

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for BENZALDEHYDE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Acacia farnesiana	Flower				Pakistan Encyclopedia Planta Medica. 1986.
Acacia farnesiana	Plant				Pakistan Encyclopedia Planta Medica. 1986.
Acinos suaveolens	Shoot		200.0	0.2732930857952227	Jim Duke's personal files.
Aesculus hippocastanum	Flower Essent. Oil		11000.0		Jim Duke's personal files.
Agastache foeniculum	Plant	1.0	135.0	0.05009904351318192	Mazza, G. and Kiehn, F.A. 1992. Essential Oil of Agastache foeniculum, A Potential Source of Methyl Chavicol. J. Ess. Oil Res., 4: 295-299.
Anacardium occidentale	Fruit				--
Aniba rosaeodora	Essential Oil		300.0	-0.7224772472681619	--
Arctium lappa	Root				--
Aspalathus linearis	Leaf Essent. Oil		15900.0	0.6952232834176496	--
Avena sativa	Seed				--
Brassica oleracea	Stem		0.02		--
Callicarpa americana	Leaf		0.55	-0.4683477845420869	--
Camellia sinensis	Leaf				--
Camellia sinensis	Shoot	2100.0	2300.0	5.505869120167252	--
Cananga odorata	Flower				--
Capsicum frutescens	Fruit				--
Capsicum annuum	Fruit				--
Carica papaya	Fruit		300.0	-0.06377099858893052	--
Carthamus tinctorius	Bud		0.1		--
Carthamus tinctorius	Leaf		0.04	-0.4691395911467352	--
Chrysanthemum x morifolium	Flower				Wealth of India.
Chrysanthemum parthenium	Shoot				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.
Cinnamomum verum	Leaf Essent. Oil		7000.0	-1.4141473605881718	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Cinnamomum aromaticum	Bark				--
Cinnamomum verum	Essential Oil				--
Cinnamomum verum	Bark Essent. Oil				--
Cinnamomum verum	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cinnamomum verum	Bark	26.0	104.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cinnamomum verum	Stem Bark				--
Cinnamomum verum	Plant	26.0	104.0	-0.260515026268546	--
Cistus ladaniferus	Leaf	28.0	1960.0	2.573819767375808	--
Citrullus lanatus	Fruit Juice				--
Cnicus benedictus	Shoot				Jim Duke's personal files.
Cucumis melo	Petiole				--
Cymbopogon winterianus	Plant				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Elsholtzia polystachya	Leaf		0.0	-0.4692016936255311	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 Elsholtzia polystachya from Two Different Locations in India. Planta Medica 58: 376-379.
Elsholtzia blanda	Shoot		13.0	-0.192655351551239	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 Elsholtzia blanda Benth. (Labiatae). J. Ess. Oils Res. 4: 121-124
Elsholtzia polystachya	Leaf		0.0	-0.4692016936255311	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 Elsholtzia polystachya from Two Different Locations in India. Planta Medica 58: 376-379.
Ephedra sinica	Shoot		15.0	-0.18767194580421803	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eriobotrya japonica	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
Eruca sativa	Hs				--
Eucalyptus punctata	Shoot		80.0	-0.02571125902603615	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus citriodora	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus bosistoana	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus occidentalis	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus albens	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus maidenii	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus diversicolor	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus siderophloia	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus polyanthemos</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus camaldulensis</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus blakelyi</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus moluccana</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus maculata</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus dealbata</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus tereticornis</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus saligna</i>	Shoot		280.0	0.472629315676062	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus botryoides</i>	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus oviformis	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus astringens	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus melliodora	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus globulus	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus cladocalyx	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus sideroxylon	Shoot		0.1	-0.2247983186195243	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Ficus carica	Fruit		1.0	-0.7971374823616315	--
Glycyrrhiza glabra	Root				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.
Glycyrrhiza glabra	Rhizome Essent. Oil				--
Glycyrrhiza glabra	Root Essent. Oil				--
Hibiscus sabdariffa	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
Hyacinthus orientalis	Flower	0.16	2.3	-1.0000000000000002	--
Hyssopus officinalis	Shoot				Indian Perfumer, 35: 51.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Iris x germanica</i>	Rhizome				--
<i>Jasminum officinale</i>	Flower				--
<i>Juglans nigra</i>	Essential Oil		28000.0	1.4141013736565446	--
<i>Juglans nigra</i>	Fruit				--
<i>Laurus nobilis</i>	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Leonurus cardiaca</i>	Plant		1.0	-1.2925553226400937	--
<i>Ligustrum japonicum</i>	Flower				--
<i>Lycopersicon esculentum</i>	Fruit				--
<i>Melaleuca viridiflora</i>	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
<i>Melaleuca leucadendra</i>	Essential Oil				--
<i>Melissa officinalis</i>	Tissue Culture				Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of <i>Melissa officinalis</i> L. Cultures. <i>J. Ess. Oil Res.</i> , 3: 111-114.
<i>Mentha spicata</i>	Essential Oil				--
<i>Mentha spicata</i>	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
<i>Micromeria fruticosa</i>	Shoot		0.0	-0.2250474889068754	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. <i>Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res</i> 3: 477-479.
<i>Micromeria fruticosa</i>	Shoot		0.0	-0.2250474889068754	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. <i>Aromatic Plants of the Holy Land and the Sinai. Part VII. J. Ess. Oil Res</i> 3: 477-479.
<i>Morus alba</i>	Plant				--
<i>Murraya koenigii</i>	Leaf		0.1	-0.4690464374285412	--
<i>Myroxylon balsamum</i>	Plant				--
<i>Narcissus tazetta</i>	Flower				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum basilicum	Essential Oil		700.0	-0.6916241263883828	--
Ocimum gratissimum	Shoot		0.1	-0.2247983186195243	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.
Origanum onites	Shoot		0.0	-0.2250474889068754	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.
Panax ginseng	Shoot				--
Perilla frutescens	Leaf Essent. Oil		16000.0	0.718924077170524	Kang, R., Helms, R., Stout, M.J., Jaber, H., Chen, Z., and Nakatsu, T. 1992. Antimicrobial Activity of the Volatile Constituents of Perilla frutescens and Its Synergistic Effects with Polygodial. J. Agric. Food Chem., 40: 2328-2330.
Perilla frutescens	Shoot Essent. Oil				Nguyen, X. D., La, D. M., Lu'u, D. C., Leclercq, P. A. 1995. Essential Oil Constituents from the Aerial Parts of Perilla frutescens (L.) Britton. J. Essent. Oil Res., 7(4): 429-432.
Petiveria alliacea	Root				Tramil
Petroselinum crispum	Leaf				--
Peumus boldus	Leaf		1.0	-0.46764913165563243	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus vulgaris	Stem Essent. Oil				--
Pogostemon cablin	Plant				--
Prunus persica	Fruit				--
Prunus cerasus	Fruit		3.0	-0.7922320209317137	--
Prunus serotina	Bark				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.
Prunus laurocerasus	Leaf	413.0	456.0	0.23876656464824977	--
Prunus persica	Seed				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Prunus dulcis	Seed		8200.0		--
Psidium guajava	Fruit		1000.0	1.6531405018822756	--
Rheum palmatum	Rhizome		1.5		--
Ribes nigrum	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Robinia pseudoacacia	Flower				--
Rosa damascena	Essential Oil				--
Rubus idaeus	Plant				--
Salvia sclarea	Plant				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Sambucus nigra	Leaf Essent. Oil				--
Sambucus nigra	Flower Essent. Oil				--
Sambucus nigra	Plant				--
Styrax benzoin	Plant				--
Syringa vulgaris	Flower				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Syzygium aromaticum	Flower				--
Syzygium aromaticum	Fruit				--
Tanacetum parthenium	Shoot				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.
Thymus capitatus	Shoot		0.0	-0.2250474889068754	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Trifolium pratense	Flower		12.0	1.0000000000000004	Buchnauer,G.,Jirovetz,L.,Nikiforov,A. 1996.Comparative Investigation of Essential Clover Flower Oils from Austria Using Gas Chromatography-Flame Ionization Detection,Gas Chromatography-Mass Spectrometry,and Gas Chrom.-Olfactometry.J.Agrc.Food Chem.44:1827-8
Triticum aestivum	Shoot				--
Umbellularia californica	Plant	70.0	280.0	1.5029713053954576	--
Vaccinium macrocarpon	Fruit				--
Vaccinium myrtillus	Fruit Juice				--
Vaccinium corymbosum	Fruit Juice				--
Vanilla planifolia	Fruit				--
Zea mays	Shoot				--
Zea mays	Silk Essent. Oil		1000.0		--
Zea mays	Husk Essent. Oil				--
Zingiber officinale	Rhizome				--