

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

**List of Plants for CAMPHENE**

Plant	Part	Low PPM	High PPM	StdDev	Reference
Hyssopus officinalis	Shoot		115000.0	10.475998457193025	--
Salvia officinalis	Leaf	20.0	18592.0	6.834837822452428	--
Satureja douglasii	Plant	1183.0	2795.0	4.175247941813957	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ferula jaeschkeana	Fruit		9500.0	3.5877139376747698	--
Rosmarinus officinalis	Plant	23.0	2350.0	3.414039648428031	--
Rosmarinus officinalis	Essential Oil	40000.0	106000.0	2.4924380801760044	--
Rosmarinus officinalis	Leaf Essent. Oil		85000.0	2.146113125386858	--
Artemisia salsoloides	Shoot		24500.0	2.126173523717797	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of Aremisia salsoloides Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
Rosmarinus officinalis	Shoot Essent. Oil		38100.0	1.6759881269456052	--
Carum carvi	Seed	1.0	900.0	1.5222256000900138	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Salvia officinalis	Leaf Essent. Oil	28000.0	66400.0	1.484566818920243	--
Salvia triloba	Plant	170.0	1200.0	1.4468721486666487	--
Pinus roxburghii	Resin, Exudate, Sap	12000.0	55000.0	1.414213562373095	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ocimum kilimandscharicum	Flower	240.0	400.0	1.4140457687025239	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Angelica archangelica	Root	2.0	130.0	1.4108316199577506	--
Petroselinum crispum	Fruit Essent. Oil	7000.0	20800.0	1.3574673725411264	--
Coriandrum sativum	Seed Essent. Oil	2100.0	7600.0	1.2973683379921246	--
Monarda punctata	Plant	10.0	1080.0	1.241602496517635	--
Salvia officinalis	Essential Oil	30200.0	60700.0	1.1306904837156095	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Cymbopogon nardus</i>	Plant	150.0	960.0	1.0363328443686213	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Abies balsamea</i>	Plant	440.0	950.0	1.0192270400228702	--
<i>Ptychopetalum olacoides</i>	Root Essent. Oil		66000.0	1.0	Über Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of <i>Ptychopetalum olacoides</i> Root Oil. <i>Planta Med.</i> 53, 2: 231.
<i>Zingiber officinale</i>	Rhizome		3080.0	1.0	--
<i>Artemisia annua</i>	Plant	12.0	920.0	0.9679096269856168	--
<i>Hedeoma drummondii</i>	Plant	0.0	900.0	0.9336980182941145	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Tanacetum parthenium</i>	Essential Oil		54000.0	0.9292841063141826	--
<i>Monarda fistulosa</i>	Plant	1.0	856.0	0.8584324791728094	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Myristica fragrans</i>	Seed	80.0	640.0	0.6230692441110584	--
<i>Thymus orospedanus</i>	Plant		578.0	0.38289111836092754	J. Nat. Prod.
<i>Pinus sylvestris</i>	Leaf Essent. Oil		35000.0	0.3677628391862796	--
<i>Petroselinum crispum</i>	Seed Essent. Oil		5000.0	0.29045559805793825	--
<i>Foeniculum vulgare</i>	Seed	10.0	540.0	0.27723987642684456	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Tanacetum parthenium</i>	Leaf Essent. Oil		30000.0	0.1899278105662218	--
<i>Hedeoma reverchonii</i>	Plant		460.0	0.18104262708106403	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Ageratum conyzoides</i>	Shoot		3060.0	0.14804925218510195	R. Vera, (1993); Chemical composition of the essential oil <i>Ageratum conyzoides</i> L. (Asteraceae) from Reunion, <i>Flavour Fragr. J.</i> , Vol.8, 257-260.
<i>Eucalyptus blakelyi</i>	Shoot		3055.0	0.1475879358904348	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
Thymus saturejoides	Shoot		2740.0	0.11852500932640501	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.
Petroselinum crispum	Seed	3.0	490.0	0.10432519258473769	--
Cistus ladaniferus	Leaf	11.0	770.0	0.09835696267616935	--
Abies alba	Leaf	528.0	738.0	0.08626138487834419	--
Ocimum basilicum	Plant	0.0	400.0	0.07840780100655714	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Rosmarinus officinalis	Shoot	1035.0	2280.0	0.07608391021702815	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.
Lepechinia calycina	Plant		390.0	0.061301996660806	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus vulgaris	Plant	15.0	375.0	0.03564329014217928	--
Achillea millefolium	Leaf	2.0	600.0	0.03409920562522311	--
Salvia canariensis	Leaf		575.0	0.024649535470672192	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, Barcelona Spain
Carum carvi	Fruit	1.0	900.0	0.021412618138643334	--
Satureja obovata	Leaf		520.0	0.003860261130660172	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.
Rosmarinus officinalis	Shoot	355.0	1435.0	-0.0018785435817184589	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
Rosmarinus eriocalyx	Shoot	735.0	1375.0	-0.007414339117724136	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	735.0	1375.0	-0.007414339117724136	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.
Satureja obovata	Shoot	850.0	1305.0	-0.013872767243064093	Fitoterapia No.60: 277.
Micromeria teneriffae	Leaf		470.0	-0.015039079178441665	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.
Abies spectabilis	Leaf	175.0	465.0	-0.016929013209351848	--
Pycnanthemum loomisii	Shoot	330.0	1260.0	-0.01802461389506835	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Rosmarinus x lavandulaceus	Shoot	210.0	1245.0	-0.019408562779069768	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	590.0	960.0	-0.045703591575096736	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.
Pycnanthemum montanum	Shoot	833.0	952.0	-0.04644169764656416	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Acinos suaveolens	Shoot		900.0	-0.05123938711110241	Jim Duke's personal files.
Monarda didyma	Plant	25.0	320.0	-0.05843863375945202	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus x mendizabalii	Shoot	430.0	605.0	-0.07845704849646365	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.
Origanum sipyleum	Shoot		590.0	-0.07984099738046507	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		590.0	-0.07984099738046507	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.
Thymus zygis	Shoot	90.0	550.0	-0.08353152773780219	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 funkii	Shoot		470.0	-0.09091258845247643	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 funkii	Shoot		470.0	-0.09091258845247643	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.
Pycnanthemum tenuifolium	Shoot	2.0	420.0	-0.09552575139914782	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myristica fragrans	Seed Essent. Oil	2000.0	4000.0	-0.09681853268597942	--
Mentha longifolia	Shoot	0.0	385.0	-0.0987549654618178	--
Origanum onites	Shoot		370.0	-0.10013891434581922	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.
Origanum onites	Shoot		370.0	-0.10013891434581922	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Shoot		335.0	-0.1033681284084892	Tucker, A. O. and Maciarelo, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Thymus riatarum	Shoot		275.0	-0.10890392394449487	Iglesias, J., Vila, R., Canigueral, S., Bellakdhar, and Il Idrissi, A. 1991. Analysis of the Essential Oil of Thymus riatarum. J. Ess. Oil Res. 3: 43-4.
Ocimum kilimandscharicum	Leaf	105.0	205.0	-0.1152055828166814	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Origanum minutiflorum	Shoot	65.0	150.0	-0.12043683131117337	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.
Satureja thymbra	Shoot		150.0	-0.12043683131117337	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 cuneifolia	Shoot		145.0	-0.12089814760584051	Tumen, G. 1991. The Volatile Constituents of Satureja cuneifolia. J. Ess. Oil Res., 3: 365-366.
Laurus nobilis	Leaf	24.0	186.0	-0.1223873321341401	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Tanacetum parthenium	Shoot		95.0	-0.1255113105525119	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 parthenium	Shoot		95.0	-0.1255113105525119	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.
Pycnanthemum virginianum	Shoot	6.0	87.0	-0.12624941662397934	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lavandula x hybrida	Shoot	55.0	85.0	-0.1264339431418462	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.
Foeniculum vulgare	Fruit	10.0	540.0	-0.12787441384193868	--
Eucalyptus punctata	Shoot		65.0	-0.12827920832051476	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.
Monarda didyma	Leaf	90.0	170.0	-0.12843512103305268	--
Satureja obovata	Leaf		170.0	-0.12843512103305268	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		170.0	-0.12843512103305268	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 cilicica	Shoot		60.0	-0.12874052461518187	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.
Pycnanthemum muticum	Shoot	1.0	50.0	-0.12966315720451616	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Shoot		45.0	-0.1301244734991833	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.
Hyssopus officinalis	Shoot		40.0	-0.13058578979385044	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop (Hyssopus officinalis L.) J. Agric. Food Chem. 42: 776-781.

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Hyssopus officinalis	Shoot		40.0	-0.13058578979385044	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Hyssopus officinalis	Shoot		40.0	-0.13058578979385044	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Eucalyptus oviformis	Shoot		40.0	-0.13058578979385044	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.
Origanum syriacum	Shoot		40.0	-0.13058578979385044	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of <i>Origanum syriacum</i> L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum syriacum	Shoot		40.0	-0.13058578979385044	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of <i>Origanum syriacum</i> L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Thymus longicaulis	Shoot		40.0	-0.13058578979385044	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. J. Ess. Oil Res. 5: 291-5.
Hyssopus officinalis	Shoot		40.0	-0.13058578979385044	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Eucalyptus botryoides	Shoot		35.0	-0.13104710608851758	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 melliodora	Shoot		35.0	-0.13104710608851758	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>Pycnanthemum setosum</i>	Shoot	20.0	31.0	-0.1314161591242513	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Hyssopus officinalis</i>	Shoot		30.0	-0.13150842238318472	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Eucalyptus bosistoana</i>	Shoot		30.0	-0.13150842238318472	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>Ocimum gratissimum</i>	Shoot		29.0	-0.13160068564211816	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of <i>Alfavaca</i> , <i>Ocimum gratissimum</i> , from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.
<i>Eucalyptus saligna</i>	Shoot		27.0	-0.131785212159985	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 diversicolor</i>	Shoot		25.0	-0.13196973867785186	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>Origanum sipyleum</i>	Shoot		25.0	-0.13196973867785186	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of <i>Origanum sipyleum</i> of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
<i>Origanum syriacum</i>	Shoot		25.0	-0.13196973867785186	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of <i>Origanum syriacum</i> L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
<i>Coridothymus capitatus</i>	Shoot		22.0	-0.13224652845465215	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.

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Hyssopus officinalis	Shoot		20.0	-0.132431054972519	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Thymus broussonettii	Shoot		20.0	-0.132431054972519	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> . J. Ess. Oil Res. 5: 45-53.
Origanum sipyleum	Shoot		20.0	-0.132431054972519	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of <i>Origanum sipyleum</i> of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Hyssopus officinalis	Shoot		20.0	-0.132431054972519	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Hyssopus officinalis	Shoot		20.0	-0.132431054972519	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
Satureja parvifolia	Shoot		19.0	-0.13252331823145244	Zygadlo, J.A., Merino, E.F., Maestri, D.M., Guzman, C.A. and Espinar, L.A. 1993. The Essential Oils of <i>Satureja odora</i> and <i>Satureja parvifolia</i> from Argentina. J. Ess. Oil Res. 5: 549-51.
Satureja odora	Shoot		18.0	-0.13261558149038585	Zygadlo, J.A., Merino, E.F., Maestri, D.M., Guzman, C.A. and Espinar, L.A. 1993. The Essential Oils of <i>Satureja odora</i> and <i>Satureja parvifolia</i> from Argentina. J. Ess. Oil Res. 5: 549-51.
Lantana camara	Shoot		13.0	-0.133076897785053	--
Eucalyptus siderophloia	Shoot		11.0	-0.13326142430291985	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.
Pycnanthemum torreyi	Shoot		10.0	-0.13335368756185328	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus cladocalyx</i>	Shoot		10.0	-0.13335368756185328	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 paniculata</i>	Shoot		10.0	-0.13335368756185328	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 albens</i>	Shoot		9.0	-0.13344595082078672	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>Thymus longicaulis</i>	Shoot		8.0	-0.13353821407972014	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. J. Ess. Oil Res. 5: 291-5.
<i>Pycnanthemum beadlei</i>	Shoot		7.0	-0.13363047733865357	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Thymus capitatus</i>	Shoot		7.0	-0.13363047733865357	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.
<i>Micromeria fruticosa</i>	Shoot		7.0	-0.13363047733865357	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.
<i>Micromeria fruticosa</i>	Shoot		7.0	-0.13363047733865357	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.
<i>Sideritis pauli</i>	Shoot		6.0	-0.133722740597587	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of <i>Sideritis pauli</i> Pau. FFJ7: 47-8. 1992.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Micromeria varia	Shoot		6.0	-0.133722740597587	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		6.0	-0.133722740597587	--
Litsea glaucescens	Shoot	2.0	4.0	-0.13390726711545384	Tucker, et al, EB46(1):21-24.1992
Hyptis suaveolens	Shoot		4.0	-0.13390726711545384	Mallvarapu, 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. <i>J. Ess. Oil Res.</i> 5: 321.
Hyptis suaveolens	Shoot		4.0	-0.13390726711545384	Mallvarapu, 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. <i>J. Ess. Oil Res.</i> 5: 321.
Salvia gilliesii	Shoot		3.5	-0.13395339874492057	Velasco-Negueruela, A. et al. 1993. The Essential Oil of <i>Salvia gilliesii</i> Benth. <i>J. Ess. Oil Res.</i> 5: 319-320.
Nepeta racemosa	Shoot		3.0	-0.13399953037438728	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		3.0	-0.13399953037438728	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.
Thymus longicaulis	Shoot		3.0	-0.13399953037438728	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.
Sideritis athoa	Shoot		2.0	-0.1340917936332072	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of <i>Sideritis athoa</i> Papanikolaou Et Kokkini. <i>J. Ess. Oil Res.</i> 5: 669-670.
Calamintha nepeta	Shoot		1.0	-0.13418405689225413	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuglo, M. 1992. Composition of the Essential Oil of <i>Calamintha nepeta</i> subsp. <i>glandulosa</i> . <i>J. Ess. Oil Res.</i> 4:189-190

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia dorisiana	Shoot	0.8	1.0	-0.13418405689225413	Tucker, A.O. & Maciarelo, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Dictamnus albus	Shoot		1.0	-0.13418405689225413	Baser, K.H.C., Kosar, M.Malyer, H. & Ozek, T. 1994. The Essential Oil Composition of Dictamnus albus from Turkey. Planta Med. 60:481-2
Dictamnus albus	Shoot		0.7	-0.1342117358699341	Baser, K.H.C., Kosar, M.Malyer, H. & Ozek, T. 1994. The Essential Oil Composition of Dictamnus albus from Turkey. Planta Med. 60:481-2
Dictamnus albus	Shoot		0.7	-0.1342117358699341	Baser, K.H.C., Kosar, M.Malyer, H. & Ozek, T. 1994. The Essential Oil Composition of Dictamnus albus from Turkey. Planta Med. 60:481-2
Acinos alpinus	Shoot		0.5	-0.13423018852172086	Velasco-Negueruela, A., Perez-Alonso, M.J., Jimenez, 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		0.5	-0.13423018852172086	Velasco-Negueruela, A., Perez-Alonso, M.J., Jimenez, 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.)
Elsholtzia blanda	Shoot		0.4	-0.13423941484761423	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
Teucrium oxylepis	Shoot		0.39	-0.1342403374802036	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		0.2	-0.1342578674994008	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>Mentha aquatica</i>	Shoot		0.1	-0.1342670938252942	Umamoto, 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>Eucalyptus astringens</i>	Shoot		0.1	-0.1342670938252942	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>Micromeria myrtifolia</i>	Shoot		0.1	-0.1342670938252942	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>Eucalyptus camaldulensis</i>	Shoot		0.1	-0.1342670938252942	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 citriodora</i>	Shoot		0.1	-0.1342670938252942	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 dealbata</i>	Shoot		0.1	-0.1342670938252942	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 globulus</i>	Shoot		0.1	-0.1342670938252942	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>Hyssopus officinalis</i>	Shoot		0.1	-0.1342670938252942	Tsankova, E.T., Konatchiev, A.N. and Genova, E.M. 1993. Chemical Composition of the Essential Oils of Two <i>Hyssopus officinalis</i> cultivars. <i>J. Ess. Oil Res.</i> 5: 609-611.
<i>Eucalyptus maculata</i>	Shoot		0.1	-0.1342670938252942	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 maideni</i>	Shoot		0.1	-0.1342670938252942	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus moluccana</i>	Shoot		0.1	-0.1342670938252942	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>Elsholtzia cristata</i>	Shoot		0.1	-0.1342670938252942	Kobold, U., Vostrowsky, O., Bestmann, H.J., Bisht, J.C., Pant, A.K., Melkani, A.B. and Mathela, C.S. 1987. Terpenoids from <i>Elsholtzia</i> Species; II. Constituents of Essential Oil from a New Chemotype of <i>Elsholtzia cristata</i> . <i>Planta Medica</i> 1987: 268-271.
<i>Eucalyptus occidentalis</i>	Shoot		0.1	-0.1342670938252942	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>Elsholtzia pilosa</i>	Shoot		0.1	-0.1342670938252942	--
<i>Eucalyptus polyanthemos</i>	Shoot		0.1	-0.1342670938252942	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 sideroxylon</i>	Shoot		0.1	-0.1342670938252942	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 tereticornis</i>	Shoot		0.1	-0.1342670938252942	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>Teucrium pseudoscorodonia</i>	Shoot		0.1	-0.1342670938252942	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
Thymus zygis	Shoot		0.1	-0.1342670938252942	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.
Teucrium scorodonia	Shoot		0.05	-0.13427170698824095	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.
Peumus boldus	Leaf	30.0	150.0	-0.1359948571566934	--
Valeriana officinalis	Leaf	0.0	130.0	-0.14355459328033415	Father Nature's Pharmacy: The aggregate of all these three-letter citations.
Satureja obovata	Leaf		130.0	-0.14355459328033415	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.
Origanum vulgare	Shoot Essent. Oil	1500.0	10500.0	-0.15055766984407706	--
Hyssopus officinalis	Leaf	6.0	80.0	-0.162453933589436	--
Ocimum tenuiflorum	Leaf		65.0	-0.16812373568216654	Brophy, J.J., Goldsack, R.J., and Clarkson, J.R. 1993. The Essential Oil of Ocimum tenuiflorum L. (Lamiaceae) Growing in Northern Australia, J. Ess. Oil Res. 5: 459-461.
Cinnamomum verum	Leaf	20.0	40.0	-0.17757340583671746	--
Micromeria croatica	Leaf		30.0	-0.18135327389853784	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.
Mentha x piperita	Leaf	2.0	25.0	-0.183243207929448	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Micromeria juliana	Leaf		25.0	-0.183243207929448	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.



Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Leaf		23.0	-0.18399918154181208	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		23.0	-0.18399918154181208	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.
Mentha x rotundifolia	Leaf	0.0	20.0	-0.18513314196035818	--
Eucalyptus citriodora	Leaf	1.0	20.0	-0.18513314196035818	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Eucalyptus nova-anglica	Leaf	8.0	15.0	-0.18702307599126838	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.
Vitex agnus-castus	Leaf	0.2	14.0	-0.18740106279745042	--
Teucrium micropodioides	Leaf		8.0	-0.18966898363454263	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Eucalyptus brassiana	Leaf		6.0	-0.1904249572469067	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.
Micromeria dalmatica	Leaf		6.0	-0.1904249572469067	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.
Cleonia lusitanica	Leaf	1.0	5.0	-0.19080294405308876	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.
Micromeria congesta	Leaf	1.0	5.0	-0.19080294405308876	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Murraya koenigii	Leaf		5.0	-0.19080294405308876	--
Cinnamomum camphora	Leaf		5.0	-0.19080294405308876	--
Teucrium divaricatum	Leaf		3.0	-0.19155891766545283	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Lindera benzoin	Leaf		2.0	-0.19193690447163486	--
Micromeria thymifolia	Leaf		1.0	-0.1923148912778169	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.
Sideritis mugronensis	Leaf	0.5	1.0	-0.1923148912778169	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
Micromeria fruticosa	Leaf	1.0	1.0	-0.1923148912778169	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.
Callicarpa americana	Leaf		0.55	-0.19248498534059874	--
Petroselinum crispum	Leaf		0.24	-0.19260216125051532	--
Melaleuca alternifolia	Leaf		0.001	-0.19269250009719266	--
Elsholtzia polystachya	Leaf		0.0	-0.19269287808399893	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		0.0	-0.19269287808399893	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
Teucrium cyprum	Leaf		0.0	-0.19269287808399893	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium kotschyianum	Leaf		0.0	-0.19269287808399893	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Sassafras albidum	Leaf		0.0	-0.19269287808399893	--
Ocimum gratissimum	Plant	1.0	240.0	-0.19528506852546118	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula latifolia	Plant	25.0	231.0	-0.21068029243663722	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda media	Plant	15.0	231.0	-0.21068029243663722	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Trachyspermum ammi	Fruit	150.0	252.0	-0.24730403942640428	--
Coriandrum sativum	Fruit	2.0	155.0	-0.2875286008211722	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Piper nigrum	Fruit		120.0	-0.3020426178192843	--
Pimpinella anisum	Fruit		119.0	-0.30245730401923043	--
Juniperus communis	Fruit	1.0	100.0	-0.3103363418182056	--
Citrus aurantiifolia	Fruit	50.0	80.0	-0.3186300658171268	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lindera benzoin	Fruit	22.0	40.0	-0.3352175138149692	--
Citrus reticulata	Fruit	1.0	40.0	-0.3352175138149692	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Tanacetum parthenium	Fruit Essent. Oil		7000.0	-0.3352780859890732	--
Elettaria cardamomum	Fruit	10.0	30.0	-0.33936437581442985	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Illicium verum	Fruit		1.0	-0.3513902756128656	--
Citrus sinensis	Fruit		0.1	-0.35176349319281713	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus mastichina	Plant	20.0	140.0	-0.36634311198297265	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Eucalyptus globulus	Essential Oil		9000.0	-0.4234452941431629	--
Monarda clinopodia	Plant		88.0	-0.4552932945808786	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja montana	Plant	2.0	85.0	-0.46042503588460393	--
Thymus x citriodorus	Plant		80.0	-0.4689779380574795	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.
Coleus barbatus	Leaf Essent. Oil		11200.0	-0.47873189704519575	Jim Duke's personal files.
Mentha pulegium	Essential Oil	100.0	7000.0	-0.483566600830156	--
Mentha pulegium	Plant	1.0	70.0	-0.48608374240323066	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Hedeoma hispida	Plant		66.0	-0.4929260641415311	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant	1.0	64.0	-0.49634722501068135	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula x intermedia	Plant	26.0	60.0	-0.5031895467489819	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant		60.0	-0.5031895467489819	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.
Lepechinia schiediana	Plant		40.0	-0.5374011554404841	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Essential Oil		5100.0	-0.5406818421827995	--
Ageratum conyzoides	Plant	5.0	38.0	-0.5408223163096343	--
Agastache foeniculum	Plant	1.0	35.0	-0.5459540576133597	--
Myrtus communis	Plant	8.0	30.0	-0.5545069597862352	--
Chrysanthemum x morifolium	Plant	8.0	30.0	-0.5545069597862352	Wealth of India.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Carum carvi	Plant		30.0	-0.5545069597862352	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum onites	Plant		28.0	-0.5579281206553854	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda citriodora	Plant	6.0	25.0	-0.5630598619591108	--
Monarda lindheimeri	Plant		21.0	-0.5699021836974113	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus vulgaris	Essential Oil		4100.0	-0.5707424955262961	--
Thymus serpyllum	Plant	1.0	19.0	-0.5733233445665615	--
Myristica fragrans	Essential Oil	2000.0	4000.0	-0.5737485608606457	--
Hypericum perforatum	Plant	1.0	18.0	-0.5750339250011366	--
Thymus capitatus	Plant		10.0	-0.5887185684777375	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lycopus virginicus	Plant	3.0	8.0	-0.5921397293468877	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja subspicata	Plant		4.0	-0.5989820510851882	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.
Glechoma hederacea	Plant	1.0	3.0	-0.6006926315197634	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja montana	Essential Oil		3100.0	-0.6008031488697926	--
Agastache nepetoides	Plant		1.0	-0.6041137923889136	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant		1.0	-0.6041137923889136	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		1.0	-0.6041137923889136	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 vulgare	Plant		0.5	-0.6049690826062011	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.
Levisticum officinale	Root	7.0	70.0	-0.6207659127814102	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Laurus nobilis	Leaf Essent. Oil		7000.0	-0.6281133210860443	--
Ocimum basilicum	Essential Oil		900.0	-0.666936586225485	--
Monarda didyma	Flower		10.0	-0.6881569624054215	Flavour and Fragrance Journal, 6: 80.
Citrus limon	Essential Oil	2.0	50.0	-0.6924881415674572	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Eucalyptus globulus	Leaf Essent. Oil	4000.0	5100.0	-0.6956906319616664	--
Valeriana officinalis	Leaf Essent. Oil		5000.0	-0.6992473325340675	--
Pinus kesiya	Resin, Exudate, Sap	10000.0	20000.0	-0.7071067811865472	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pinus insularis	Resin, Exudate, Sap	10000.0	20000.0	-0.7071067811865472	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Perilla frutescens	Shoot Essent. Oil		2000.0	-0.7130808318988705	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.
Sideritis mugronensis	Flower	2.0	3.0	-0.7258888062971025	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of Sideritis mugronensis Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
Valeriana officinalis	Root	3.0	65.0	-0.7900657071763403	--
Ocimum basilicum	Shoot Essent. Oil		500.0	-0.8123496252026575	--
Apium graveolens	Leaf Essent. Oil		1000.0	-0.8415153554301138	--
Ocimum basilicum	Leaf Essent. Oil	300.0	900.0	-0.8450720560025149	--
Coleus barbatus	Root Essent. Oil		64000.0	-1.0	Jim Duke's personal files.
Acorus calamus	Rhizome	10.0	460.0	-1.0	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Piper nigrum	Fruit Essent. Oil	1000.0	1400.0	-1.0221892865520528	--
Pimpinella anisum	Seed		119.0	-1.1787017615236954	--
Daucus carota	Seed	1.0	70.0	-1.3481581516889602	--
Cuminum cyminum	Seed Essent. Oil		400.0	-1.4910054033640832	--
Cannabis sativa	Resin, Exudate, Sap				--
Cannabis sativa	Flower Essent. Oil				--
Juniperus sabina	Plant				--
Cannabis sativa	Leaf Essent. Oil				--
Kaempferia galanga	Plant				--
Cannabis sativa	Essential Oil				--
Larrea tridentata	Plant				--
Cannabis sativa	Plant				--
Lavandula angustifolia	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Houttuynia cordata	Essential Oil				--
Houttuynia cordata	Shoot Essent. Oil				--
Magnolia denudata	Bark				--
Magnolia denudata	Bulb				--
Magnolia denudata	Flower				--
Magnolia denudata	Leaf				--
Magnolia denudata	Twig				--
Magnolia officinalis	Essential Oil				--
Marrubium vulgare	Plant				--
Mentha aquatica	Shoot				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
Mentha aquatica	Shoot				Umamoto, 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				Umamoto, 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.
Lindera benzoin	Twig	17.0	26.0		--
Mentha aquatica	Shoot				Umamoto, 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	Plant				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Mentha spicata	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Piper auritum	Leaf				Tramil
Cinnamomum verum	Root Bark				--
Cinnamomum verum	Leaf Essent. Oil				--
Cinnamomum verum	Bark Essent. Oil		0.0		--
Cinnamomum verum	Stem Bark				--
Oenanthe aquatica	Fruit				--
Oenanthe javanica	Shoot				--
Pastinaca sativa	Root				--
Pinus eliottii	Leaf				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pinus mugo	Leaf				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 palustris</i>	Resin, Exudate, Sap				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Alpinia galanga</i>	Rhizome				--
<i>Pinus sylvestris</i>	Resin, Exudate, Sap				--
<i>Pogostemon cablin</i>	Plant				--
<i>Pycnanthemum curvipes</i>	Shoot				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Croton lechleri</i>	Plant				Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
<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>Rosa damascena</i>	Essential Oil				--
<i>Apium graveolens</i>	Seed				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
<i>Citrus paradisi</i>	Pericarp				--
<i>Salvia sclarea</i>	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Artemisia dracuncululus</i>	Leaf Essent. Oil				--
<i>Kaempferia galanga</i>	Rhizome				--
<i>Satureja hortensis</i>	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Pimpinella anisum</i>	Essential Oil				--
<i>Saussurea lappa</i>	Root Essent. Oil				--
<i>Schinus molle</i>	Fruit				--
<i>Curcuma longa</i>	Tuber				--
<i>Thuja occidentalis</i>	Branches				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Curcuma longa	Rhizome				--
Foeniculum vulgare	Seed Essent. Oil				Jim Duke's personal files.
Zingiber officinale	Rhizome Essent. Oil		126000.0		--
Zingiber officinale	Essential Oil				--
Psidium guajava	Pericarp Essent. Oil				--
Centella asiatica	Shoot				Jim Duke's personal files.
Marrubium vulgare	Essential Oil				--
Aesculus hippocastanum	Flower Essent. Oil		83000.0		Jim Duke's personal files.
Hyssopus officinalis	Essential Oil				--
Eucalyptus globulus	Fruit Essent. Oil				--
Juniperus communis	Fruit Essent. Oil				--
Juniperus communis	Essential Oil				--
Coleus barbatus	Stem Essent. Oil		11200.0		Jim Duke's personal files.
Calamintha nepeta	Leaf				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.
Citrus limon	Leaf Essent. Oil				Jim Duke's personal files.
Apium graveolens	Seed Essent. Oil				--
Salvia officinalis	Et		47000.0		--
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.
Piper nigrum	Seed Essent. Oil				--
Tagetes filifolia	Shoot				--
Boswellia serrata	Essential Oil				--
Mentha pulegium	Shoot				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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
Rosmarinus officinalis	Resin, Exudate, Sap				--
Mentha spicata	Essential Oil				--
Valeriana officinalis	Essential Oil				--
Valeriana officinalis	Rhizome Essent. Oil				--
Valeriana officinalis	Root Essent. Oil				--
Citrus limon	Petiole		3.0		--
Teucrium asiaticum	Shoot				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.
Elettaria cardamomum	Seed Essent. Oil				--
Teucrium salviastrum	Shoot				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.
Artemisia dracunculus	Essential Oil				--
Thymus zygis	Shoot				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.
Myrciaria dubia	Fruit				--
Abies sachalinensis	Branches	4160.0	4680.0		--
Citrus aurantium	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Agathosma betulina	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Aloysia citrodora	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Amomum xanthioides	Seed				--
Anethum graveolens	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Aniba rosaeodora	Essential Oil				--
Aralia cordata	Stem		3.0		--
Agathosma betulina	Leaf Essent. Oil				--
Artemisia absinthium	Plant				--
Artemisia capillaris	Essential Oil				--
Artemisia dracunculus	Leaf				--
Barosma betulina	Leaf				--
Capsicum annum	Fruit				--
Boswellia sacra	Resin Essent. Oil		0.7		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.
Chamaemelum nobile	Plant				--
Chrysanthemum balsamita	Plant				--
Cinnamomum aromaticum	Plant				--
Eucalyptus citriodora	Leaf Essent. Oil				--
Cinnamomum camphora	Plant				--
Cinnamomum verum	Bark	18.0	72.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus aurantium	Plant				--
Croton eluteria	Bark				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cyperus rotundus	Root				--
Myristica fragrans	Leaf Essent. Oil				--
Pinus sylvestris	Essential Oil				--
Angelica archangelica	Root Essent. Oil				--
Eucalyptus globulus	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Angelica archangelica	Fruit				--
Ferula gummosa	Essential Oil				--
Alpinia officinarum	Rhizome				Wealth of India.
Gossypium sp	Plant				--
Petroselinum crispum	Fruit				--
Helianthus annuus	Essential Oil				--
Houttuynia cordata	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Coriandrum sativum	Essential Oil				--
Tagetes minuta	Essential Oil				--