

List of Plants

BICYCLOGERMACRENE

Chemid

BICYCLOGERMACRENE

*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
Acinos alpinus	Shoot	--	30.0	-0.74	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	--	30.0	-0.74	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.)
Aloysia citrodora	Plant	24.0	168.0	0.06	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Angelica archangelica	Root	--	--		*
Artemisia salsoloides	Shoot	--	50.0	-0.66	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 pallens	Plant	78.0	348.0	1.35	*
Coriandrum sativum	Seed Essent. Oil	--	400.0		*
Dracocephalum parviflora	Plant	--	15.0	-1.03	*
Eucalyptus fasciculosa	Leaf	--	1.3	-0.28	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 melanophloia	Leaf	--	480.0	-0.2	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 citriodora	Leaf Essent. Oil	--	10000.0		*
Eucalyptus odorata	Leaf	--	40.0	-0.27	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 ochrophloia	Leaf	--	0.5	-0.28	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 stoatei	Leaf	--	100.0	-0.26	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 largisparsa	Leaf	--	4.6	-0.28	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 erythrandra	Leaf	--	245.0	-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 Eucalyptus.Part I.Subgenus Symphyomyrtus,Section Dumaria,Series Incrassatae.Flavour and Fragrance J.9(3):113-7

<i>Eucalyptus intertexta</i>	Leaf	--	5.5	-0.28	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 viridis</i>	Leaf	--	0.5	-0.28	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 porosa</i>	Leaf	--	5175.0	0.57	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	-0.28	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 incrassata</i>	Leaf	--	200.0	-0.25	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 sparsa</i>	Leaf	--	32095.0	5.0	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 dolichorhyncha</i>	Leaf	--	460.0	-0.2	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 angulosa</i>	Leaf	--	55.0	-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 leucoxylo</i>	Leaf	--	545.0	-0.19	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 desquamata</i>	Leaf	--	15.0	-0.28	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 lansdowneana</i>	Leaf	--	1540.0	-0.03	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 tetraptera</i>	Leaf	--	455.0	-0.2	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	--	8.0	-0.28	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	--	4065.0	0.39	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 ceratocorys</i>	Leaf	--	6.0	-0.28	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 populnea</i>	Leaf	--	1.8	-0.28	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>Humulus lupulus</i>	Fruit	--	10.0		*
<i>Hyssopus officinalis</i>	Shoot	--	520.0	1.36	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	--	540.0	1.45	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	--	760.0	2.39	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	--	480.0	1.19	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	--	430.0	0.98	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	--	510.0	1.32	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	--	460.0	1.1	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	--	520.0	1.36	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	--	460.0	1.1	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	--	420.0	0.93	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>Laurus nobilis</i>	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lindera benzoin</i>	Leaf	--	3.0	-0.28	*
<i>Melaleuca alternifolia</i>	Essential Oil	--	1300.0	-1.0	*
<i>Melissa officinalis</i>	Shoot	1.0	8.0	-0.84	Deutsche Apot. Ztit. 129(4):155-163. W. Schulze et al. Die Melisse.
<i>Mentha aquatica</i>	Shoot	--	5.0	-0.85	Umamoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	7.0	-0.84	Umamoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	6.0	-0.85	Umamoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	2.0	-0.86	Umamoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Mentha aquatica</i>	Shoot	--	2.0	-0.86	Umamoto, K., Arai, T., Nii, H. and Furukawa, K. 1993. A New Chemotype of <i>Mentha aquatica</i> Containing Sesquiterpene Alcohols as Major Components. Nippon Nogeikagaku Kaishi 67(10): 1417-1419.
<i>Metrosideros sclerocarpa</i>	Leaf	40.0	160.0	-0.25	*
<i>Micromeria fruticosa</i>	Shoot	--	50.0	-0.66	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of <i>Micromeria fruticosa</i> (L.) Druce subsp. <i>barbata</i> (Boiss et. Ky.), P.H. Davis. Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res 3: 477-479.
<i>Micromeria fruticosa</i>	Shoot	--	50.0	-0.66	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of <i>Micromeria fruticosa</i> (L.) Druce subsp. <i>barbata</i> (Boiss et. Ky.), P.H. Davis. Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res 3: 477-479.
<i>Moldavica parviflora</i>	Plant	--	15.0	-1.03	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Origanum majorana</i>	Plant	12.0	69.0	-0.64	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Origanum vulgare</i>	Plant	51.0	340.0	1.29	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Origanum vulgare</i>	Shoot Essent. Oil	--	14300.0		*

<i>Origanum majorana</i>	Essential Oil	--	27000.0	1.0	*
<i>Panax ginseng</i>	Root	--	--		*
<i>Panax ginseng</i>	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Panax quinquefolius</i>	Plant	--	--		*
<i>Pelargonium citrosum</i>	Shoot	--	0.6	-0.87	Matsuda, B. M., et al. 1996. Essential Oil Analysis and Field Evaluation of the Citrosa Plant ' <i>Pelargonium citrosum</i> ' as a Repellent Against Populations of <i>Aedes</i> Mosquitoes. <i>J. Am. Mosq. Contr. Assoc.</i> 12(1):69-74.
<i>Petroselinum crispum</i>	Leaf	--	5.16	-0.28	*
<i>Pycnanthemum pilosum</i>	Flower	19.0	70.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum montanum</i>	Shoot	63.0	72.0	-0.56	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pilosum</i>	Leaf	19.0	70.0	-0.27	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum incanum</i>	Shoot	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Satureja grandiflora</i>	Shoot	--	90.0	-0.48	Carnat, A., Chossegras, A., and Lamaison, J. 1991. The Essential Oil of <i>Satureja grandiflora</i> (L.) Scheele from France. <i>J. Ess. Oil Res.</i> , 3: 361-362
<i>Satureja douglasii</i>	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Tagetes lucida</i>	Shoot	--	35.0	-0.72	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor & Fragrance</i> , 12(1): 47-52.
<i>Tanacetum parthenium</i>	Root	--	4.0		*
<i>Teucrium polium</i>	Shoot	--	5.0	-0.85	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 gnaphalodes</i>	Shoot	--	1.5	-0.86	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>Thymus funkii</i>	Shoot	--	170.0	-0.14	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. <i>Flav. & Fragr. J.</i> 10(6): 379-383.
<i>Thymus funkii</i>	Shoot	--	170.0	-0.14	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. <i>Flav. & Fragr. J.</i> 10(6): 379-383.
<i>Vitex agnus-castus</i>	Leaf	--	--		*
<i>Vitex agnus-castus</i>	Flower	--	--		*
<i>Vitex agnus-castus</i>	Fruit	--	--		*