

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

**List of Plants for 1,8-CINEOLE**

<b>Plant</b>	<b>Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference</b>
Achillea millefolium	Leaf	24	960	-0.31413337784745815	--
Acinos suaveolens	Shoot	5	5	-0.13552675308545786	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	100	-0.7982890747494946	--
Aloysia citrodora	Plant	28	420	-0.44377263456589705	--
Alpinia galanga	Leaf	--	10	-0.528938235441155	--
Alpinia galanga	Rhizome	1	22700	1.8327934816656402	--
Alpinia officinarum	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Amomum compactum	Seed	2880	16080	1.8800936958654932	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.
Artemisia annua	Leaf	2360	6600	0.3187048852429541	--
Artemisia annua	Shoot	1	6600	-0.0019339060453946566	--
Artemisia capillaris	Essential Oil	--	--		--
Artemisia cina	Flower	8000	24000	2.6355854008382185	--
Artemisia dracunculus	Shoot	50	500	-0.12842761628622745	--
Artemisia herba-alba	Plant	--	--		--
Artemisia salsoloides	Shoot	86500	86500	1.10495776701441	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia vulgaris	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Calamintha nepeta	Leaf	80	80	-0.519934439015072	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	18	18	-0.13534031110891243	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuoglo, M. 1992. Composition of the Essential Oil of Calamintha nepeta subsp. glandulosa. J. Ess. Oil Res. 4:189-190
Callicarpa americana	Leaf	--	1	-0.5300958664102229	--
Canarium indicum	Essential Oil	2500	6250	-0.7687851338874861	--
Capsicum frutescens	Fruit	--	--		--
Carum carvi	Seed	--	0.1	-0.7134832654336017	--
Chamaemelum nobile	Plant	--	--		--
Chrysanthemum balsamita	Plant	--	--		--
Chrysanthemum parthenium	Shoot	--	--		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.
Chrysanthemum x morifolium	Plant	24	90	-0.5364006987067864	Wealth of India.
Cinnamomum aromaticum	Plant	--	--		--
Cinnamomum aromaticum	Bark	--	--		Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cinnamomum camphora	Leaf	3120	6240	0.272399646480241	--
Cinnamomum verum	Bark	165	800	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cinnamomum verum	Leaf	--	110	-0.5160756691181793	Mallavarupu, G. R. et al. 1995. Investigation of the essential oil of cinnamon leaf grown at Bangalore and Hyderabad. Flav. & Fragr. J., 10: 239-242.
Cinnamomum verum	Essential Oil	--	--		--
Cinnamomum verum	Leaf Essent. Oil	1500	6000	-0.8066353382387724	--
Cinnamomum verum	Bark Essent. Oil	--	16500		--
Cinnamomum verum	Stem Bark	--	--		--
Cinnamomum verum	Root Bark	--	--		--
Cistus ladaniferus	Essential Oil	2	140	-0.7935534884809137	--
Citrus aurantiifolia	Fruit	70	70	-0.41945193577446593	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Leaf Essent. Oil	11000	50000	-0.6565847961763176	Jim Duke's personal files.
Citrus reticulata	Fruit	0	76	-0.41910464878819126	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cleonia lusitanica	Leaf	2	10	-0.528938235441155	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Coriandrum sativum	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Coriandrum sativum	Seed Essent. Oil	--	13780	-1	--
Crocus sativus	Silk Stigma Style	--	--		--
Cuminum cyminum	Fruit	40	138	-0.4155160165966862	--
Cuminum cyminum	Seed	40	138	-0.6912409465781895	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cunila origanoides	Shoot	--	28	-0.13519689420387748	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Curcuma longa	Rhizome	30	9575	0.3047864660484435	--
Curcuma longa	Root	--	--		--
Curcuma longa	Leaf	--	330	-0.4877780232076323	--
Curcuma zedoaria	Rhizome	902	1920	-0.5864054352505768	--
Cymbopogon citratus	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cyperus rotundus	Root	--	--		--
Dracocephalum thymiflora	Plant	134	134	-0.5240502901546678	--
Elettaria cardamomum	Fruit	525	56000	2.8178415879493794	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Elettaria cardamomum	Fruit Essent. Oil	342000	360000	-0.4996991087091834	--
Elettaria cardamomum	Seed Essent. Oil	23100	308000	1	--
Elsholtzia blanda	Shoot	12	12	-0.1354263612519334	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 cristata	Shoot	5	5	-0.13552675308545786	Kobold, U., Vostrowsky, O., Bestmann, H.J., Bisht, J.C., Pant, A.K., Melkani, A.B. and Mathela, C.S. 1987. Terpenoids from Elsholtzia Species; II. Constituents of Essential Oil from a New Chemotype of Elsholtzia cristata. Planta Medica 1987: 268-271.
Elsholtzia pilosa	Shoot	1000	1000	-0.12125677103447957	--
Elsholtzia polystachya	Leaf	260	260	-0.4967818196337154	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	--	260	-0.4967818196337154	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.
Eucalyptus albens	Shoot	--	755	-0.12477048520783604	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 angulosa	Leaf	--	365	-0.48327612499459077	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

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus astringens</i>	Shoot	--	8185	-0.01821172476686237	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 behriana</i>	Leaf	1960	1960	-0.2781181921431257	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 blakelyi</i>	Shoot	--	11625	0.031123690565163124	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 bosistoana</i>	Shoot	--	9645	0.002727143368241473	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 botryoides</i>	Shoot	--	1880	-0.10863608339140328	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 brassiana</i>	Leaf	--	3585	-0.06910148939476804	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.
<i>Eucalyptus bridgesiana</i>	Leaf	--	21580	2.2455173204247374	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Volatile Constituents of the Essential Oil of Eucalyptus bridgesiana Growing in India. Journal of Essential Oil Res. 3: 449-450.
<i>Eucalyptus camaldulensis</i>	Shoot	--	5215	-0.060806545562244844	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 ceratocorys</i>	Leaf	--	4465	0.04408909424741951	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

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus citriodora	Leaf	50	3580	-0.06974461771091683	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Eucalyptus citriodora	Shoot	--	20000	0.1512353485319403	--
Eucalyptus citriodora	Leaf Essent. Oil	5000	32000	-0.717969108838231	--
Eucalyptus citriodora	Essential Oil	--	--		--
Eucalyptus cladocalyx	Shoot	--	330	-0.13086570367182174	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 cuprea	Leaf	6160	6160	0.2621095934218603	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 dealbata	Shoot	--	730	-0.12512902747042343	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 desquamata	Leaf	24390	24390	2.6069554341003593	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 diversicolor	Shoot	--	3565	-0.08447033489301288	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	--	4025	-0.012506197573674266	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

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus erythrandra	Leaf	--	4630	0.06531232868032967	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 fasciculosa	Leaf	1515	1515	-0.3353566122803683	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	--	5635	0.19458112022623705	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	3500	29750	3.7465788103160196	--
Eucalyptus globulus	Shoot	--	728000	10.305152225006955	--
Eucalyptus globulus	Leaf Essent. Oil	168000	691200	1.5300608304247285	--
Eucalyptus globulus	Essential Oil	--	667000	1.9097239164573967	--
Eucalyptus globulus	Fruit Essent. Oil	208100	725000	1.395591934022218	--
Eucalyptus incrassata	Leaf	--	8610	0.5772424683347688	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 intertexta	Leaf	7455	7455	0.4286798273043977	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 lansdowneana</i>	Leaf	48	48	-0.5240504602384243	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 largisparsa</i>	Leaf	4030	4030	-0.011863069257525474	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 leucoxydon</i>	Leaf	180	180	-0.5070718726920961	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 maculata</i>	Shoot	--	1260	-0.11752793150357066	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 maideni</i>	Shoot	--	10980	0.021873300190408344	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 melanophloia</i>	Leaf	22	22	-0.527394727482398	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 melliodora</i>	Shoot	--	12735	0.04704296702404344	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 moluccana</i>	Shoot	--	5300	-0.0595875018694477	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
<i>Eucalyptus nova-anglica</i>	Leaf	25	40	-0.5250794655442623	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 occidentalis</i>	Shoot	--	0.1	-0.13559702736892493	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 ochrophloia</i>	Leaf	18	18	-0.527909230135317	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>Symphyomyrtus</i> , Section <i>Adnataria</i> . <i>Flavour and Fragrance J.</i> 10(6):359-364
<i>Eucalyptus odorata</i>	Leaf	1520	1520	-0.3347134839642195	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>Symphyomyrtus</i> , Section <i>Adnataria</i> . <i>Flavour and Fragrance J.</i> 10(6):359-364
<i>Eucalyptus oviformis</i>	Shoot	--	3990	-0.07837511642902718	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 paniculata</i>	Shoot	--	330	-0.13086570367182174	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 polyanthemos</i>	Shoot	--	275	-0.131654496649514	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 populnea</i>	Leaf	2210	2210	-0.24596177633568608	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>Symphyomyrtus</i> , Section <i>Adnataria</i> . <i>Flavour and Fragrance J.</i> 10(6):359-364

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus porosa	Leaf	5940	5940	0.2338119475113134	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 punctata	Shoot	--	6900	-0.03664079706385445	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 saligna	Shoot	--	900	-0.12269094008482914	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	--	2065	-0.10598287064825657	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	--	2130	-0.10505066076552934	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus sp	Lh	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Eucalyptus sparsa	Leaf	7365	7365	0.4171035176137194	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 stoatei	Leaf	--	8810	0.6029676009807206	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

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus tereticornis	Shoot	--	1265	-0.11745622305105319	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 tetraptera	Leaf	--	4890	0.09875500112006691	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 viridis	Leaf	440	440	-0.4736292002523588	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
Foeniculum vulgare	Fruit	1	300	-0.40613926796726973	--
Foeniculum vulgare	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Foeniculum vulgare	Seed	1	300	-0.6651114639489161	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Foeniculum vulgare	Essential Oil	1000	12000	-0.7454761258822148	Jim Duke's personal files.
Glechoma hederacea	Plant	6	37	-0.5512773271900201	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedeoma drummondii	Plant	1	2342	0.09571566627891899	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedeoma pulegioides	Plant	6	30	-0.5532421649142208	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedeoma reverchonii	Plant	447	447	-0.43619397477255156	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
Hibiscus sabdariffa	Calyx	--	--		--
Houttuynia cordata	Plant	--	--		--
Houttuynia cordata	Essential Oil	--	--		--
Hyptis suaveolens	Plant	130	4555	0.7168850782297921	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 74.
Hyptis suaveolens	Shoot	885	885	-0.12290606544238158	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	--	885	-0.12290606544238158	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	Shoot	488	610	-0.1268500303308429	Indian Perfumer, 35: 51.
Hyssopus officinalis	Shoot	5545	5545	-0.05607378769609123	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	--	5545	-0.05607378769609123	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	--	122000	-0.2995646683900661	--
Illicium verum	Fruit	1	3500	-0.22091954195410496	--
Isanthus brachiatus	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juniperus sabina	Plant	--	--		--
Lantana camara	Shoot	--	27	-0.13521123589438097	--
Laurus nobilis	Leaf	375	15000	2.6596919560245604	--
Laurus nobilis	Leaf Essent. Oil	211400	620000	1.287251771450938	--
Laurus nobilis	Fruit Essent. Oil	228000	283700	-0.8958928253130353	--
Laurus nobilis	Essential Oil	--	--		--
Lavandula angustifolia	Flower	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula latifolia	Plant	1000	3434	0.40223035125422557	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Lavandula x hybrida	Shoot	1750	2465	-0.10024619444685824	Tucker, A.O., Maciarelo, M.J., Angell, S., Espailat, 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.
Lavandula x intermedia	Plant	315	1110	-0.25009577318040127	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lepechinia calycina	Plant	985	985	-0.2851821611125563	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	Shoot Essent. Oil	100000	160000		Tucker, A. O. and Debaggio, T. 2000. The Big Book of Herbs. Interweave Press, Inc. Loveland, CO. 688 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lindera benzoin	Twig	315	320		--
Lippia alba	Plant	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
Litsea glaucescens	Shoot	425	565	-0.12749540640350024	Tucker, et al, EB46(1):21-24.1992
Lycopus virginicus	Plant	7	18	-0.5566104581557076	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Magnolia denudata	Bark	--	--		--
Magnolia denudata	Bulb	--	--		--
Magnolia denudata	Flower	--	--		--
Magnolia denudata	Leaf	--	--		--
Magnolia denudata	Twig	--	--		--
Melaleuca alternifolia	Leaf	260	16000	1.5277861196026847	--
Melaleuca alternifolia	Leaf Essent. Oil	29000	56000	-0.6361233586223465	--
Melaleuca alternifolia	Essential Oil	30400	368000	0.697655500183284	--
Melaleuca alternifolia	Root Essent. Oil	--	25700		--
Melaleuca alternifolia	Resin, Exudate, Sap	--	--		--
Melaleuca cajuputi	Leaf	3910	3910	-0.027298148845096504	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Melaleuca sp	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Mentha aquatica	Leaf	300	850	-0.42089267832815774	--
Mentha aquatica	Shoot	110	110	-0.13402087558259082	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	--	110	-0.13402087558259082	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	--	140	-0.13359062486748594	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	--	115	-0.13394916713007335	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	--	45	-0.13495308546531803	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 arvensis var. piperascens	Leaf	--	--		Jim Duke's personal files.
Mentha longifolia	Shoot	30	10930	0.021156215665233555	--
Mentha pulegium	Plant	20	20	-0.5560490759487932	--
Mentha spicata	Plant	50	9375	2.069816196893691	--
Mentha x piperita	Leaf	45	1390	-0.14434750238417682	--



Plant	Part	Low PPM	High PPM	StdDev	Reference
Micromeria congesta	Leaf	11	12	-0.5286809841146956	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Micromeria fruticosa	Shoot	43	43	-0.13498176884632504	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of Micromeria fruticosa (L.) Druce subsp. barbata (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 fruticosa	Shoot	--	43	-0.13498176884632504	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of Micromeria fruticosa (L.) Druce subsp. barbata (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 myrtifolia	Shoot	0.1	0.1	-0.13559702736892493	Ozek, T., Kirimer, N., and Baser, K.H.C. 1992. Composition of the Essential Oil of Micromeria myrtifolia Boiss. et Hohen. J. Ess. Oil Res., 4: 79-80.
Micromeria teneriffae	Leaf	110	110	-0.5160756691181793	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Micromeria thymifolia	Leaf	25	25	-0.5270088504927087	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Moldavica thymiflora	Plant	134	134	-0.5240502901546678	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda citriodora	Flower	20	20	-0.45105796568561957	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 citriodora	Leaf	40	40	-0.5250794655442623	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 citriodora	Plant	85	614	-0.38931856049519253	--
Monarda clinopodia	Plant	1383	1383	-0.1734671019365746	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda didyma	Flower	22	22	-0.450800530876068	Flavour and Fragrance Journal, 6: 80.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Monarda didyma	Leaf	30	50	-0.5237932089119647	--
Monarda didyma	Plant	100	2735	0.2060272699376145	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda fistulosa	Plant	3	5006	0.8434767658890076	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda lindheimeri	Plant	478	478	-0.4274925505653771	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda media	Plant	807	1351	-0.1824492172472063	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda punctata	Plant	373	6864	1.3650008361125603	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda russeliana	Plant	325	325	-0.47043828939433485	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myristica fragrans	Seed	440	5600	0.18974198009521376	--
Myrtus communis	Plant	135	2065	0.01796423062126339	--
Myrtus communis	Leaf	135	2065	-0.24081674980649576	--
Nepeta racemosa	Shoot	1150	1150	-0.1191055174589552	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	--	1150	-0.1191055174589552	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.
Nicotiana tabacum	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ocimum basilicum	Plant	135	135	-0.5237695990512106	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum basilicum	Plant	--	135	-0.5237695990512106	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 canum	Shoot	--	--		=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Ocimum gratissimum	Plant	10	65	-0.5434179762932174	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ocimum gratissimum	Shoot	690	690	-0.12570269509056325	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, Ocimum gratissimum, from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
Ocimum kilimandscharicum	Flower	1130	1960	-0.2013462004205552	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum kilimandscharicum	Shoot	715	6200	-0.046679980416301496	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum tenuiflorum	Leaf	35	1710	-0.3102746079505654	--
Origanum minutiflorum	Shoot	60	140	-0.13359062486748594	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 onites	Plant	23	23	-0.5552070026384215	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum onites	Shoot	0	0	-0.13559846153797536	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 sipyleum	Shoot	265	265	-0.13179791355454898	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Origanum sipyleum	Shoot	--	20	-0.13531162772790545	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	--	265	-0.13179791355454898	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	--	220	-0.13244328962720628	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	3	-0.5608208247075663	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 vulgare	Plant	7	7	-0.5596980602937374	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 vulgare	Plant	11	11	-0.5585752958799084	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 vulgare	Plant	1.5	800	-0.3371100152521458	--
Origanum vulgare	Plant	4	96	-0.534716552086043	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Peumus boldus	Leaf	3220	40000	4.61480203711689	--
Pimenta dioica	Leaf	--	51	-0.523664583248735	--
Pimenta dioica	Fruit	--	142	-0.4152844919391697	--
Pimenta racemosa	Leaf	0	680	-0.4427590410772167	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pinus sylvestris	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Piper auritum	Leaf	--	--		Tramil
Piper cubeba	Fruit	700	1400	-0.34246998715024435	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Piper nigrum	Fruit	--	--		--
Prunella vulgaris	Plant	--	2250	0.06989208476085287	--
Prunella vulgaris	Essential Oil	--	--		--
Pycnanthemum albescens	Shoot	80	270	-0.13172620510203148	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum beadleii	Shoot	28	28	-0.13519689420387748	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum californicum	Shoot	576	576	-0.12733764780796178	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum clinopodioides	Shoot	21	88	-0.1343363927736677	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum incanum	Shoot	33	76	-0.13450849305970966	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum loomisii	Shoot	17853	26040	0.23785915917305483	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum montanum	Shoot	21	720	-0.1252724443754584	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pycnanthemum muticum</i>	Shoot	1	50	-0.13488137701280056	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pilosum</i>	Flower	10	35	-0.4491272046139825	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pilosum</i>	Leaf	10	35	-0.5257225938604111	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pycnanthemoides</i>	Shoot	39	116	-0.13393482543956983	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum setosum</i>	Shoot	20	7099	-0.03378680065365879	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum tenuifolium</i>	Shoot	1	1100	-0.11982260198412999	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum torreyi</i>	Shoot	10	10	-0.1354550446329404	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum verticillatum</i>	Shoot	42	42	-0.13499611053682853	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum virginianum</i>	Shoot	6	58	-0.1347666434887726	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Ravensara aromatica</i>	Bark	--	44	-1	--
<i>Ravensara aromatica</i>	Leaf	--	20	-0.5276519788088575	--
<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 eriocalyx</i>	Shoot	380	705	-0.1254875697330108	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 eriocalyx	Shoot	380	705	-0.1254875697330108	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	0	0	-0.5302244920734527	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaïd, 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	--	0	-0.5302244920734527	Soliman, F.M., El-Kashoury, M.M., Fathy, M.M. and Gonaïd, 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	Plant	0	8125	1.7189523175721406	--
Rosmarinus officinalis	Shoot	--	2250	-0.10332965790510984	Tucker, A. O. and Maciarello, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Rosmarinus officinalis	Shoot	795	2960	-0.09314705764762783	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	Shoot	630	1360	-0.11609376245322109	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 tomentosus	Shoot	530	1465	-0.11458788495035403	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 x lavandulaceus	Shoot	470	2255	-0.10325794945259235	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 x mendizabalii	Shoot	115	805	-0.12405340068266124	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia dorisiana	Shoot	19	20	-0.13531162772790545	Tucker, A.O. & Maciarelo, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Salvia officinalis	Plant	390	6288	1.2033227605211898	--
Salvia sclarea	Plant	--	--		Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Salvia triloba	Plant	2760	18600	4.659191626286734	--
Sassafras albidum	Leaf	0	1.6	-0.530018691012285	--
Satureja cilicica	Shoot	80	80	-0.13445112629769568	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 cuneifolia	Shoot	80	80	-0.13445112629769568	Tumen, G. 1991. The Volatile Constituents of Satureja cuneifolia. J. Ess. Oil Res., 3: 365-366.
Satureja douglasii	Plant	39	195	-0.5069281328437761	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja hortensis	Plant	--	--		--
Satureja montana	Plant	4	150	-0.519559232499352	--
Satureja odora	Shoot	160	160	-0.13330379105741602	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 parvifolia	Shoot	55	55	-0.1348096685602831	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 subspicata	Plant	5	5	-0.5602594425006518	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.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Sideritis athoa	Shoot	8	8	-0.1354837280139474	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	-0.5574525314660794	J. Essential Oil, 4: 533.
Sideritis mugronensis	Flower	355	1255	-0.29209197078749877	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
Sideritis mugronensis	Leaf	125	275	-0.49485243468526907	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
Sideritis pauli	Shoot	65	65	-0.13466625165524812	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of Sideritis pauli Pau. FFJ7: 47-8. 1992.
Stachys germanica	Plant	48	48	-0.5481897250519905	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Stevia rebaudiana	Flower	--	9	-0.45247385713815347	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Stevia rebaudiana	Shoot	--	8	-0.1354837280139474	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Tagetes erecta	Plant	43	43	-0.5495931805692766	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Tagetes lucida	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of Tagetes lucida Cav. ssp. lucida essential oil. Flavor & Fragrance, 12(1): 47-52.
Tagetes minuta	Plant	47	125	-0.526576510085783	--
Tanacetum parthenium	Shoot	--	--		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 vulgare	Leaf	472	1300	-0.3630111298747664	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Telosma cordata	Flower	893	893	-0.3386876713163407	K. Furukawa, T. Arai, S. Hashimoto, (1993); Volatile components of <i>Telosma cordata</i> Merrill flowers, <i>Flavour Fragr. J.</i> , Vol 8, 221-223.
Teucrium arduini	Shoot	3	3	-0.13555543646646487	Blazevic, N., Kalodera, Z., Petricic, J., and Plazibat, M. 1992. Essential Oil Content and Composition of <i>Teucrium arduini</i> L. <i>J. Ess. Oil Res.</i> 4: 223-225.
Teucrium arduini	Shoot	--	3	-0.13555543646646487	Blazevic, N., Kalodera, Z., Petricic, J., and Plazibat, M. 1992. Essential Oil Content and Composition of <i>Teucrium arduini</i> L. <i>J. Ess. Oil Res.</i> 4: 223-225.
Teucrium asiaticum	Shoot	0.62	0.62	-0.13558956968986324	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.
Teucrium cyprum	Leaf	0	0	-0.5302244920734527	Arnold, N., Bellomaria, B., Velentini 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.
Teucrium divaricatum	Leaf	6	6	-0.5294527380940741	Arnold, N., Bellomaria, B., Velentini 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.
Teucrium gnaphalodes	Shoot	0	0	-0.13559846153797536	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.
Teucrium kotschyannum	Leaf	0	0	-0.5302244920734527	Arnold, N., Bellomaria, B., Velentini 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.
Teucrium micropodioides	Leaf	12	12	-0.5286809841146956	Arnold, N., Bellomaria, B., Velentini 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.
Teucrium oxylepis	Shoot	0.99	0.99	-0.1355842632643768	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
Teucrium oxylepis	Shoot	1.83	1.83	-0.13557221624435392	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
Teucrium polium	Shoot	1	1	-0.13558411984747185	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian Teucrium Species. <i>J. Ess. Oil Res.</i> 5: 397-402.
Teucrium pseudoscorodonia	Shoot	0.281	0.281	-0.13559443152294384	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
Teucrium salviastrum	Shoot	0.98	0.98	-0.135584406681282	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
Teucrium scorodonia	Shoot	0.51	0.51	-0.13559114727581864	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
Thymus capitatus	Plant	10	30	-0.5532421649142208	Lawrence, B.M., <i>Essential Oils</i> 1976-1977, <i>Essential Oils</i> 1978, <i>Essential Oils</i> 1979-1980.
Thymus capitatus	Shoot	0	0	-0.13559846153797536	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. <i>Flav. &amp; Fragr. J.</i> 8: 331-7.
Thymus cilicicus	Shoot	1515	1515	-0.11387080042517923	Tumen, G., Koyuncu, M., Kirimer, N., and Baser, K.H.C. 1994. Composition of the Essential Oil of <i>Thymus cilicicus</i> Boiss. & Bal. <i>J. Ess. Oil Res.</i> 6: 97-8.
Thymus funkii	Shoot	1960	1960	-0.10748874815112362	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.
Thymus funkii	Shoot	--	2200	-0.10404674243028462	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus longicaulis	Shoot	0.8	0.8	-0.13558698818557252	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	--	24	-0.13525426096589147	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	--	0.8	-0.13558698818557252	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 mastichina	Plant	300	7500	1.5435203779113653	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus serpyllum	Plant	1	38	-0.5509966360865629	--
Thymus x citriodorus	Plant	50	50	-0.547628342845076	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	0.1	2000	-0.10691508053098378	De Cunha, A.P. and Salguiero, L.R. 1991. The Chemical Polymorphism of Thymus zygis ssp. sylvestris from Central Portugal. J. Ess. Oil Res. 3: 409-12.
Thymus zygis	Shoot	0.1	0.1	-0.13559702736892493	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.
Turnera diffusa	Leaf	550	1100	-0.38873626252071813	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Umbellularia californica	Plant	2340	9360	2.0656058303418323	--
Vaccinium corymbosum	Fruit	--	--		--
Valeriana officinalis	Leaf	85	1660	-0.31670589111205333	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vetiveria zizanioides	Root	--	15		--
Vitex agnus-castus	Leaf	--	115	-0.5154325408020304	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	Fruit	600	4225	-0.1789556977792473	--
Vitex agnus-castus	Flower	--	--		--
Zea mays	Silk Stigma Style	--	--		--
Zingiber officinale	Rhizome	--	490	-0.7528854377140122	--
Zingiber officinale	Rhizome Essent. Oil	26000	100000		--