

# List of Plants



Chemid  
EUGENOL

## Dosage

LD50=2,680 (orl rat) Jim Duke's personal files.

LDLo=500 (orl rat)

LD50=3,000 (orl mus)

ADI=2.5 mg/kg Martindale's 28th

\*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
Acacia farnesiana	Flower	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Achillea millefolium	Plant	--	--		Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
Acorus calamus	Rhizome	30.0	300.0	-0.72	*
Agastache rugosa	Shoot	--	--		Jim Duke's personal files.
Agathosma betulina	Leaf Essent. Oil	--	--		*
Ageratum conyzoides	Shoot	--	800.0	0.15	R. Vera, (1993); Chemical composition of the essential oil Ageratum conyzoides L. (Asteraceae) from Reunion, Flavour Fragr. J., Vol.8, 257-260.
Aloysia citrodora	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Alpinia galanga	Rhizome	100.0	12000.0	1.41	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Alpinia officinarum	Rhizome	90.0	400.0	-0.7	*
Anethum graveolens	Plant	--	--		*
Anethum graveolens	Essential Oil	--	--		*
Anethum graveolens	Leaf	280.0	750.0	-0.73	*
Apium graveolens	Seed Essent. Oil	--	--		*
Apium graveolens	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
Artemisia dracunculus	Shoot Essent. Oil	--	--		*
Artemisia dracunculus	Shoot	--	--		*
Artemisia dracunculus	Essential Oil	--	--		*
Artemisia capillaris	Essential Oil	--	--		*
Aspalathus linearis	Leaf Essent. Oil	--	13600.0	-1.01	*
Boronia megastigma	Flower	--	--		*

<i>Calamintha nepeta</i>	Shoot	--	8.0	-0.49	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>Camellia sinensis</i>	Fruit Essent. Oil	--	--		*
<i>Camellia sinensis</i>	Fruit	--	--		*
<i>Cananga odorata</i>	Flower	--	--		*
<i>Capsicum annum</i>	Fruit	--	--		*
<i>Cinnamomum aromaticum</i>	Leaf	2.8	400.0	-0.77	*
<i>Cinnamomum verum</i>	Stem Bark	--	--		*
<i>Cinnamomum verum</i>	Bark Essent. Oil	61000.0	420000.0		*
<i>Cinnamomum camphora</i>	Plant	--	--		*
<i>Cinnamomum aromaticum</i>	Bark	1.8	375.0	-0.69	*
<i>Cinnamomum verum</i>	Leaf	1400.0	16800.0	1.16	Wealth of India.
<i>Cinnamomum verum</i>	Leaf Essent. Oil	701000.0	945000.0	1.56	*
<i>Cinnamomum aromaticum</i>	Plant	--	--		*
<i>Cinnamomum verum</i>	Root Bark	--	--		*
<i>Cinnamomum verum</i>	Essential Oil	--	--		*
<i>Cinnamomum verum</i>	Bark	140.0	16800.0	1.41	*
<i>Cistus ladaniferus</i>	Leaf	15.0	1050.0	-0.69	*
<i>Coffea arabica</i>	Seed	--	--		Jim Duke's personal files.
<i>Commiphora myrrha</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>Commiphora myrrha</i>	Essential Oil	--	2300.0	-0.7	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Croton lechleri</i>	Plant	--	--		Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
<i>Croton eluteria</i>	Bark	--	--		*
<i>Cuminum cyminum</i>	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Cuminum cyminum</i>	Fruit	--	--		*
<i>Curcuma longa</i>	Essential Oil	--	2100.0	-0.71	*
<i>Curcuma longa</i>	Tuber	--	--		*
<i>Curcuma longa</i>	Rhizome Essent. Oil	--	2100.0		*
<i>Cymbopogon winterianus</i>	Plant	66.0	233.0	-0.49	*
<i>Cynara cardunculus</i>	Essential Oil	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Daucus carota</i>	Seed	--	7000.0	1.39	*
<i>Dianthus caryophyllus</i>	Flower	0.6	870.0	-0.37	*
<i>Drimys winteri</i>	Bark	--	--		*
<i>Elsholtzia blanda</i>	Shoot	--	0.9	-0.49	Bestman, H.J., Rauscher, J., Vostrowsky O., Pant, A.K., Dev. V., Perihar, R. and Mathela, C.S. 1992. Constituents of the Essential Oil of <i>Elsholtzia blanda</i> Benth. (Labiatae). J. Ess. Oils Res. 4: 121-124
<i>Ephedra sinica</i>	Shoot	--	4.0	-0.49	*
<i>Eucalyptus citriodora</i>	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

<i>Eucalyptus brassiana</i>	Leaf	--	--	-0.82	Singh, A. K., Gupta, K. C., & Brophy, J. J. 1991. Chemical Constituents of the Leaf Essential Oil of <i>Eucalyptus brassiana</i> S. T. Blake. <i>Journal of Essential Oil Res.</i> 3: 45-7.
<i>Eucalyptus citriodora</i>	Essential Oil	--	--		*
<i>Ficus carica</i>	Fruit	--	--		*
<i>Ficus carica</i>	Flower	--	--		*
<i>Foeniculum vulgare</i>	Root Essent. Oil	--	2000.0		Jim Duke's personal files.
<i>Foeniculum vulgare</i>	Sprout Seedling	--	--		Jim Duke's personal files.
<i>Glycyrrhiza glabra</i>	Root	--	1.0		*
<i>Helianthus annuus</i>	Flower	--	--		*
<i>Helichrysum angustifolium</i>	Plant	--	--		*
<i>Hibiscus sabdariffa</i>	Calyx	--	--		*
<i>Humulus lupulus</i>	Essential Oil	--	--		*
<i>Hyacinthus orientalis</i>	Flower	0.32	4.6	-0.38	*
<i>Hyssopus officinalis</i>	Flower	62.0	624.0	-0.37	Flavour and Fragrance Journal, 6: 72.
<i>Hyssopus officinalis</i>	Leaf	2.0	443.0	-0.76	*
<i>Hyssopus officinalis</i>	Essential Oil	--	--		*
<i>Iris x germanica</i>	Rhizome	--	--		*
<i>Jasminum officinale</i>	Flower	3.0	10.0	-0.38	*
<i>Juglans regia</i>	Leaf	10.0	30.0	-0.81	*
<i>Lantana camara</i>	Leaf	--	--		*
<i>Laurus nobilis</i>	Leaf Essent. Oil	--	10200.0	-1.02	*
<i>Laurus nobilis</i>	Leaf	18.0	1335.0	-0.66	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Laurus nobilis</i>	Essential Oil	--	--		*
<i>Lavandula latifolia</i>	Plant	--	9.0	-0.61	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Lavandula x intermedia</i>	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Levisticum officinale</i>	Root	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Ligustrum japonicum</i>	Flower	--	--		*
<i>Lonicera japonica</i>	Flower	--	--		Schlotzhauer, W.S., S.D. Pair, and R.J. Horvat. 1996. Volatile constituents from the flowers of Japanese Honeysuckle. <i>J. Agric. Food Chem.</i> 44:206-209.
<i>Lycopersicon esculentum</i>	Fruit	--	--		*
<i>Magnolia kobus</i>	Flower	--	--		*
<i>Melaleuca viridiflora</i>	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Melaleuca bracteata</i>	Leaf	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Melia azedarach</i>	Wood	--	--		*
<i>Melissa officinalis</i>	Shoot	--	--		*
<i>Mentha pulegium</i>	Plant	160.0	320.0	-0.44	*
<i>Mentha pulegium</i>	Essential Oil	--	16000.0	-0.67	*
<i>Mentha x piperita</i>	Essential Oil	--	--		*
<i>Mentha spicata</i>	Essential Oil	--	--		*

Mentha arvensis var. piperascens	Essential Oil	--	--		Jim Duke's personal files.
Mentha longifolia	Shoot	--	--		*
Mentha spicata	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Mentha spicata	Shoot	--	--		*
Micromeria fruticosa	Shoot	--	--	-0.49	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 congesta	Leaf	5.0	15.0	-0.81	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 fruticosa	Shoot	--	--	-0.49	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 myrtifolia	Shoot	--	--	-0.49	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.
Morinda citrifolia	Fruit	--	0.01	-0.71	*
Morus alba	Plant	--	--		*
Myristica fragrans	Essential Oil	2000.0	3000.0	-0.7	*
Myristica fragrans	Seed	40.0	320.0	-0.93	*
Myristica fragrans	Seed Essent. Oil	1000.0	38000.0		*
Myroxylon balsamum	Plant	--	--		*
Myrtus communis	Shoot	1.0	15.0	-0.48	*
Narcissus tazetta	Flower	--	--		*
Nicotiana tabacum	Leaf	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ocimum sanctum	Leaf	4200.0	4970.0	-0.23	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Ocimum canum	Shoot	--	--		=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 tenuiflorum	Stem	20.0	100.0	-1.0	*
Ocimum basilicum	Essential Oil	300.0	857500.0	1.71	*
Ocimum gratissimum	Seed	--	1670.0	-0.46	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Ocimum basilicum	Plant	--	14.0	-0.61	*
Ocimum suave	Shoot	110.0	2860.0	1.82	J. Nat. Prod. 44: 308.
Ocimum kilimandscharicum	Shoot	--	3000.0	1.93	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	45.0	5580.0	-0.16	*
Ocimum basilicum	Leaf Essent. Oil	51200.0	270000.0	-0.31	*
Ocimum gratissimum	Plant	--	5340.0	2.29	*
Ocimum basilicum	Leaf	14.0	8575.0	0.19	*
Ocimum sp	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Ocimum kilimandscharicum	Flower	--	35.0	-0.38	Charles, D.J., and Simon, J.E. 1992. Essential Oil Constituents of Ocimum killimandscharicum Guerke. J. Ess. Oil Res., 4: 125-128.
Ocimum tenuiflorum	Inflorescence	--	--		*
Ocimum gratissimum	Shoot	--	4045.0	2.78	Vostrowsky, O., Garbe, W., Bestmann, H.J. and Maia, J.G.S. 1990. Essential Oil of Alfavaca, Ocimum gratissimum, from Brazilian Amazon. Zeitschr. Naturforschung 45(C): 1073-6.

Ocimum basilicum	Shoot Essent. Oil	5700.0	26700.0		*
Oenanthe javanica	Shoot	--	--		*
Origanum minutiflorum	Shoot	55.0	125.0	-0.39	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	Shoot	--	--	-0.49	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	--	255000.0	-0.35	*
Origanum majorana	Plant	200.0	2000.0	0.47	*
Origanum vulgare	Shoot	--	--		*
Panax ginseng	Root Essent. Oil	--	--		*
Pelargonium graveolens	Essential Oil	--	--		*
Peumus boldus	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Pimenta dioica	Leaf Essent. Oil	--	792400.0	1.14	*
Pimenta dioica	Fruit	3500.0	36000.0	1.41	*
Pimenta racemosa	Leaf	16.0	21840.0	1.75	*
Pimenta dioica	Flower Essent. Oil	--	543000.0		*
Pimenta dioica	Leaf	8348.0	12000.0	0.59	*
Pimpinella anisum	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pimpinella anisum	Plant	--	--		*
Pimpinella anisum	Seed Essent. Oil	--	--		*
Pimpinella anisum	Essential Oil	--	--		*
Piper nigrum	Leaf Essent. Oil	--	--		*
Piper nigrum	Fruit	--	--		*
Piper auritum	Leaf	--	--		Tramil
Piper betel	Leaf	535.0	17850.0	1.28	*
Pogostemon cablin	Plant	--	--		*
Polianthes tuberosa	Flower	--	--		*
Prunus dulcis	Flower	--	--		*
Prunus cerasus	Plant	--	--		*
Psidium guajava	Essential Oil	--	--		*
Ptychopetalum olacoides	Root	--	--		Ito, Y., Hirayama, F., Aikawa, Y., Kondo, H., Sagara, K., Shoji, J. 1995. Constituents from Muira-Puama (The Roots of Ptychopetalum olacoides). Nat. Med. 49, 4: 487.
Pueraria montana	Fruit Essent. Oil	--	--		*
Pycnanthemum setosum	Shoot	60.0	93.0	-0.42	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Ravensara aromatica	Bark	--	110.0	-0.72	*
Ravensara aromatica	Leaf	--	60.0	-0.81	*
Rosa gallica	Flower	2.0	4.0	-0.38	*
Rosa damascena	Essential Oil	--	--		*
Rosa centifolia	Essential Oil	--	--		*
Rosmarinus officinalis	Shoot	--	0.5	-0.49	Tucker, A. O. and Maciarelo, M. J. 1998. The essential oils of some rosemary cultivars. Flavor and Fragrance Journal, 1: 137-142. 1986.
Santalum album	Wood	--	--		*

<i>Sassafras albidum</i>	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Scutellaria baicalensis</i>	Root Essent. Oil	--	--		*
<i>Stevia rebaudiana</i>	Leaf	--	--		Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
<i>Stevia rebaudiana</i>	Flower	--	--		Kinghorn, A. D. (Ed.) 2002. Medicinal and Aromatic Plants - Industrial Profiles. Stevia. The genus Stevia. Taylor & Francis. New York, NY. 211 pp.
<i>Syzygium aromaticum</i>	Essential Oil	61000.0	627000.0	1.06	*
<i>Syzygium aromaticum</i>	Stem	36000.0	57000.0	1.0	*
<i>Syzygium aromaticum</i>	Leaf Essent. Oil	--	--		*
<i>Syzygium aromaticum</i>	Fruit	--	--		*
<i>Syzygium aromaticum</i>	Leaf	7920.0	26400.0	2.29	*
<i>Syzygium aromaticum</i>	Bark	--	--		*
<i>Syzygium aromaticum</i>	Bulb	--	--		*
<i>Syzygium aromaticum</i>	Flower	108655.0	180000.0	2.65	*
<i>Tanacetum parthenium</i>	Essential Oil	--	--		*
<i>Tanacetum parthenium</i>	Fruit Essent. Oil	--	1000.0		*
<i>Thymus funkii</i>	Shoot	--	5.0	-0.49	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. <i>Flav. &amp; Fragr. J.</i> 10(6): 379-383.
<i>Thymus cilicicus</i>	Shoot	--	0.1	-0.49	Tumen, G., Koyuncu, M., Kirimer, N., and Baser, K.H.C. 1994. Composition of the Essential Oil of <i>Thymus cilicicus</i> Boiss. & Bal. <i>J. Ess. Oil Res.</i> 6: 97-8.
<i>Thymus vulgaris</i>	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
<i>Thymus funkii</i>	Shoot	--	--		Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. <i>Flav. &amp; Fragr. J.</i> 10(6): 379-383.
<i>Thymus capitatus</i>	Shoot	--	21.0	-0.48	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. <i>Flav. &amp; Frag. J.</i> 8: 331-7.
<i>Tilia</i> sp.	Flower	--	--		*
<i>Trifolium pratense</i>	Flower	--	--		*
<i>Umbellularia californica</i>	Plant	10.0	40.0	-0.6	*
<i>Vaccinium myrtillus</i>	Fruit Juice	--	0.01		*
<i>Vaccinium corymbosum</i>	Fruit	--	0.02	-0.71	*
<i>Vaccinium macrocarpon</i>	Fruit	--	--		*
<i>Vanilla planifolia</i>	Fruit	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Viola odorata</i>	Leaf	--	--		*
<i>Viola odorata</i>	Flower	147.0	357.0	-0.38	*
<i>Zea mays</i>	Seed	--	--		*
<i>Zingiber officinale</i>	Rhizome Essent. Oil	--	--		*