

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

**List of Plants for ALPHA-COPAENE**

Plant	Part	Low PPM	High PPM	StdDev	Reference
Achillea millefolium	Leaf	--	--		--
Acinos alpinus	Shoot	4.5	4.5	-0.2960814941369321	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Acinos alpinus	Shoot	--	4.5	-0.2960814941369321	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Alpinia galanga	Rhizome	--	--		--
Angelica archangelica	Root	10	190		--
Angelica archangelica	Root Essent. Oil	--	--		--
Artemisia annua	Plant	4	620	2.6088478815042415	--
Artemisia capillaris	Essential Oil	--	--		--
Artemisia herba-alba	Plant	--	--		--
Artemisia salsolooides	Shoot	500	500	5.387619552329427	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of Artemisia salsolooides Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
Boswellia sacra	Essential Oil	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Calamintha nepeta	Leaf	25	25	-0.20757155613371883	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Callicarpa americana</i>	Leaf	--	2	-0.3444107788177234	--
<i>Capsicum annuum</i>	Fruit	--	--		--
<i>Carthamus tinctorius</i>	Flower	0.17	0.22	-0.8722153075099439	--
<i>Carthamus tinctorius</i>	Leaf	0.05	0.05	-0.3560123650887585	--
<i>Centella asiatica</i>	Essential Oil	--	9000	-0.36082830563118673	Jim Duke's personal files.
<i>Chamaemelum nobile</i>	Plant	--	--		--
<i>Chrysanthemum parthenium</i>	Shoot	--	--		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
<i>Chrysanthemum x morifolium</i>	Plant	2	5	-0.5147605038264476	Wealth of India.
<i>Citrus limon</i>	Essential Oil	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Citrus limon</i>	Petiole	--	0		--
<i>Citrus paradisi</i>	Pericarp	--	--		--
<i>Citrus reticulata</i>	Fruit	1	2	-0.6867645101915246	--
<i>Citrus sinensis</i>	Pericarp	--	--		--
<i>Citrus sinensis</i>	Pericarp Essent. Oil	--	--		Jim Duke's personal files.
<i>Citrus sinensis</i>	Fruit	0.7	1	-0.6881248888845418	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Cleonia lusitanica</i>	Leaf	1	1	-0.35036031023876707	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of <i>Cleonia lusitanica</i> . <i>J. Ess. Oil Res.</i> , 3: 441-442.
<i>Coleus barbatus</i>	Root Essent. Oil	--	5000	-1	Jim Duke's personal files.
<i>Commiphora myrrha</i>	Resin, Exudate, Sap	--	--		Gruenwald, J. et al. 1998. <i>PDR for Herbal Medicine</i> . 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
<i>Copaifera spp</i>	Wood	--	--		--
<i>Croton eluteria</i>	Bark	--	--		--
<i>Croton lechleri</i>	Plant	--	--		Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
<i>Elettaria cardamomum</i>	Seed	--	--		--
<i>Eucalyptus angulosa</i>	Leaf	--	15	-0.2670668703441556	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 <i>Eucalyptus</i> .Part I.Subgenus <i>Sympyomyrtus</i> ,Section Dumaria, Series Incrastatae.Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus behriana</i>	Leaf	2.7	2.7	-0.3402461068229929	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. Subjenus <i>Sympyomyrtus</i> , Section Adnataria. Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus brassiana</i>	Leaf	--	0	-0.3563098416598108	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Chemical Constituents of the Leaf Essential Oil of <i>Eucalyptus brassiana</i> S. T. Blake. <i>Journal of Essential Oil Res.</i> 3: 45-7.
<i>Eucalyptus ceratocorys</i>	Leaf	--	36	-0.14212671050223838	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 <i>Eucalyptus</i> .Part I.Subgenus <i>Sympyomyrtus</i> ,Section Dumaria, Series Incrastatae.Flavour and Fragrance J.9(3):113-7

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus cuprea	Leaf	23	23	-0.2194706189758062	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus desquamata	Leaf	75	75	0.08990501491846502	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus dolichorhyncha	Leaf	--	60	0.0006620436028098569	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 Sympyomyrtus,Section Dumaria, Series Incrastatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus erythrandra	Leaf	--	33	-0.15997530476536942	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 Sympyomyrtus,Section Dumaria, Series Incrastatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus fasciculosa	Leaf	0	1.3	-0.3485754508124539	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus forrestiana	Leaf	--	195	0.8038487854437062	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 Sympyomyrtus,Section Dumaria, Series Incrastatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus globulus	Leaf Essent. Oil	--	2000	1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus incrassata	Leaf	--	65	0.03040970070802824	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 Sympyomyrtus,Section Dumaria, Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus intertexta	Leaf	5.5	5.5	-0.32358741884407055	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus lansdowneana	Leaf	2.4	2.4	-0.3420309662493059	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus largisparsa	Leaf	20	20	-0.23731921323893723	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus leucoxylon	Leaf	45	45	-0.0885809277128453	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus melanophloia	Leaf	7	7	-0.31466312171250505	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus nova-anglica	Leaf	11	20	-0.23731921323893723	Brophy, J. L., Lassak, E. V., & Boland, D. J. 1992. The Leaf Essential Oils of Eucalyptus nova-anglica. Deane & Maiden. Journal of Essential Oil Res. 4: 29-32.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus ochrophloia	Leaf	2	2	-0.3444107788177234	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus odorata	Leaf	33	33	-0.15997530476536942	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus populnea	Leaf	1.8	1.8	-0.3456006851019321	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus porosa	Leaf	10	10	-0.296814527449374	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus sparsa	Leaf	25	25	-0.20757155613371883	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 Sympyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus stoatei	Leaf	--	140	0.47662455728630404	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 Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7
Eucalyptus tetraptera	Leaf	--	20	-0.23731921323893723	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 Sympyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus viridis	Leaf	1	1	-0.35036031023876707	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>Sympyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
Humulus lupulus	Fruit	15	15	-0.6690795871823009	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Hyptis suaveolens	Shoot	1.5	1.5	-0.3304934076372329	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of <i>Hyptis suaveolens</i> (L.) Poit. J. Ess. Oil Res. 5: 321.
Hyptis suaveolens	Shoot	--	1.5	-0.3304934076372329	Mallavarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of <i>Hyptis suaveolens</i> (L.) Poit. J. Ess. Oil Res. 5: 321.
Illicium verum	Fruit	25	1100	0.8069312947413789	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Juniperus communis	Fruit	3	33	-0.6445927707079909	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Fruit Essent. Oil	--	--		--
Lantana camara	Shoot	--	14	-0.18711043471931266	--
Laurus nobilis	Plant	--	--		--
Leonotis leonurus	Se	6	6		Pedro, L.G., Barroso, J.G., Marques, N.T., Ascenso, L., Pais, M.S.S. and Scheffer, J.J.C. 1991. Composition of the Essential Oil from Sepals of <i>Leonotis leonurus</i> R. Br. J. Ess. Oil Res. 3: 451-3
Leptospermum scoparium	Essential Oil	--	--		--
Magnolia denudata	Bark	--	--		--
Magnolia denudata	Bulb	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Magnolia denudata	Flower	--	--		--
Magnolia denudata	Leaf	--	--		--
Magnolia denudata	Twig	--	--		--
Melaleuca alternifolia	Leaf	10	25	-0.20757155613371883	--
Melaleuca alternifolia	Essential Oil	--	1700	-0.549784304993286	--
Melia azedarach	Wood	--	--		--
Melissa officinalis	Shoot	2	120	1.0287771756246513	--
Mentha aquatica	Shoot	2	2	-0.3247580887205161	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.
Mentha aquatica	Shoot	--	2	-0.3247580887205161	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.
Mentha aquatica	Shoot	--	2	-0.3247580887205161	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.
Mentha aquatica	Shoot	--	2	-0.3247580887205161	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.
Mentha aquatica	Shoot	--	2	-0.3247580887205161	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.
Mentha x piperita	Essential Oil	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Metrosideros sclerocarpa	Leaf	7	28	-0.18972296187058782	--
Micromeria myrtifolia	Shoot	7	7	-0.267404899553348	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.
Micromeria varia	Shoot	45	45	0.16847933811712973	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.
Micromeria varia	Shoot	--	45	0.16847933811712973	--
Monarda didyma	Flower	--	--		Flavour and Fragrance Journal, 6: 80.
Monarda didyma	Leaf	--	--		Flavour and Fragrance Journal, 6: 80.
Murraya koenigii	Leaf	--	0.1	-0.35571488851770644	--
Myristica fragrans	Essential Oil	--	3000	-0.5161346064767478	--
Myroxylon balsamum	Plant	--	--		--
Nepeta racemosa	Shoot	11	11	-0.22152234821961353	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. <i>J. Ess. Oil Res.</i> 5: 215-7.
Nepeta racemosa	Shoot	--	11	-0.22152234821961353	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. <i>J. Ess. Oil Res.</i> 5: 215-7.
Ocimum basilicum	Plant	0.8	20	-0.43857493345252835	--
Ocimum basilicum	Plant	--	0.8	-0.5360924635311449	Die Nahrung. Pino, J., Rosado, A., Goire, I., Roncal, E., and Garcia, I. 1993. Analysis of the Essential Oil from Cuban Basil. <i>Die Nahrung</i> 37:(5): 501-504.
Ocimum basilicum	Shoot Essent. Oil	300	3600	-1	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum gratissimum	Flower	100	170	1.6993695654437464	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	50	95	0.20889564333933855	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of Ocimum gratissimum L. J. Ess. Oil Res. 4: 231-234.
Opopanax chironium	Essential Oil	--	--		--
Origanum majorana	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum majorana	Essential Oil	--	--		--
Origanum vulgare	Plant	18	90	-0.0830422717075718	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Panax ginseng	Flower Essent. Oil	--	--		--
Panax ginseng	Shoot Essent. Oil	--	--		--
Pelargonium citrosum	Shoot	--	6	-0.2788755373867816	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.
Perilla frutescens	Shoot Essent. Oil	--	12000	1	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	Leaf	7.92	7.92	-0.30918955280514493	--
Pilocarpus microphyllus	Leaf	75	285	1.3393066133376372	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pimenta dioica	Leaf Essent. Oil	--	--		--
Pimenta racemosa	Leaf	0	70	0.060157357813246624	--
Pinus sylvestris	Wood	--	--		--
Pinus sylvestris	Essential Oil	--	--		--
Pinus sylvestris	Leaf Essent. Oil	--	500	-1	--
Piper auritum	Leaf	--	--		Tramil
Piper nigrum	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Piper nigrum	Fruit Essent. Oil	8200	15800	1	--
Plectranthus barbatus	Essential Oil	7000	100000	1.9946505905264882	--
Plectranthus incanus	Shoot	25	25	-0.06093341855154284	Shah, G.C., Bhandari, R. & Mathela, C.S. 1992. 1,2-Epoxy-p-Methane Derivatives from some Labiate Species. J. Ess. Oil Res. 4: 57-59.
Ptychopetalum olacoides	Root Essent. Oil	--	32000	1	Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of Ptychopetalum olacoides Root Oil. Planta Med. 53, 2: 231.
Rheum palmatum	Rhizome	--	50		--
Rosmarinus officinalis	Leaf	2	2	-0.3444107788177234	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Leaf	--	4	-0.33251171597563606	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 officinalis	Leaf	--	2	-0.3444107788177234	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 officinalis	Resin, Exudate, Sap	--	--		--
Salvia dorisiana	Shoot	1.4	1.6	-0.3293463438538896	Tucker, A.O. & Maciarello, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Salvia gilliesii	Shoot	41	41	0.12259678678339525	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Salvia officinalis	Leaf Essent. Oil	--	--		--
Sassafras albidum	Leaf	--	0	-0.3563098416598108	--
Satureja cilicica	Shoot	3	3	-0.3132874508870825	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	Plant	3	85	-0.10843746183221153	--
Satureja subspicata	Plant	15	15	-0.4639701235771681	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.
Sideritis athoa	Shoot	7	7	-0.267404899553348	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 germanicolpitana	Plant	4	15	-0.4639701235771681	J. Essential Oil, 4: 533.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Sideritis mugronensis</i>	Flower	10	35	-0.34541755817946124	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
<i>Sideritis mugronensis</i>	Leaf	5	15	-0.2670668703441556	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. <i>J. Ess. Oil Res.</i> , 3: 395-397.
<i>Sideritis pauli</i>	Shoot	95	95	0.7420112297888107	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of <i>Sideritis pauli</i> Pau. <i>FFJ7</i> : 47-8. 1992.
<i>Stevia rebaudiana</i>	Flower	--	26	-0.48173669975434175	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. <i>Stevia. The genus Stevia</i> . Taylor & Francis. New York, NY. 211 pp.
<i>Stevia rebaudiana</i>	Leaf	--	1	-0.35036031023876707	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. <i>Stevia. The genus Stevia</i> . Taylor & Francis. New York, NY. 211 pp.
<i>Syzygium aromaticum</i>	Flower	--	--		--
<i>Syzygium aromaticum</i>	Fruit	--	1890	1.8816304622249802	--
<i>Syzygium aromaticum</i>	Leaf	--	1135	6.3964083212247616	Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
<i>Tagetes lucida</i>	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
<i>Tagetes minuta</i>	Essential Oil	--	1000	-0.5679033734252681	--
<i>Tamarindus indica</i>	Fruit Essent. Oil	--	6000	-1	--
<i>Tanacetum parthenium</i>	Shoot	--	--		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. <i>Flavor and Fragrance Journal</i> 11(6): 367-71.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium asiaticum</i>	Shoot	1.75	1.75	-0.3276257481788745	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 cyprium</i>	Leaf	65	65	0.03040970070802824	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
<i>Teucrium divaricatum</i>	Leaf	21	21	-0.23136968181789355	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
<i>Teucrium gnaphalodes</i>	Shoot	2.5	2.5	-0.3190227698037993	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian <i>Teucrium</i> Species. <i>J. Ess. Oil Res.</i> 5: 397-402.
<i>Teucrium kotschyanum</i>	Leaf	160	160	0.5956151857071775	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
<i>Teucrium micropodioides</i>	Leaf	32	32	-0.1659248361864131	Arnold, N., Bellomaria, B., Valentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
<i>Teucrium oxylepis</i>	Shoot	3.31	3.31	-0.30973155315871803	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	4.8	4.8	-0.292640302786902	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 polium</i>	Shoot	1.5	1.5	-0.3304934076372329	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian <i>Teucrium</i> Species. <i>J. Ess. Oil Res.</i> 5: 397-402.
<i>Teucrium pseudoscorodonia</i>	Shoot	1.8	1.8	-0.3270522162872029	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium salviastrum</i>	Shoot	1.27	1.27	-0.3331316543389227	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 scorodonia</i>	Shoot	4.77	4.77	-0.29298442192190505	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>Thymus riatarum</i>	Shoot	25	25	-0.06093341855154284	Iglesias, J., Vila, R., Canigueral, S., Bellakdhar, and II Idrissi, A. 1991. Analysis of the Essential Oil of <i>Thymus riatarum</i> . <i>J. Ess. Oil Res.</i> 3: 43-4.
<i>Turnera diffusa</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Zea mays</i>	Leaf	--	--		--
<i>Zingiber officinale</i>	Rhizome	--	--		--
<i>Zingiber officinale</i>	Rhizome Essent. Oil	--	--		--