



Chemid

CAMPHOR

CAS Number

464482

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Achillea millefolium	Leaf	20	1780	-0.18433975802654748	--
Acinos alpinus	Shoot	1	1	-0.15724505495450056	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Acinos alpinus	Shoot	--	1	-0.15724505495450056	Velasco-Negueruela,A., Perez-Alonso,M.J., Jiminez,S.M. and Garcia,F.M. 1993. The Volatile Constituents of Acinus alpinus (L.) Moench ssp. meridionalis (Nyman). P.W. Ball Growing in Spain. Flav. & Frag. J. 8:127-130.)
Acorus calamus	Rhizome	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Alpinia galanga	Rhizome	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Alpinia galanga	Rhizome Essent. Oil	--	--		--
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	6460	-0.0534217853770054	--
Artemisia dracunculus	Shoot	20	200	-0.14976698900024374	--
Artemisia dracunculus	Essential Oil	--	--		--
Artemisia dracunculus	Leaf Essent. Oil	--	20000	-0.7174269876896714	--
Artemisia herba-alba	Plant	580	773	-0.26114344972520515	--
Artemisia salsoloides	Shoot	--	210000	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.
Artemisia vulgaris	Plant	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
Calamintha nepeta	Leaf	1	1	-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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cannabis sativa	Leaf Essent. Oil	--	--		--
Cannabis sativa	Essential Oil	--	--		--
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.
Capsicum frutescens	Fruit	--	--		--
Centella asiatica	Essential Oil	--	--		--
Chrysanthemum parthenium	Shoot	--	640	-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.
Chrysanthemum x morifolium	Flower	--	--		Wealth of India.
Cinnamomum camphora	Leaf	96	220000	4.682939389519441	--
Cinnamomum verum	Plant	--	--		--
Cinnamomum verum	Leaf	--	5	-0.24878995860316278	--
Cinnamomum verum	Essential Oil	--	--		--
Cinnamomum verum	Root Bark	--	--		--
Cinnamomum verum	Bark Essent. Oil	--	--		--
Cinnamomum verum	Stem Bark	--	--		--
Cleonia lusitanica	Leaf	5	7	-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	-0.8262065309494772	Jim Duke's personal files.
Coleus barbatus	Stem Essent. Oil	--	2500		Jim Duke's personal files.
Coriandrum sativum	Fruit	100	1300	1.6456434313757062	--
Coriandrum sativum	Seed Essent. Oil	--	58300	1	--
Coriandrum sativum	Essential Oil	--	--		--
Crocus sativus	Silk Stigma Style	--	--		--
Curcuma longa	Tuber	--	--		--
Curcuma longa	Rhizome Essent. Oil	--	600	-1	--
Cymbopogon nardus	Plant	15	60	-0.6234615654171126	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Daucus carota	Seed	--	--		--
Elettaria cardamomum	Fruit	7	20	-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	4	-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	180	-0.5522109010125488	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Foeniculum vulgare	Seed	10	180		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Glycyrrhiza glabra	Root	--	--		--
Hedeoma drummondii	Plant	1	786	-0.254537369074441	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hedeoma reverchonii	Plant	31	31	-0.6381982068688171	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.
Hyptis suaveolens	Shoot	12	12	-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	-0.15683169452486825	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	Flower	125	1240	-0.4037256527367186	--
Hyssopus officinalis	Leaf	10	3280	-0.17537277359849665	--
Hyssopus officinalis	Essential Oil	--	--		--
Juniperus communis	Fruit	1	7	-0.8917009005689489	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Essential Oil	--	--		--
Lantana camara	Shoot	--	1	-0.15724505495450056	--
Larrea tridentata	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Laurus nobilis	Plant	--	--		--
Laurus nobilis	Leaf Essent. Oil	--	--		--
Lavandula angustifolia	Flower	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula latifolia	Plant	480	3300	1.0229769967733227	--
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 x hybrida	Shoot	660	890	-0.12383801659603667	Tucker, A.O., Maciareello, M.J., Angell, S., Espaillet, J.R., and French, E.C. 1993. The Essential Oil of Lavandula x hybrida Balb. ex Ging., a Distinct Hybrid from L. x heterophylla Poir. (Labiatae). J. Ess. Oil Res. 5: 443-445.
Lavandula x intermedia	Plant	542	1620	0.1692681126745783	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lepechinia calycina	Plant	875	875	-0.20931112461920998	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Levisticum officinale	Root	1	10		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lippia alba	Plant	--	--		Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
Lippia dulcis	Plant	--	--		--
Magnolia fargesii	Flower	--	--		--
Magnolia kobus	Flower	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Melaleuca alternifolia	Leaf	0.001	0.001	-0.24890202349105242	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Micromeria croatica	Leaf	140	140	-0.24576360135869563	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Micromeria juliana	Leaf	65	65	-0.24744491093895515	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of Micromeria congesta. J. Ess. Oil Res., 3: 387-393.
Micromeria myrtifolia	Shoot	0.5	0.5	-0.15726384406493837	Ozek, T., Kirimer, N., and Baser, K.H.C. 1992. Composition of the Essential Oil of Micromeria myrtifolia Boiss. et Hohen. J. Ess. Oil Res., 4: 79-80.
Micromeria thymifolia	Leaf	10	10	-0.24867787129781216	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.
Myristica fragrans	Seed Essent. Oil	--	34000	-1	--
Myrtus communis	Plant	12	18	-0.6448042875195812	--
Nepeta cataria	Plant	16	80	-0.6132983644159371	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Nepeta racemosa	Shoot	2	2	-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.
Nepeta racemosa	Shoot	--	2	-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 basilicum	Plant	2	31	-0.6381982068688171	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Ocimum basilicum	Essential Oil	2100	7200	-1.1929832436449845	--
Ocimum basilicum	Leaf Essent. Oil	--	10000	-0.7795867266952746	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum basilicum	Shoot Essent. Oil	--	4500	-1	--
Ocimum canum	Shoot	1900	4550	0.013698271808887719	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ocimum gratissimum	Plant	2	35	-0.6361655666685819	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ocimum kilimandscharicum	Flower	2650	5070	1.3756405727887508	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum kilimandscharicum	Shoot	0.1	7000	0.10576491295426046	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum tenuiflorum	Leaf	--	--		=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
Origanum creticum	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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 sipyleum	Shoot	15	15	-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 sipyleum	Shoot	--	13	-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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Origanum sipyleum	Shoot	--	15	-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 sipyleum	Shoot	--	10	-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.
Origanum syriacum	Shoot	0.1	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 syriacum	Shoot	--	0	-0.15728263317537622	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum syriacum	Shoot	--	--		Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum vulgare	Plant	0	40	-0.6336247664182881	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Peumus boldus	Leaf	1.6	150	-0.24553942674799437	--
Pimenta racemosa	Leaf	0	240	-0.24352185525168293	--
Pimpinella anisum	Seed Essent. Oil	--	--		--
Pinus sylvestris	Leaf Essent. Oil	--	--		--
Piper auritum	Leaf	--	--		Tramil
Piper nigrum	Fruit	--	--		--
Polygonum hydropiper	Essential Oil	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ptychopetalum olacoides	Root Essent. Oil	--	62000		Uber Bucek, E., Fournier, G., Dadoun, H. 1987. Volatile Constituents of Ptychopetalum olacoides Root Oil. Planta Med. 53, 2: 231.
Pycnanthemum clinopodioides	Shoot	42	44	-0.15562919145684706	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum montanum	Shoot	3395	3880	-0.011479136177806092	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum pycnanthemoides	Shoot	78	116	-0.15292355955379938	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum tenuifolium	Shoot	4	40	-0.1557795043403497	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Rhododendron dauricum	Plant	--	--		--
Rosmarinus eriocalyx	Shoot	1590	2670	-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 eriocalyx	Shoot	1590	2670	-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 officinalis	Leaf	595	595	-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	Leaf	--	160	-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	Plant	60	5800	2.293377121920263	--
Rosmarinus officinalis	Shoot	--	1030	-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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rosmarinus officinalis	Shoot	320	1410	-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.
Rosmarinus officinalis	Shoot	1885	3920	-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 officinalis	Essential Oil	18000	93000	-0.6926999479228944	--
Rosmarinus officinalis	Resin, Exudate, Sap	--	--		--
Rosmarinus officinalis	Shoot Essent. Oil	--	76300	1	--
Rosmarinus officinalis	Leaf Essent. Oil	--	121000	-0.08961362373307821	--
Rosmarinus tomentosus	Shoot	2745	4455	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 x lavandulaceus	Shoot	330	2335	-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 x mendizabalii	Shoot	850	1475	-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.
Salvia canariensis	Leaf	28	28	-0.24827435699854986	Casniguer, 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. Caniguer, Facultat de Farmacia, Universitat de Barcelona, Ave. Diagonal 643, E-08028, Barcelona Spain

Plant	Part	Low PPM	High PPM	StdDev	Reference
Salvia gilliesii	Shoot	60	60	-0.15502793992283648	Velasco-Negueruela, A. et al. 1993. The Essential Oil of Salvia gilliesii Benth. J. Ess. Oil Res. 5: 319-320.
Salvia officinalis	Leaf	0	9324	-0.03988163889064865	--
Salvia officinalis	Pericarp Essent. Oil	--	229000		--
Salvia officinalis	Leaf Essent. Oil	44000	458000	2.005169580755753	--
Salvia officinalis	Essential Oil	76000	305000	0.54343127227621	--
Salvia sclarea	Plant	--	--		Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Salvia triloba	Plant	160	5040	1.9071754838755932	--
Sassafras albidum	Leaf	--	0	-0.24890204590851342	--
Satureja douglasii	Plant	2392	5941	2.3650276889785506	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Satureja hortensis	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Satureja montana	Plant	5	75	-0.6158391646662309	--
Satureja obovata	Leaf	2040	2040	-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	--	2660	-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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Satureja obovata	Leaf	--	1225	-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 obovata	Leaf	--	2040	-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	Shoot	2510	4025	-0.0060302941508350435	Fitoterapia No.60: 277.
Sideritis athoa	Shoot	0.5	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 pauli	Shoot	3	3	-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 scardica	Shoot	75	75	-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	-0.9719149200520317	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	-0.15664380342048995	Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
Tanacetum parthenium	Shoot	--	24	-0.15638075587436032	--
Tanacetum parthenium	Fruit Essent. Oil	--	189000		--
Tanacetum parthenium	Essential Oil	--	442000	1.342251919291669	--
Tanacetum parthenium	Leaf Essent. Oil	--	201000	0.40766428831174817	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Tanacetum vulgare	Leaf	0	1800	-0.2085506159822847	--
Teucrium asiaticum	Shoot	0.1	0.1	-0.1572788753532887	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 gnaphalodes	Shoot	6	6	-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.
Teucrium oxylepis	Shoot	0.22	0.22	-0.1572743659667835	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	0.06	0.06	-0.15728037848212362	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 polium	Plant	--	--		Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Teucrium polium	Shoot	1	1	-0.15724505495450056	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.
Teucrium pseudoscorodonia	Shoot	0.1	0.1	-0.1572788753532887	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 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.
Teucrium scorodonia	Shoot	0.28	0.28	-0.15727211127353108	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>Thuja occidentalis</i>	Branches	--	--		--
<i>Thymus broussonettii</i>	Shoot	0	0	-0.15728263317537622	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.
<i>Thymus capitatus</i>	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Thymus capitatus</i>	Shoot	9	9	-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. & Fragr. J. 8: 331-7.
<i>Thymus cilicicus</i>	Shoot	940	940	-0.12195910555225356	Tumen, G., Koyuncu, M., Kirimer, N., and Baser, K.H.C. 1994. Composition of the Essential Oil of <i>Thymus cilicicus</i> Boiss. & Bal. J. Ess. Oil Res. 6: 97-8.
<i>Thymus funkii</i>	Shoot	1135	1135	-0.11463135248149939	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. Flav. & Fragr. J. 10(6): 379-383.
<i>Thymus funkii</i>	Shoot	--	1135	-0.11463135248149939	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. Flav. & Fragr. J. 10(6): 379-383.
<i>Thymus longicaulis</i>	Shoot	3	3	-0.15716989851274923	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>Thymus longicaulis</i>	Shoot	--	0	-0.15728263317537622	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>Thymus longicaulis</i>	Shoot	--	3	-0.15716989851274923	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>Thymus mastichina</i>	Plant	1	450	-0.42527914589418986	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Thymus orospedanus	Plant	718	718	-0.28909225247843784	J. Nat. Prod.
Thymus riatarum	Shoot	25	25	-0.15634317765348466	Iglesias, J., Vila, R., Canigual, S., Bellakdhar, and Il Idrissi, A. 1991. Analysis of the Essential Oil of Thymus riatarum. J. Ess. Oil Res. 3: 43-4.
Thymus saturejoides	Shoot	10	10	-0.15690685096661958	Tantaoui-Elaraki, A., Lattaoui, N., Errifi, A. and Benjilali, 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 vulgaris	Plant	5	45	-0.6310839661679942	J. Ethnopharmacology, 39: 167.
Thymus x citriodorus	Plant	20	20	-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. & Fragr. J. 10: 225-229.
Thymus zygis	Shoot	0.1	390	-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.
Thymus zygis	Shoot	19	19	-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 zygis	Shoot	--	19	-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.
Vitex agnus-castus	Leaf	--	--		Jim Duke's personal files.
Vitex agnus-castus	Flower	--	--		Jim Duke's personal files.
Vitex agnus-castus	Fruit	80	800	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.
Zingiber officinale	Rhizome	1	60		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zingiber officinale	Rhizome Essent. Oil	--	1200	1	--