Shoot		3.0	-0.4990244697176778	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 cilicicus	Shoot		170.0	-0.36663891770344986	Tumen, G., Koyuncu, M., Kirimer, N., and Baser, K.H.C. 1994. Composition of the Essential Oil of Thymus cilicicus Boiss. & Bal. J. Ess. Oil Res. 6: 97-8.
Thymus funkii	Shoot		65.0	-0.44987534262257517	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 orospedanus	Plant		3939.0	0.6051167139815454	J. Nat. Prod.
Thymus capitatus	Plant	10.0	550.0	-0.27708307943042804	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus zygis	Shoot		825.0	0.1525978282206176	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus saturejoides	Shoot		460.0	-0.13674783935538945	Tantaoui-Elaraki, A., Lattaoui, N., Errifi, A. and Benjlali, B. 1993. Composition and Antimicrobial Activity of the Essential Oils of Thymus broussonettii, T. zygis and T. saturejoides. J. Ess. Oil Res. 5: 45-53.
Thymus longicaulis	Shoot		40.0	-0.46969353903189076	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.
Trachyspermum ammi	Fruit	6240.0	9512.0	0.6794280501092825	--
Trichostemma dichotomum	Shoot		0.3	-0.5011648349298838	Tucker, A.O. and Maciarello, M.J. 1990. The Essential Oil of Trichostemma dichotomum. J. Ess. Oil Res. 2: 149-150.
Turnera diffusa	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Umbellularia californica	Plant	100.0	400.0	-0.31612998678120885	--
Valeriana officinalis	Root				--
Valeriana officinalis	Root Essent. Oil				--
Vetiveria zizanioides	Root		15.0	-0.5670050742521554	--
Vitex agnus-castus	Leaf		10.0	-0.3918055201670966	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
Vitex agnus-castus	Leaf Essent. Oil		14400.0	-0.564710773279301	Jim Duke's personal files.
Vitex agnus-castus	Fruit				Jim Duke's personal files.
Vitex agnus-castus	Flower				Jim Duke's personal files.
Zingiber officinale	Rhizome Essent. Oil		26000.0		--
Zingiber officinale	Rhizome		90.0	-0.47413848530364283	--