

# List of Plants

## BETA-PHELLANDRENE

### Chemid

#### BETAPHELLANDRENE

\*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
Abies balsamea	Gum	--	--		*
Abies alba	Plant	32.0	46.0	-0.39	*
Agathosma betulina	Leaf Essent. Oil	--	--		*
Allium sativum var. sativum	Bulb	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Anethum graveolens	Seed Essent. Oil	--	--		*
Anethum graveolens	Essential Oil	--	31600.0	1.72	*
Anethum graveolens	Fruit	168.0	1925.0	-0.14	*
Anethum graveolens	Root Essent. Oil	--	--		*
Anethum graveolens	Seed	25.0	1925.0	-0.07	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Anethum graveolens	Shoot Essent. Oil	82100.0	169300.0	1.0	*
Anethum graveolens	Leaf	120.0	2100.0	4.55	*
Anethum graveolens	Root	--	--		*
Angelica archangelica	Root Essent. Oil	--	--		*
Angelica archangelica	Root	50.0	5320.0	1.0	*
Angelica archangelica	Fruit	--	--		*
Apium graveolens	Seed Essent. Oil	200.0	2000.0	-1.03	*
Apium graveolens	Fruit	--	2000.0	-0.13	*
Artemisia dracunculoides	Shoot	100.0	1070.0	4.04	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Boswellia serrata	Essential Oil	--	--		*
Boswellia sacra	Essential Oil	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Canarium indicum	Essential Oil	800.0	2000.0	-1.07	*
Carica papaya	Fruit	--	--		*
Carum carvi	Seed	--	--		Wealth of India.
Cinnamomum verum	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cistus ladaniferus	Plant	2.0	140.0	0.51	*

Citrus limon	Pericarp Essent. Oil	--	65900.0		Jim Duke's personal files.
Citrus limon	Essential Oil	--	80.0	-1.25	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus paradisi	Pericarp	--	--		*
Citrus aurantiifolia	Fruit	--	90.0	-0.46	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Petiole	--	8.0		*
Citrus limon	Leaf Essent. Oil	--	3300.0	-0.64	Jim Duke's personal files.
Coleus barbatus	Root Essent. Oil	--	10000.0	1.0	Jim Duke's personal files.
Coriandrum sativum	Seed Essent. Oil	400.0	18600.0	-0.33	*
Coriandrum sativum	Essential Oil	--	--		*
Coriandrum sativum	Fruit	1.0	13.0	-0.47	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Cuminum cyminum	Seed Essent. Oil	--	700.0	-1.08	*
Cuminum cyminum	Seed	90.0	279.0	-0.99	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cuminum cyminum	Fruit	90.0	279.0	-0.42	*
Daucus carota	Shoot	--	177.0	0.14	*
Elettaria cardamomum	Seed Essent. Oil	--	32500.0	0.25	*
Eucalyptus globulus	Leaf Essent. Oil	--	36000.0	2.05	*
Eucalyptus citriodora	Leaf Essent. Oil	--	12000.0	0.07	*
Eucalyptus dolichorhyncha	Leaf	--	6.0	-0.45	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Eucalyptus angulosa	Leaf	--	1.5	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Eucalyptus viridis	Leaf	--	0.5	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus incrassata	Leaf	--	14.0	-0.43	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1994. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part I. Subgenus Symphyomyrtus, Section Dumaria, Series Incrassatae. Flavour and Fragrance J. 9(3):113-7
Eucalyptus porosa	Leaf	--	10.0	-0.44	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus intertexta	Leaf	--	5.5	-0.45	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus leucoxydon	Leaf	--	10.0	-0.44	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus largisparsa	Leaf	--	4.6	-0.45	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus Eucalyptus. Part VI. Subgenus Symphyomyrtus, Section Adnataria. Flavour and Fragrance J. 10(6):359-364
Eucalyptus globulus	Essential Oil	--	--		*

<i>Eucalyptus ceratocorys</i>	Leaf	--	80.0	-0.27	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> .Part I.Subgenus <i>Symphyomyrtus</i> ,Section <i>Dumaria</i> ,Series <i>Incrassatae</i> .Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus tetraptera</i>	Leaf	--	100.0	-0.23	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> .Part I.Subgenus <i>Symphyomyrtus</i> ,Section <i>Dumaria</i> ,Series <i>Incrassatae</i> .Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus desquamata</i>	Leaf	--	15.0	-0.43	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus forrestiana</i>	Leaf	--	95.0	-0.24	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> .Part I.Subgenus <i>Symphyomyrtus</i> ,Section <i>Dumaria</i> ,Series <i>Incrassatae</i> .Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus lansdowneana</i>	Leaf	--	430.0	0.56	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus behriana</i>	Leaf	--	2.7	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus fasiculosa</i>	Leaf	--	1.3	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus sparsa</i>	Leaf	--	100.0	-0.23	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus globulus</i>	Fruit Essent. Oil	--	34300.0	-0.64	*
<i>Eucalyptus stoatei</i>	Leaf	--	13.0	-0.43	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> .Part I.Subgenus <i>Symphyomyrtus</i> ,Section <i>Dumaria</i> ,Series <i>Incrassatae</i> .Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus odorata</i>	Leaf	--	4.4	-0.45	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus ochrophloia</i>	Leaf	--	0.5	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus erythrandra</i>	Leaf	--	7.0	-0.45	Bignell,C.M.,Dunlop,P.J.,Brophy,J.J.,and Jackson, J.F.1994.Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> .Part I.Subgenus <i>Symphyomyrtus</i> ,Section <i>Dumaria</i> ,Series <i>Incrassatae</i> .Flavour and Fragrance J.9(3):113-7
<i>Eucalyptus cuprea</i>	Leaf	--	6.4	-0.45	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus populnea</i>	Leaf	--	1.8	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Eucalyptus melanophloia</i>	Leaf	--	0.8	-0.46	Bignell, C.M., Dunlop, P.J., Brophy, J.J., and Jackson, J.F. 1995. Volatile Leaf Oils of Some South-western and Southern Australian Species of the Genus <i>Eucalyptus</i> . Part VI. Subgenus <i>Symphyomyrtus</i> , Section <i>Adnataria</i> . Flavour and Fragrance J. 10(6):359-364
<i>Foeniculum vulgare</i>	Seed	170.0	1020.0	-0.58	*
<i>Foeniculum vulgare</i>	Fruit	170.0	1020.0	-0.3	*
<i>Gossypium</i> sp	Plant	--	--		*
<i>Hedeoma drummondii</i>	Plant	9.0	31.0	-0.53	*

<i>Hyssopus officinalis</i>	Shoot	--	--		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>Hyssopus officinalis</i>	Shoot	--	50.0	-0.41	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	380.0	1.03	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	330.0	0.81	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	0.1	-0.63	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>Hyssopus officinalis</i>	Shoot	--	50.0	-0.41	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	290.0	0.64	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	280.0	0.59	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Essential Oil	--	--		*
<i>Hyssopus officinalis</i>	Leaf	1.0	800.0	1.45	*
<i>Hyssopus officinalis</i>	Shoot	--	60.0	-0.37	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	330.0	0.81	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Shoot	--	190.0	0.2	Kerrola, K., Galambosi, B. and Kallio, H. 1994. Volatile Components and Odor Intensity of Four Phenotypes of Hyssop ( <i>Hyssopus officinalis</i> L.) J. Agric. Food Chem. 42: 776-781.
<i>Hyssopus officinalis</i>	Flower	34.0	348.0		Flavour and Fragrance Journal, 6: 69.
<i>Illicium verum</i>	Fruit	220.0	835.0	-0.33	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Juniperus communis</i>	Leaf Essent. Oil	--	--		*
<i>Juniperus communis</i>	Fruit Essent. Oil	--	--		*
<i>Juniperus communis</i>	Fruit	66.0	660.0	-0.36	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Juniperus communis</i>	Essential Oil	--	--		*
<i>Laurus nobilis</i>	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lavandula angustifolia</i>	Flower	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Levisticum officinale</i>	Root	24.0	240.0	-1.0	*
<i>Lindera benzoin</i>	Fruit	400.0	545.0	-0.38	*
<i>Lycopus uniflorus</i>	Plant	107.0	154.0	0.64	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Melaleuca alternifolia</i>	Leaf	--	75.0	-0.29	*
<i>Melaleuca alternifolia</i>	Essential Oil	--	5800.0	-0.71	*
<i>Melaleuca alternifolia</i>	Root Essent. Oil	--	6300.0	-1.0	*

Mentha arvensis var. piperascens	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Mentha pulegium	Essential Oil	800.0	20000.0	0.63	*
Mentha pulegium	Plant	3.0	400.0	2.99	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Micromeria varia	Shoot	--	15.0	-0.56	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.
Micromeria teneriffae	Leaf	--	20.0	-0.42	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 varia	Shoot	--	15.0	-0.56	*
Murraya koenigii	Leaf	140.0	560.0	0.87	*
Myrciaria dubia	Fruit	--	--		*
Myristica fragrans	Seed Essent. Oil	--	34000.0	0.32	*
Myristica fragrans	Essential Oil	--	20000.0	0.63	*
Ocimum gratissimum	Plant	5.0	30.0	-0.54	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Oenanthe aquatica	Fruit	8000.0	20000.0	2.98	*
Origanum vulgare	Plant	--	4.0	-0.79	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum syriacum	Shoot	--	60.0	-0.37	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum vulgare	Shoot Essent. Oil	--	800.0	-1.0	*
Origanum majorana	Essential Oil	--	14000.0	0.06	*
Origanum majorana	Plant	27.0	155.0	0.65	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant	12.0	60.0	-0.25	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant	--	60.0	-0.25	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum syriacum	Shoot	--	60.0	-0.37	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum vulgare	Plant	--	5.0	-0.78	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum vulgare	Plant	--	1.0	-0.82	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum onites	Shoot	--	38.0	-0.46	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.
Pastinaca sativa	Root	--	--		*
Pelargonium graveolens	Essential Oil	--	--		*
Pelargonium citrosum	Shoot	--	4.0	-0.61	Matsuda, B. M., et al. 1996. Essential Oil Analysis and Field Evaluation of the Citrosa Plant 'Pelargonium citrosum' as a Repellent Against Populations of Aedes Mosquitoes. J. Am. Mosq. Contr. Assoc. 12(1):69-74.
Petroselinum crispum	Seed Essent. Oil	--	71000.0	1.87	*
Petroselinum crispum	Seed	43.0	4970.0	1.64	*

<i>Petroselinum crispum</i>	Fruit Essent. Oil	--	35100.0	-0.62	*
<i>Petroselinum crispum</i>	Leaf	60.0	530.0	0.8	*
<i>Pimenta dioica</i>	Plant	--	--		*
<i>Pimenta dioica</i>	Fruit	--	--		*
<i>Pimenta racemosa</i>	Leaf	230.0	780.0	1.4	*
<i>Pinus palustris</i>	Resin, Exudate, Sap	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Pinus sylvestris</i>	Essential Oil	--	--		*
<i>Pinus mugo</i>	Leaf	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Pinus sylvestris</i>	Twig	--	--		*
<i>Pinus sylvestris</i>	Leaf Essent. Oil	--	13000.0	0.16	*
<i>Pinus sylvestris</i>	Resin, Exudate, Sap	--	--		*
<i>Pinus sylvestris</i>	Flower	--	--		*
<i>Piper nigrum</i>	Seed Essent. Oil	--	--		*
<i>Piper cubeba</i>	Fruit	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Piper cubeba</i>	Fruit Essent. Oil	120000.0	130000.0	1.73	*
<i>Piper nigrum</i>	Fruit Essent. Oil	--	41000.0	-0.47	*
<i>Piper auritum</i>	Leaf	--	--		Tramil
<i>Ribes nigrum</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Ribes nigrum</i>	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Ribes nigrum</i>	Bud	--	--		*
<i>Rosmarinus officinalis</i>	Leaf Essent. Oil	--	--		*
<i>Rosmarinus officinalis</i>	Plant	--	--		*
<i>Salvia officinalis</i>	Leaf Essent. Oil	--	1000.0	-0.83	*
<i>Salvia officinalis</i>	Leaf	5.0	28.0	-0.4	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Sassafras albidum</i>	Leaf	--	--	-0.46	*
<i>Sassafras albidum</i>	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Satureja hortensis</i>	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Satureja obovata</i>	Leaf	--	110.0	-0.2	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . <i>Phytochemistry</i> 35(1): 83.
<i>Satureja obovata</i>	Leaf	--	110.0	-0.2	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . <i>Phytochemistry</i> 35(1): 83.
<i>Satureja obovata</i>	Leaf	--	300.0	0.25	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . <i>Phytochemistry</i> 35(1): 83.
<i>Satureja obovata</i>	Leaf	--	360.0	0.4	Arrebola, M.L., Navaro, M.C., Jimenez, J. and Ocana, F.A. 1994. Variations in Yield and Composition of the Essential Oil of <i>Satureja obovata</i> . <i>Phytochemistry</i> 35(1): 83.
<i>Schinus molle</i>	Fruit	--	--		*
<i>Skimmia arborescens</i>	Leaf	325.0	1560.0	3.26	*
<i>Tagetes minuta</i>	Leaf Essent. Oil	--	--		Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. <i>J. Essent. Oil Res.</i> 6 6: 617-621. <i>Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba</i> 5000 Argentina.

Tagetes minuta	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Tagetes minuta	Shoot Essent. Oil	--	--		*
Teucrium divaricatum	Leaf	--	12.0	-0.44	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 cyprium	Leaf	--	50.0	-0.34	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 micropodioides	Leaf	--	--	-0.46	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium kotschyianum	Leaf	--	18.0	-0.42	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.
Thymus riararum	Shoot	--	35.0	-0.48	Iglesias, J., Vila, R., Canigual, S., Bellakdhar, and Il Drissi, A. 1991. Analysis of the Essential Oil of Thymus riararum. J. Ess. Oil Res. 3: 43-4.
Thymus capitatus	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus vulgaris	Essential Oil	--	--		*
Thymus longicaulis	Shoot	--	--	-0.63	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 vulgaris	Plant	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Thymus longicaulis	Shoot	--	3.0	-0.62	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 capitatus	Shoot	--	--	-0.63	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	-0.62	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.
Trachyspermum ammi	Plant	--	--		*
Trichostemma dichotomum	Shoot	--	18.0	-0.55	Tucker, A.O. and Maciarelo, M.J. 1990. The Essential Oil of Trichostemma dichotomum. J. Ess. Oil Res. 2: 149-150.
Umbellularia californica	Plant	10.0	40.0	-0.45	*
Valeriana officinalis	Root	--	--		*
Valeriana officinalis	Leaf	--	35.0	-0.38	Father Nature's Pharmacy: The aggregate of all these three-letter citations.
Valeriana officinalis	Leaf Essent. Oil	--	1400.0	-0.8	*
Vitex agnus-castus	Leaf	--	1.4	-0.46	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
Zingiber officinale	Rhizome	32.0	2850.0		*
Zingiber officinale	Rhizome Essent. Oil	57000.0	106700.0		*