

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for CAMPHENE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Rhizome Essent. Oil		126000.0		--
Hyssopus officinalis	Shoot		115000.0	10.475998457193025	--
Rosmarinus officinalis	Essential Oil	40000.0	106000.0	2.4924380801760044	--
Rosmarinus officinalis	Leaf Essent. Oil		85000.0	2.146113125386858	--
Aesculus hippocastanum	Flower Essent. Oil		83000.0		Jim Duke's personal files.
Salvia officinalis	Leaf Essent. Oil	28000.0	66400.0	1.484566818920243	--
Ptychopetalum olacoides	Root Essent. Oil		66000.0	1.0	Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of Ptychopetalum olacoides Root Oil. Planta Med. 53, 2: 231.
Coleus barbatus	Root Essent. Oil		64000.0	-1.0	Jim Duke's personal files.
Salvia officinalis	Essential Oil	30200.0	60700.0	1.1306904837156095	--
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.
Tanacetum parthenium	Essential Oil		54000.0	0.9292841063141826	--
Salvia officinalis	Et		47000.0		--
Rosmarinus officinalis	Shoot Essent. Oil		38100.0	1.6759881269456052	--
Pinus sylvestris	Leaf Essent. Oil		35000.0	0.3677628391862796	--
Tanacetum parthenium	Leaf Essent. Oil		30000.0	0.1899278105662218	--
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 Artemisia salsoloides Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
Petroselinum crispum	Fruit Essent. Oil	7000.0	20800.0	1.3574673725411264	--
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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia officinalis	Leaf	20.0	18592.0	6.834837822452428	--
Coleus barbatus	Leaf Essent. Oil		11200.0	-0.47873189704519575	Jim Duke's personal files.
Coleus barbatus	Stem Essent. Oil		11200.0		Jim Duke's personal files.
Origanum vulgare	Shoot Essent. Oil	1500.0	10500.0	-0.15055766984407706	--
Ferula jaeschkeana	Fruit		9500.0	3.5877139376747698	--
Eucalyptus globulus	Essential Oil		9000.0	-0.4234452941431629	--
Coriandrum sativum	Seed Essent. Oil	2100.0	7600.0	1.2973683379921246	--
Laurus nobilis	Leaf Essent. Oil		7000.0	-0.6281133210860443	--
Tanacetum parthenium	Fruit Essent. Oil		7000.0	-0.3352780859890732	--
Mentha pulegium	Essential Oil	100.0	7000.0	-0.483566600830156	--
Eucalyptus globulus	Leaf Essent. Oil	4000.0	5100.0	-0.6956906319616664	--
Origanum vulgare	Essential Oil		5100.0	-0.5406818421827995	--
Valeriana officinalis	Leaf Essent. Oil		5000.0	-0.6992473325340675	--
Petroselinum crispum	Seed Essent. Oil		5000.0	0.29045559805793825	--
Abies sachalinensis	Branches	4160.0	4680.0		--
Thymus vulgaris	Essential Oil		4100.0	-0.5707424955262961	--
Myristica fragrans	Essential Oil	2000.0	4000.0	-0.5737485608606457	--
Myristica fragrans	Seed Essent. Oil	2000.0	4000.0	-0.09681853268597942	--
Satureja montana	Essential Oil		3100.0	-0.6008031488697926	--
Zingiber officinale	Rhizome		3080.0	1.0	--
Ageratum conyzoides	Shoot		3060.0	0.14804925218510195	R. Vera, (1993); Chemical composition of the essential oil Ageratum conyzoides L. (Asteraceae) from Reunion, Flavour Fragr. J., Vol.8, 257-260.
Eucalyptus blakelyi	Shoot		3055.0	0.1475879358904348	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.
Satureja douglasii	Plant	1183.0	2795.0	4.175247941813957	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

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.
Rosmarinus officinalis	Plant	23.0	2350.0	3.414039648428031	--
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.
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.
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.
Piper nigrum	Fruit Essent. Oil	1000.0	1400.0	-1.0221892865520528	--
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.
Pycnanthemum loomisii	Shoot	330.0	1260.0	-0.01802461389506835	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
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 ericalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Salvia triloba	Plant	170.0	1200.0	1.4468721486666487	--
Monarda punctata	Plant	10.0	1080.0	1.241602496517635	--
Apium graveolens	Leaf Essent. Oil		1000.0	-0.8415153554301138	--
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 ericalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Cymbopogon nardus	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.
Pycnanthemum montanum	Shoot	833.0	952.0	-0.04644169764656416	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Abies balsamea	Plant	440.0	950.0	1.0192270400228702	--
Artemisia annua	Plant	12.0	920.0	0.9679096269856168	--
Ocimum basilicum	Leaf Essent. Oil	300.0	900.0	-0.8450720560025149	--
Ocimum basilicum	Essential Oil		900.0	-0.666936586225485	--
Carum carvi	Seed	1.0	900.0	1.5222256000900138	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.
Carum carvi	Fruit	1.0	900.0	0.021412618138643334	--
Hedeoma drummondii	Plant	0.0	900.0	0.9336980182941145	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda fistulosa	Plant	1.0	856.0	0.8584324791728094	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cistus ladaniferus	Leaf	11.0	770.0	0.09835696267616935	--
Abies alba	Leaf	528.0	738.0	0.08626138487834419	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Myristica fragrans	Seed	80.0	640.0	0.6230692441110584	--
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.
Achillea millefolium	Leaf	2.0	600.0	0.03409920562522311	--
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 orospedanus	Plant		578.0	0.38289111836092754	J. Nat. Prod.
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
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.
Foeniculum vulgare	Seed	10.0	540.0	0.27723987642684456	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Foeniculum vulgare	Fruit	10.0	540.0	-0.12787441384193868	--
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.
Ocimum basilicum	Shoot Essent. Oil		500.0	-0.8123496252026575	--
Petroselinum crispum	Seed	3.0	490.0	0.10432519258473769	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
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.
Abies spectabilis	Leaf	175.0	465.0	-0.016929013209351848	--
Acorus calamus	Rhizome	10.0	460.0	-1.0	--
Hedeoma reverchonii	Plant		460.0	0.18104262708106403	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum tenuifolium	Shoot	2.0	420.0	-0.09552575139914782	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
Ocimum kilimandscharicum	Flower	240.0	400.0	1.4140457687025239	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum kilimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Cuminum cyminum	Seed Essent. Oil		400.0	-1.4910054033640832	--
Lepechinia calycina	Plant		390.0	0.061301996660806	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Mentha longifolia	Shoot	0.0	385.0	-0.0987549654618178	--
Thymus vulgaris	Plant	15.0	375.0	0.03564329014217928	--
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
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. & Frag. J. 8: 331-7.
Rosmarinus officinalis	Shoot		335.0	-0.1033681284084892	Tucker, A. O. and Maciarello, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Monarda didyma	Plant	25.0	320.0	-0.05843863375945202	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
Trachyspermum ammi	Fruit	150.0	252.0	-0.24730403942640428	--
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.
Ocimum kilimandscharicum	Leaf	105.0	205.0	-0.1152055828166814	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum kilimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Laurus nobilis	Leaf	24.0	186.0	-0.1223873321341401	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Coriandrum sativum	Fruit	2.0	155.0	-0.2875286008211722	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Peumus boldus	Leaf	30.0	150.0	-0.1359948571566934	--
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.
Thymus mastichina	Plant	20.0	140.0	-0.36634311198297265	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Valeriana officinalis	Leaf	0.0	130.0	-0.14355459328033415	Father Nature's Farmacy: 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.
Angelica archangelica	Root	2.0	130.0	1.4108316199577506	--
Piper nigrum	Fruit		120.0	-0.3020426178192843	--
Pimpinella anisum	Fruit		119.0	-0.30245730401923043	--
Pimpinella anisum	Seed		119.0	-1.1787017615236954	--
Juniperus communis	Fruit	1.0	100.0	-0.3103363418182056	--
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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Chrysanthemum parthenium</i>	Shoot		95.0	-0.1255113105525119	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
<i>Monarda clinopodia</i>	Plant		88.0	-0.4552932945808786	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum virginianum</i>	Shoot	6.0	87.0	-0.12624941662397934	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Satureja montana</i>	Plant	2.0	85.0	-0.46042503588460393	--
<i>Lavandula x hybrida</i>	Shoot	55.0	85.0	-0.1264339431418462	Tucker, A.O., Maciarelo, M.J., Angell, S., Espallat, J.R., and French, E.C. 1993. The Essential Oil of <i>Lavandula x hybrida</i> Balb. ex Ging., a Distinct Hybrid from <i>L. x heterophylla</i> Poir. (Labiatae). J. Ess. Oil Res. 5: 443-445.
<i>Thymus x citriodorus</i>	Plant		80.0	-0.4689779380574795	Stahl-Biskup, E. and Holthuijzen, J. 1995. Essential oil and glycosidally bound volatiles of lemon-scented thyme, <i>Thymus x citriodorus</i> (Pers.) Schreb. Flav. & Fragr. J. 10: 225-229.
<i>Citrus aurantiifolia</i>	Fruit	50.0	80.0	-0.3186300658171268	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Hyssopus officinalis</i>	Leaf	6.0	80.0	-0.162453933589436	--
<i>Cinnamomum verum</i>	Bark	18.0	72.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Levisticum officinale</i>	Root	7.0	70.0	-0.6207659127814102	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Mentha pulegium</i>	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.
<i>Daucus carota</i>	Seed	1.0	70.0	-1.3481581516889602	--
<i>Hedeoma hispida</i>	Plant		66.0	-0.4929260641415311	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Valeriana officinalis</i>	Root	3.0	65.0	-0.7900657071763403	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
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.
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.
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.
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.
Pycnanthemum muticum	Shoot	1.0	50.0	-0.12966315720451616	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Essential Oil	2.0	50.0	-0.6924881415674572	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.
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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
Lepechinia schiediana	Plant		40.0	-0.5374011554404841	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lindera benzoin	Fruit	22.0	40.0	-0.3352175138149692	--
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.
Cinnamomum verum	Leaf	20.0	40.0	-0.17757340583671746	--
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.
Citrus reticulata	Fruit	1.0	40.0	-0.3352175138149692	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
Ageratum conyzoides	Plant	5.0	38.0	-0.5408223163096343	--
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.
Agastache foeniculum	Plant	1.0	35.0	-0.5459540576133597	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
Pycnanthemum setosum	Shoot	20.0	31.0	-0.1314161591242513	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hyssopus officinalis	Shoot		30.0	-0.13150842238318472	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.
Myrtus communis	Plant	8.0	30.0	-0.5545069597862352	--
Chrysanthemum x morifolium	Plant	8.0	30.0	-0.5545069597862352	Wealth of India.
Eucalyptus bosistoana	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.
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.
Carum carvi	Plant		30.0	-0.5545069597862352	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
Ocimum gratissimum	Shoot		29.0	-0.13160068564211816	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.
Origanum onites	Plant		28.0	-0.5579281206553854	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Eucalyptus saligna	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Lindera benzoin	Twig	17.0	26.0		--
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.
Eucalyptus diversicolor	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.
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.
Origanum sipyleum	Shoot		25.0	-0.13196973867785186	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 syriacum	Shoot		25.0	-0.13196973867785186	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Monarda citriodora	Plant	6.0	25.0	-0.5630598619591108	--
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.
Coridothymus capitatus	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.
Monarda lindheimeri	Plant		21.0	-0.5699021836974113	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
Mentha x rotundifolia	Leaf	0.0	20.0	-0.18513314196035818	--
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.
Eucalyptus citriodora	Leaf	1.0	20.0	-0.18513314196035818	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
Thymus serpyllum	Plant	1.0	19.0	-0.5733233445665615	--
Satureja parvifolia	Shoot		19.0	-0.13252331823145244	Zygodlo, 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.
Hypericum perforatum	Plant	1.0	18.0	-0.5750339250011366	--
Satureja odora	Shoot		18.0	-0.13261558149038585	Zygodlo, 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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus nova-anglica</i>	Leaf	8.0	15.0	-0.18702307599126838	Brophy, J. L., Lassak, E. V., & Boland, D. J. 1992. The Leaf Essential Oils of <i>Eucalyptus nova-anglica</i> . Deane & Maiden. Journal of Essential Oil Res. 4: 29-32.
<i>Vitex agnus-castus</i>	Leaf	0.2	14.0	-0.18740106279745042	--
<i>Lantana camara</i>	Shoot		13.0	-0.133076897785053	--
<i>Eucalyptus siderophloia</i>	Shoot		11.0	-0.13326142430291985	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. Journal of Essential Oil Res. 4: 259-264.
<i>Monarda didyma</i>	Flower		10.0	-0.6881569624054215	Flavour and Fragrance Journal, 6: 80.
<i>Pycnanthemum torreyi</i>	Shoot		10.0	-0.13335368756185328	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Thymus capitatus</i>	Plant		10.0	-0.5887185684777375	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<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 <i>Eucalyptus</i> 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 <i>Eucalyptus</i> 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 <i>Eucalyptus</i> Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Lycopus virginicus</i>	Plant	3.0	8.0	-0.5921397293468877	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Teucrium micropodioides</i>	Leaf		8.0	-0.18966898363454263	Arnold, N., Bellomaria, B., Valentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some <i>Teucrium</i> Species from Cyprus. J. Ethnopharm. 35: 105-113.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus longicaulis	Shoot		8.0	-0.13353821407972014	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.
Pycnanthemum beadlei	Shoot		7.0	-0.13363047733865357	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus capitatus	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.
Micromeria fruticosa	Shoot		7.0	-0.13363047733865357	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		7.0	-0.13363047733865357	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.
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.
Sideritis pauli	Shoot		6.0	-0.133722740597587	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of Sideritis pauli Pau. FFJ7: 47-8. 1992.
Micromeria varia	Shoot		6.0	-0.133722740597587	Pedro, L.G., et al. 1995. Composition of the Essential oil of Micromeria varia Benth. ssp. thymoides (Sol. ex Lowe) Perez var. thymoides, and endemic species of the Madeira Archipelago. flav. & Fragr. J. 10(3): 199-202.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Micromeria varia	Shoot		6.0	-0.133722740597587	--
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.
Murraya koenigii	Leaf		5.0	-0.19080294405308876	--
Cinnamomum camphora	Leaf		5.0	-0.19080294405308876	--
Litsea glaucescens	Shoot	2.0	4.0	-0.13390726711545384	Tucker, et al, EB46(1):21-24.1992
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.
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 Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 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 Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Salvia gilliesii	Shoot		3.5	-0.13395339874492057	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Citrus limon	Petiole		3.0		--
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.
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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Nepeta racemosa</i>	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. J. Ess. Oil Res. 5: 215-7.
<i>Nepeta racemosa</i>	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. J. Ess. Oil Res. 5: 215-7.
<i>Thymus longicaulis</i>	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. J. Ess. Oil Res. 5: 291-5.
<i>Aralia cordata</i>	Stem		3.0		--
<i>Glechoma hederacea</i>	Plant	1.0	3.0	-0.6006926315197634	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lindera benzoin</i>	Leaf		2.0	-0.19193690447163486	--
<i>Sideritis athoa</i>	Shoot		2.0	-0.13409179363332072	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of <i>Sideritis athoa</i> Papanikolaou Et Kokkini. J. Ess. Oil Res. 5: 669-670.
<i>Illicium verum</i>	Fruit		1.0	-0.3513902756128656	--
<i>Calamintha nepeta</i>	Shoot		1.0	-0.13418405689225413	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuoglu, M. 1992. Composition of the Essential Oil of <i>Calamintha nepeta</i> subsp. <i>glandulosa</i> . J. Ess. Oil Res. 4:189-190
<i>Agastache nepetoides</i>	Plant		1.0	-0.6041137923889136	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Micromeria thymifolia</i>	Leaf		1.0	-0.1923148912778169	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . J. Ess. Oil Res., 3: 387-393.
<i>Salvia dorisiana</i>	Shoot	0.8	1.0	-0.13418405689225413	Tucker, A.O. & Maciarelo, M.J. 1994. The Essential Oil of <i>Salvia dorisiana</i> Standley. J. Ess. Oil Res. 6: 97-8.
<i>Sideritis mugronensis</i>	Leaf	0.5	1.0	-0.1923148912778169	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. J. Ess. Oil Res., 3: 395-397.

Plant	Part	Low PPM	High PPM	StdDev	Reference
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 <i>Micromeria congesta</i> . <i>J. Ess. Oil Res.</i> , 3: 387-393.
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 <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 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 <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
Dictamnus albus	Shoot		1.0	-0.13418405689225413	Baser, K.H.C., Kosar, M.Malyer, H. & Ozek, T. 1994. The Essential Oil Composition of <i>Dictamnus albus</i> from Turkey. <i>Planta Med.</i> 60:481-2
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 <i>Olibanum</i> . <i>Plant Med.</i> 53 (4): 382-384.
Dictamnus albus	Shoot		0.7	-0.1342117358699341	Baser, K.H.C., Kosar, M.Malyer, H. & Ozek, T. 1994. The Essential Oil Composition of <i>Dictamnus albus</i> from Turkey. <i>Planta Med.</i> 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 <i>Dictamnus albus</i> from Turkey. <i>Planta Med.</i> 60:481-2
Callicarpa americana	Leaf		0.55	-0.19248498534059874	--
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 <i>Acinos alpinus</i> (L.) Moench ssp. meridionalis (Nyman). <i>P.W. Ball Growing in Spain. Flav. & Frag. J.</i> 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 <i>Acinos alpinus</i> (L.) Moench ssp. meridionalis (Nyman). <i>P.W. Ball Growing in Spain. Flav. & Frag. J.</i> 8:127-130.)

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Origanum vulgare</i>	Plant		0.5	-0.6049690826062011	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
<i>Elsholtzia blanda</i>	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 <i>Elsholtzia blanda</i> Benth. (Labiatae). <i>J. Ess. Oils Res.</i> 4: 121-124
<i>Teucrium oxylepis</i>	Shoot		0.39	-0.1342403374802036	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Petroselinum crispum</i>	Leaf		0.24	-0.19260216125051532	--
<i>Teucrium oxylepis</i>	Shoot		0.2	-0.1342578674994008	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Mentha aquatica</i>	Shoot		0.1	-0.1342670938252942	Umemoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. <i>Nippon Nogeikagaku Kaishi</i> 67(10): 1417-1419.
<i>Citrus sinensis</i>	Fruit		0.1	-0.35176349319281713	--
<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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<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 Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 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 Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 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 Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 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. J. Ess. Oil Res. 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 Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<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> . Planta Medica 1987: 268-271.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<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. <i>Journal of Essential Oil Res.</i> 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. <i>Journal of Essential Oil Res.</i> 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. <i>Journal of Essential Oil Res.</i> 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. <i>Journal of Essential Oil Res.</i> 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 Teucrium Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Thymus zygis</i>	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 CCl ₄ -Induced Hepatotoxicity and Free Radical Scavenger Activity. <i>JEO5</i> : 153-8.
<i>Teucrium scorodonia</i>	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. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Melaleuca alternifolia</i>	Leaf		0.001	-0.19269250009719266	--
<i>Cinnamomum verum</i>	Bark Essent. Oil		0.0		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
Teucrium cyprium	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 kotschyanum	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	--
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				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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.
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.
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.
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.
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				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cinnamomum verum	Leaf Essent. Oil				--
Cinnamomum verum	Stem Bark				--
Oenanthe aquatica	Fruit				--
Oenanthe javanica	Shoot				--
Pastinaca sativa	Root				--
Pinus elliottii	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.
Pinus palustris	Resin, Exudate, Sap				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Alpinia galanga	Rhizome				--
Pinus sylvestris	Resin, Exudate, Sap				--
Pogostemon cablin	Plant				--
Pycnanthemum curvipes	Shoot				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Croton lechleri	Plant				Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Ribes nigrum	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Rosa damascena	Essential Oil				--
Apium graveolens	Seed				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
Citrus paradisi	Pericarp				--
Salvia sclarea	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia dracunculus	Leaf Essent. Oil				--
Kaempferia galanga	Rhizome				--
Satureja hortensis	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Pimpinella anisum	Essential Oil				--
Saussurea lappa	Root Essent. Oil				--
Schinus molle	Fruit				--
Curcuma longa	Tuber				--
Thuja occidentalis	Branches				--
Curcuma longa	Rhizome				--
Foeniculum vulgare	Seed Essent. Oil				Jim Duke's personal files.
Zingiber officinale	Essential Oil				--
Psidium guajava	Pericarp Essent. Oil				--
Centella asiatica	Shoot				Jim Duke's personal files.
Marrubium vulgare	Essential Oil				--
Hyssopus officinalis	Essential Oil				--
Eucalyptus globulus	Fruit Essent. Oil				--
Juniperus communis	Fruit Essent. Oil				--
Juniperus communis	Essential Oil				--
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				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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				--
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				--
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				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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				--
Citrus aurantium	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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				--
Agathosma betulina	Leaf Essent. Oil				--
Artemisia absinthium	Plant				--
Artemisia capillaris	Essential Oil				--
Artemisia dracunculus	Leaf				--
Barosma betulina	Leaf				--
Capsicum annuum	Fruit				--
Chamaemelum nobile	Plant				--
Chrysanthemum balsamita	Plant				--
Cinnamomum aromaticum	Plant				--
Eucalyptus citriodora	Leaf Essent. Oil				--
Cinnamomum camphora	Plant				--
Citrus aurantium	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Croton eluteria	Bark				--
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				--