

# List of Plants

## CIS-SABINENE-HYDRATE

### Chemid

#### CISSABINENEHYDRATE

\*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
<i>Achillea millefolium</i>	Leaf	1.0	80.0	-0.29	*
<i>Angelica archangelica</i>	Root	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Angelica archangelica</i>	Root Essent. Oil	--	--		*
<i>Aralia cordata</i>	Root	--	--		*
<i>Artemisia annua</i>	Plant	1.0	200.0	0.65	*
<i>Artemisia salsoloides</i>	Shoot	--	2000.0	5.28	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of <i>Aremisia salsoloides</i> Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
<i>Calamintha nepeta</i>	Shoot	--	4.0	-0.24	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuoglu, M. 1992. Composition of the Essential Oil of <i>Calamintha nepeta</i> subsp. <i>glandulosa</i> . J. Ess. Oil Res. 4:189-190
<i>Calamintha nepeta</i>	Leaf	--	1.0	-0.32	Akgul, A., De Pooter, H.L., and De Buyck, L.F. 1991. The Essential Oils of <i>Calamintha nepeta</i> subsp. <i>glandulosa</i> and <i>Ziziphora clinopodioides</i> from Turkey. J. Ess. Oil Res., 3: 7-10.
<i>Citrus sinensis</i>	Fruit	--	0.1	-0.71	*
<i>Citrus reticulata</i>	Fruit	--	0.1	-0.71	*
<i>Cuminum cyminum</i>	Seed Essent. Oil	--	1500.0	-1.0	*
<i>Cuminum cyminum</i>	Seed	--	207.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Cuminum cyminum</i>	Fruit	--	207.0	1.41	*
<i>Elsholtzia polystachya</i>	Leaf	--	--	-0.32	Mathela, C.S., Melkani, A.B., Bisht, J.C., Pant, A.K., Bestmann, H.J., Erler, J., Kobold, U., Rauscher, J. and Vostrowsky, O. 1992. Chemical Varieties of Essential Oils from <i>Elsholtzia polystachya</i> from Two Different Locations in India. <i>Planta Medica</i> 58: 376-379.
<i>Elsholtzia polystachya</i>	Leaf	--	--	-0.32	Mathela, C.S., Melkani, A.B., Bisht, J.C., Pant, A.K., Bestmann, H.J., Erler, J., Kobold, U., Rauscher, J. and Vostrowsky, O. 1992. Chemical Varieties of Essential Oils from <i>Elsholtzia polystachya</i> from Two Different Locations in India. <i>Planta Medica</i> 58: 376-379.
<i>Laurus nobilis</i>	Leaf	--	--		*
<i>Melaleuca alternifolia</i>	Root Essent. Oil	--	2000.0		*
<i>Mentha spicata</i>	Essential Oil	--	--		*
<i>Micromeria varia</i>	Shoot	--	15.0	-0.21	Pedro, L.G., et al. 1995. Composition of the Essential oil of <i>Micromeria varia</i> Benth. ssp. <i>thymoides</i> (Sol. ex Lowe) Perez var. <i>thymoides</i> , and endemic species of the Madeira Archipelago. <i>flav. &amp; Fragr. J.</i> 10(3): 199-202.
<i>Micromeria teneriffae</i>	Leaf	--	20.0	-0.31	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	--	0.1	-0.25	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.

Micromeria fruticosa	Shoot	--	5.0	-0.23	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of Micromeria fruticosa (L.) Druce subsp. barbata (Boiss et. Ky.), P.H. Davis. Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res 3: 477-479.
Micromeria varia	Shoot	--	15.0	-0.21	*
Micromeria fruticosa	Shoot	--	5.0	-0.23	Fleisher, Z. and Fleisher, A. 1991. The Essential Oil of Micromeria fruticosa (L.) Druce subsp. barbata (Boiss et. Ky.), P.H. Davis. Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res 3: 477-479.
Monarda fistulosa	Plant	1.0	527.0	2.63	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Murraya koenigii	Leaf	--	12.0	-0.32	*
Myristica fragrans	Essential Oil	2000.0	5000.0	-1.0	*
Myristica fragrans	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Myristica fragrans	Seed Essent. Oil	2000.0	7000.0	1.0	*
Nepeta racemosa	Shoot	--	3.0	-0.24	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	--	3.0	-0.24	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	--	--		*
Origanum majorana	Leaf	100.0	7965.0	3.16	*
Origanum sipyleum	Shoot	--	35.0	-0.15	Baser, K.H.C., Ozek, T., Kurkcuglu, 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	--	--	-0.57	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	--	0.5	-0.56	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	--	--	-0.25	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	--	2200.0	-1.0	*
Origanum majorana	Essential Oil	--	75000.0	1.0	*
Origanum sipyleum	Shoot	--	45.0	-0.12	Baser, K.H.C., Ozek, T., Kurkcuglu, 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	--	50.0	-0.11	Baser, K.H.C., Ozek, T., Kurkcuglu, 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	1.0	46.0	-0.29	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant	--	0.9	-0.56	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	--	--	-0.25	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum onites	Shoot	--	--	-0.25	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 majorana	Leaf Essent. Oil	20000.0	580000.0		*
Origanum sipyleum	Shoot	--	50.0	-0.11	Baser, K.H.C., Ozek, T., Kurkcuglu, 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	--	60.0	-0.2	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	--	55.0	-0.1	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum minutiflorum	Shoot	60.0	80.0	-0.03	Baser, K.H.C., Tumen, G., Sezik, E. 1991. The Essential Oil of Origanum minutiflorum O. Schwarz and P.H. Davis. J. Ess. Oil Res. 3: 445-446.
Origanum onites	Plant	--	4.0	-0.54	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Piper nigrum	Fruit	--	--		*
Rosmarinus officinalis	Leaf	--	0.4	-0.32	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	Shoot Essent. Oil	--	19300.0	1.0	*
Rosmarinus officinalis	Leaf	--	--	-0.32	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 Essent. Oil	--	--		*
Rosmarinus officinalis	Plant	--	--		*
Rosmarinus officinalis	Leaf	--	0.4	-0.32	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.
Salvia officinalis	Leaf Essent. Oil	--	--		*
Salvia officinalis	Leaf	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Satureja obovata	Leaf	--	--		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	--	--		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 cilicica	Shoot	--	21.0	-0.19	Tumen, G. Baser, K.H.C. and Kirimer, N. 1993. The Essential Oil of Satureja cilicica P.H. Davis. J. Ess. Oil Res. 5: 547-548.
Satureja obovata	Leaf	--	--		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	--	0.01	-0.32	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 germanicolpitana	Plant	1.0	2.0	-0.55	J. Essential Oil, 4: 533.
Thymus longicaulis	Shoot	--	7.0	-0.23	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 funkii	Shoot	--	65.0	-0.07	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 capitatus	Shoot	--	--	-0.25	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.
Thymus saturejoides	Shoot	--	0.1	-0.25	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 funkii	Shoot	--	65.0	-0.07	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	--	20.0	-0.19	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 longicaulis	Shoot	--	--	-0.25	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	--	64.0	-0.07	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 longicaulis	Shoot	--	--	-0.25	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 broussonettii	Shoot	--	--	-0.25	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. saturojoides. J. Ess. Oil Res. 5: 45-53.