

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for CAMPHOR

Plant	Part	Low PPM	High PPM	StdDev	Reference
Achillea millefolium	Leaf	20.0	2880.0	-0.18433975802654748	--
Acinos alpinus	Shoot		1.0	-0.15724505495450056	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		1.0	-0.15724505495450056	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.)
Acorus calamus	Rhizome				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Alpinia galanga	Rhizome Essent. Oil				--
Alpinia galanga	Rhizome				--
Alpinia officinarum	Rhizome				Wealth of India.
Ammi visnaga	Essential Oil				--
Amomum compactum	Seed				Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Anethum graveolens	Root				--
Annona squamosa	Plant				--
Artemisia annua	Leaf	100.0	8720.0	-0.0534217853770054	--
Artemisia dracunculus	Essential Oil				--
Artemisia herba-alba	Plant	580.0	773.0	-0.26114344972520515	--
Artemisia dracunculus	Shoot	20.0	200.0	-0.14976698900024374	--
Artemisia dracunculus	Leaf Essent. Oil		20000.0	-0.7174269876896714	--
Artemisia vulgaris	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia salsoloides	Shoot		210000.0	7.734143750713728	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.
Calamintha nepeta	Leaf		1.0	-0.2488796284474433	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.
Cannabis sativa	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
Cannabis sativa	Essential Oil				--
Cannabis sativa	Leaf Essent. Oil				--
Capsicum frutescens	Fruit				--
Centella asiatica	Essential Oil				--
Chrysanthemum x morifolium	Flower				Wealth of India.
Chrysanthemum parthenium	Shoot		640.0	-0.13323257181495227	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
Cinnamomum verum	Stem Bark				--
Cinnamomum verum	Essential Oil				--
Cinnamomum camphora	Leaf	96.0	220000.0	4.682939389519441	--
Cinnamomum verum	Bark Essent. Oil				--
Cinnamomum verum	Leaf		5.0	-0.24878995860316278	--
Cinnamomum verum	Root Bark				--
Cinnamomum verum	Plant				--
Cleonia lusitanica	Leaf	5.0	7.0	-0.24874512368102253	Perez-Alonso, M., Velasco-Negueruela, A., and Lopez-Saez, A. 1991. The Essential Oil of Cleonia lusitanica. J. Ess. Oil Res., 3: 441-442.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Coleus barbatus	Leaf Essent. Oil		2500.0	-0.8262065309494772	Jim Duke's personal files.
Coleus barbatus	Stem Essent. Oil		2500.0		Jim Duke's personal files.
Coriandrum sativum	Essential Oil				--
Coriandrum sativum	Fruit	100.0	1300.0	1.6456434313757062	--
Coriandrum sativum	Seed Essent. Oil		58300.0	1.0	--
Crocus sativus	Silk Stigma Style				--
Curcuma longa	Rhizome Essent. Oil		600.0	-1.0	--
Curcuma longa	Tuber				--
Cymbopogon nardus	Plant	15.0	60.0	-0.6234615654171126	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Daucus carota	Seed				--
Elettaria cardamomum	Fruit	7.0	20.0	-0.8661900913537282	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Elsholtzia cristata	Shoot		4.0	-0.15713232029187357	Kobold, U., Vostrowsky, O., Bestmann, H.J., Bisht, J.C., Pant, A.K., Melkani, A.B. and Mathela, C.S. 1987. Terpenoids from Elsholtzia Species; II. Constituents of Essential Oil from a New Chemotype of Elsholtzia cristata. Planta Medica 1987: 268-271.
Foeniculum vulgare	Fruit	10.0	180.0	-0.5522109010125488	--
Foeniculum vulgare	Seed	10.0	180.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Glycyrrhiza glabra	Root				--
Hedeoma reverchonii	Plant		31.0	-0.6381982068688171	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedeoma drummondii	Plant	1.0	786.0	-0.254537369074441	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Helianthus annuus	Flower				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Hyptis suaveolens	Shoot		12.0	-0.15683169452486825	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		12.0	-0.15683169452486825	Mallvarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.
Hyssopus officinalis	Leaf	10.0	3280.0	-0.17537277359849665	--
Hyssopus officinalis	Essential Oil				--
Hyssopus officinalis	Flower	125.0	1240.0	-0.4037256527367186	--
Juniperus communis	Fruit	1.0	7.0	-0.8917009005689489	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Essential Oil				--
Lantana camara	Shoot		1.0	-0.15724505495450056	--
Larrea tridentata	Plant				--
Laurus nobilis	Leaf Essent. Oil				--
Laurus nobilis	Plant				--
Lavandula sp	Shoot				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Lavandula angustifolia	Flower				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula x intermedia	Plant	542.0	1620.0	0.1692681126745783	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula x hybrida	Shoot	660.0	890.0	-0.12383801659603667	Tucker, A.O., Maciarelo, M.J., Angell, S., Espailat, J.R., and French, E.C. 1993. The Essential Oil of Lavandula x hybrida Balb. ex Ging., a Distinct Hybrid from L. x heterophylla Poir. (Labiatae). J. Ess. Oil Res. 5: 443-445.
Lavandula latifolia	Plant	480.0	3300.0	1.0229769967733227	--
Lepechinia calycina	Plant		875.0	-0.20931112461920998	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Levisticum officinale</i>	Root	1.0	10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lippia alba</i>	Plant				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
<i>Lippia dulcis</i>	Plant				--
<i>Magnolia fargesii</i>	Flower				--
<i>Magnolia kobus</i>	Flower				--
<i>Melaleuca alternifolia</i>	Leaf		0.001	-0.24890202349105242	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Micromeria juliana</i>	Leaf		65.0	-0.24744491093895515	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>Micromeria croatica</i>	Leaf		140.0	-0.24576360135869563	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>Micromeria thymifolia</i>	Leaf		10.0	-0.24867787129781216	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>Micromeria myrtifolia</i>	Shoot		0.5	-0.15726384406493837	Ozek, T., Kirimer, N., and Baser, K.H.C. 1992. Composition of the Essential Oil of <i>Micromeria myrtifolia</i> Boiss. et Hohen. J. Ess. Oil Res., 4: 79-80.
<i>Myristica fragrans</i>	Seed Essent. Oil		34000.0	-1.0	--
<i>Myrtus communis</i>	Plant	12.0	18.0	-0.6448042875195812	--
<i>Nepeta racemosa</i>	Shoot		2.0	-0.1572074767336249	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 cataria</i>	Plant	16.0	80.0	-0.6132983644159371	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
Nepeta racemosa	Shoot		2.0	-0.1572074767336249	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.
Ocimum kilimandscharicum	Flower	2650.0	5070.0	1.3756405727887508	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum kilimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum basilicum	Shoot Essent. Oil		4500.0	-1.0	--
Ocimum tenuiflorum	Leaf				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp:ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Ocimum canum	Shoot	1900.0	4550.0	0.013698271808887719	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ocimum basilicum	Leaf Essent. Oil		10000.0	-0.7795867266952746	--
Ocimum gratissimum	Plant	2.0	35.0	-0.6361655666685819	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ocimum kilimandscharicum	Shoot	0.1	7000.0	0.10576491295426046	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum kilimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum basilicum	Essential Oil	2100.0	7200.0	-1.1929832436449845	--
Ocimum basilicum	Plant	2.0	31.0	-0.6381982068688171	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Origanum syriacum	Shoot				Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum sipyleum	Shoot		10.0	-0.15690685096661958	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Origanum onites	Shoot		0.0	-0.15728263317537622	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Origanum syriacum	Shoot		0.0	-0.15728263317537622	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum sipyleum	Shoot		15.0	-0.15671895986224127	Baser, K.H.C., Ozek, T., Kurkcuoglu, M. and Tumen, G. 1992. Composition of the Essential Oil of Origanum sipyleum of Turkish Origin. J. Ess. Oil Res. 4: 139-142.
Origanum vulgare	Plant	0.0	40.0	-0.6336247664182881	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum creticum	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Origanum syriacum	Shoot		0.1	-0.1572788753532887	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum sipyleum	Shoot		13.0	-0.1567941163039926	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		15.0	-0.15671895986224127	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.
Peumus boldus	Leaf	1.6	150.0	-0.24553942674799437	--
Pimenta racemosa	Leaf	0.0	240.0	-0.24352185525168293	--
Pimpinella anisum	Seed Essent. Oil				--
Pinus sylvestris	Leaf Essent. Oil				--
Piper auritum	Leaf				Tramil
Piper nigrum	Fruit				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Polygonum hydropiper	Essential Oil				--
Ptychopetalum olacoides	Root Essent. Oil		62000.0		Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of Ptychopetalum olacoides Root Oil. Planta Med. 53, 2: 231.
Pycnanthemum pycnanthemoides	Shoot	78.0	116.0	-0.15292355955379938	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum montanum	Shoot	3395.0	3880.0	-0.011479136177806092	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum tenuifolium	Shoot	4.0	40.0	-0.1557795043403497	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum clinopodioides	Shoot	42.0	44.0	-0.15562919145684706	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Rhododendron dauricum	Plant				--
Rosmarinus tomentosus	Shoot	2745.0	4455.0	0.01012834082569979	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Shoot		1030.0	-0.11857706567344393	Tucker, A. O. and Maciarelo, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Rosmarinus officinalis	Leaf Essent. Oil		121000.0	-0.08961362373307821	--
Rosmarinus officinalis	Leaf		595.0	-0.23556365657178782	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	Essential Oil	18000.0	93000.0	-0.6926999479228944	--
Rosmarinus eriocalyx	Shoot	1590.0	2670.0	-0.0569487834373576	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 x mendizabalii	Shoot	850.0	1475.0	-0.10185475738377417	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Plant	60.0	5800.0	2.293377121920263	--
Rosmarinus officinalis	Shoot Essent. Oil		76300.0	1.0	--
Rosmarinus officinalis	Shoot	1885.0	3920.0	-0.009976007342779595	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	1590.0	2670.0	-0.0569487834373576	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus x lavandulaceus	Shoot	330.0	2335.0	-0.06953748743070451	Soriano Cano, M.C., Sotomayor Sanchez, J.A., Sanchez Gomez, P. and Garcia Vallejo, M.C. 1993. Essential Oils of the Rosmarinus eriocalyx-tomentosus Complex in Southeast Spain. J. Ess. Oil Res. 5: 243-246.
Rosmarinus officinalis	Leaf		160.0	-0.2453152521372931	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	Resin, Exudate, Sap				--
Rosmarinus officinalis	Shoot	320.0	1410.0	-0.10429734174069223	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.
Salvia officinalis	Pericarp Essent. Oil		229000.0		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia canariensis	Leaf		28.0	-0.24827435699854986	Casnigueral,S., Iglesias,J., Vila,R., Virgili,A. and Ibanez,C.1994. The Essential Oil from Leaves of Salvia canariensis L. Flav. & Frag. J. 9:201-204. S. Canigueral, Facultat de Farmacia, Universitat de Barcelona, Ave.Diagonal 643,E-08028, Barcelone Spain
Salvia officinalis	Leaf	0.0	9324.0	-0.03988163889064865	--
Salvia officinalis	Essential Oil	76000.0	305000.0	0.54343127227621	--
Salvia triloba	Plant	160.0	5040.0	1.9071754838755932	--
Salvia officinalis	Leaf Essent. Oil	44000.0	458000.0	2.005169580755753	--
Salvia gilliesii	Shoot		60.0	-0.15502793992283648	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Salvia sclarea	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Sassafras albidum	Leaf		0.0	-0.24890204590851342	--
Satureja douglasii	Plant	2392.0	5941.0	2.3650276889785506	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja obovata	Leaf		1225.0	-0.22144065609760777	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja montana	Plant	5.0	75.0	-0.6158391646662309	--
Satureja obovata	Shoot	2510.0	4025.0	-0.0060302941508350435	Fitoterapia No.60: 277.
Satureja obovata	Leaf		2660.0	-0.18927159946197541	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of Satureja obovata. Phytochemistry 35(1): 83.
Satureja hortensis	Plant				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
Satureja obovata	Leaf		2040.0	-0.2031704253254542	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		2040.0	-0.2031704253254542	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.
Sideritis pauli	Shoot		3.0	-0.15716989851274923	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of Sideritis pauli Pau. FFJ7: 47-8. 1992.
Sideritis athoa	Shoot		0.5	-0.15726384406493837	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of Sideritis athoa Papanikolaou Et Kokkini. J. Ess. Oil Res. 5: 669-670.
Sideritis scardica	Shoot		75.0	-0.15446426660970153	Menkovic, N., et al. 1991. The Essential Oil of Sideritis scardica. Pl. Med. 57. Suppl. 2. pp. A137-A132.
Stevia rebaudiana	Flower		17.0	-0.9719149200520317	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Stevia rebaudiana	Shoot		17.0	-0.15664380342048995	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Tanacetum vulgare	Leaf	0.0	1800.0	-0.2085506159822847	--
Tanacetum parthenium	Essential Oil		442000.0	1.342251919291669	--
Tanacetum parthenium	Fruit Essent. Oil		189000.0		--
Tanacetum parthenium	Shoot		24.0	-0.15638075587436032	--
Tanacetum parthenium	Leaf Essent. Oil		201000.0	0.40766428831174817	--
Teucrium gnaphalodes	Shoot		6.0	-0.15705716385012225	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian Teucrium Species. J. Ess. Oil Res. 5: 397-402.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium scorodonia</i>	Shoot		0.28	-0.15727211127353108	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium oxylepis</i>	Shoot		0.22	-0.1572743659667835	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium salviastrum</i>	Shoot				Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium asiaticum</i>	Shoot		0.1	-0.1572788753532887	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium polium</i>	Shoot		1.0	-0.15724505495450056	Perez-Alonso, M.J. Velasco-Negueruela, A. and Lopez-Saez, J.A. 1993. The Essential Oils of Two Iberian <i>Teucrium</i> Species. <i>J. Ess. Oil Res.</i> 5: 397-402.
<i>Teucrium pseudoscorodonia</i>	Shoot		0.1	-0.1572788753532887	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium polium</i>	Plant				Rizk, A.F.M., <i>The Phytochemistry of the Flora of Qatar</i> , Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
<i>Teucrium oxylepis</i>	Shoot		0.06	-0.15728037848212362	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>Thuja occidentalis</i>	Branches				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus broussonettii	Shoot		0.0	-0.15728263317537622	Tantaoui-Elaraki, A., Lattaoui, N., Errifi, A. and Benjlali, B. 1993. Composition and Antimicrobial Activity of the Essential Oils of Thymus broussonettii, T. zygis and T. saturejoides. J. Ess. Oil Res. 5: 45-53.
Thymus orospedanus	Plant		718.0	-0.28909225247843784	J. Nat. Prod.
Thymus capitatus	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus funkii	Shoot		1135.0	-0.11463135248149939	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 zygis	Shoot		19.0	-0.15656864697873862	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.
Thymus longicaulis	Shoot		3.0	-0.15716989851274923	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus riararum	Shoot		25.0	-0.15634317765348466	Iglesias, J., Vila, R., Canigual, S., Bellakdhar, and Idrissi, A. 1991. Analysis of the Essential Oil of Thymus riararum. J. Ess. Oil Res. 3: 43-4.
Thymus mastichina	Plant	1.0	450.0	-0.42527914589418986	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus funkii	Shoot		1135.0	-0.11463135248149939	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 zygis	Shoot		19.0	-0.15656864697873862	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus longicaulis	Shoot		0.0	-0.15728263317537622	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus cilicicus	Shoot		940.0	-0.12195910555225356	Tumen, G., Koyuncu, M., Kirimer, N., and Baser, K.H.C. 1994. Composition of the Essential Oil of Thymus cilicicus Boiss. & Bal. J. Ess. Oil Res. 6: 97-8.
Thymus vulgaris	Plant	5.0	45.0	-0.6310839661679942	J. Ethnopharmacology, 39: 167.
Thymus capitatus	Shoot		9.0	-0.15694442918749524	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.
Thymus longicaulis	Shoot		3.0	-0.15716989851274923	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus x citriodorus	Plant		20.0	-0.6437879674194636	Stahl-Biskup, E. and Holthuijzen, J. 1995. Essential oil and glycosidally bound volatiles of lemon-scented thyme, Thymus x citriodorus (Pers.) Schreb. Flav. & Frag. J. 10: 225-229.
Thymus saturejoides	Shoot		10.0	-0.15690685096661958	Tantaoui-Elaraki, A., Lattaoui, N., Errifi, A. and Benjlali, B. 1993. Composition and Antimicrobial Activity of the Essential Oils of Thymus broussonettii, T. zygis and T. saturejoides. J. Ess. Oil Res. 5: 45-53.
Thymus zygis	Shoot	0.1	390.0	-0.14262712703386787	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.
Vitex agnus-castus	Fruit	80.0	800.0	0.6644584615595209	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vitex agnus-castus	Flower				Jim Duke's personal files.
Vitex agnus-castus	Leaf				Jim Duke's personal files.
Zingiber officinale	Rhizome Essent. Oil		1200.0	1.0	--
Zingiber officinale	Rhizome	1.0	60.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.