

Dr. Duke's Phytochemical and Ethnobotanical Database

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	200	0.2732930857952227	Jim Duke's personal files.
Aesculus hippocastanum	Flower Essent. Oil	--	11000		Jim Duke's personal files.
Agastache foeniculum	Plant	1	135	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	300	-0.7224772472681619	--
Arctium lappa	Root	--	--		--
Aspalathus linearis	Leaf Essent. Oil	--	15900	0.6952232834176496	--
Avena sativa	Seed	--	--		--
Brassica oleracea	Stem	0.02	0.02		--
Callicarpa americana	Leaf	--	0.55	-0.4683477845420869	--
Camellia sinensis	Shoot	2100	2300	5.505869120167252	--
Camellia sinensis	Leaf	--	--		--
Cananga odorata	Flower	--	--		--
Capsicum annuum	Fruit	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Capsicum frutescens	Fruit	--	--		--
Carica papaya	Fruit	--	300	-0.06377099858893052	--
Carthamus tinctorius	Bud	0.1	0.1		--
Carthamus tinctorius	Leaf	0.04	0.04	-0.4691395911467352	--
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.
Chrysanthemum x morifolium	Flower	--	--		Wealth of India.
Cinnamomum aromaticum	Bark	--	--		--
Cinnamomum verum	Plant	26	104	-0.260515026268546	--
Cinnamomum verum	Bark	26	104		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cinnamomum verum	Bark Essent. Oil	--	--		--
Cinnamomum verum	Leaf Essent. Oil	--	7000	-1.4141473605881718	--
Cinnamomum verum	Stem Bark	--	--		--
Cinnamomum verum	Essential Oil	--	--		--
Cinnamomum verum	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cistus ladaniferus	Leaf	28	1960	2.573819767375808	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
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 blanda	Shoot	13	13	-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.
Elsholtzia polystachya	Leaf	--	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	-0.18767194580421803	--
Eriobotrya japonica	Leaf	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
Eruca sativa	Hs	--	--		--
Eucalyptus albens	Shoot	--	0.1	-0.2247983186195243	Zrira, S. S., Benjlali, 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., Benjlali, 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 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 bosistoana</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 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.
<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 citriodora</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 cladocalyx</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 diversicolor</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 globulus</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
<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 maideni</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 melliodora</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 occidentalis</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 oviformis</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 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 punctata</i>	Shoot	--	80	-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.
<i>Eucalyptus saligna</i>	Shoot	--	280	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus siderophloia</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 sideroxylon</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>Ficus carica</i>	Fruit	--	1	-0.7971374823616315	--
<i>Glycyrrhiza glabra</i>	Rhizome Essent. Oil	--	--		--
<i>Glycyrrhiza glabra</i>	Root	75000	--		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.
<i>Glycyrrhiza glabra</i>	Root Essent. Oil	--	--		--
<i>Hibiscus sabdariffa</i>	Fruit	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
<i>Hyacinthus orientalis</i>	Flower	0.16	2.3	-1.0000000000000002	--
<i>Hyssopus officinalis</i>	Shoot	--	--		Indian Perfumer, 35: 51.
<i>Iris x germanica</i>	Rhizome	--	--		--
<i>Jasminum officinale</i>	Flower	--	--		--
<i>Juglans nigra</i>	Fruit	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juglans nigra	Essential Oil	28000	28000	1.4141013736565446	--
Laurus nobilis	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Leonurus cardiaca	Plant	1	1	-1.2925553226400937	--
Ligustrum japonicum	Flower	--	--		--
Lycopersicon esculentum	Fruit	--	--		--
Melaleuca leucadendra	Essential Oil	--	--		--
Melaleuca viridiflora	Leaf	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
Melissa officinalis	Tissue Culture	--	--		Gbolade, A.A. and Lockwood, G.B. 1991. The Constituents of Melissa officinalis L. Cultures. J. Ess. Oil Res., 3: 111-114.
Mentha spicata	Leaf	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Mentha spicata	Essential Oil	--	--		--
Micromeria fruticosa	Shoot	0	0	-0.2250474889068754	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 fruticosa	Shoot	--	0	-0.2250474889068754	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.
Morus alba	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Murraya koenigii	Leaf	--	0.1	-0.4690464374285412	--
Myroxylon balsamum	Plant	--	--		--
Narcissus tazetta	Flower	--	--		--
Ocimum basilicum	Essential Oil	--	700	-0.6916241263883828	--
Ocimum gratissimum	Shoot	0.1	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	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.
Perilla frutescens	Leaf Essent. Oil	--	16000	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.
Petiveria alliacea	Root	--	--		Tramil
Petroselinum crispum	Leaf	--	--		--
Peumus boldus	Leaf	1	1	-0.46764913165563243	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Phaseolus vulgaris	Stem Essent. Oil	--	--		--
Pogostemon cablin	Plant	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Prunus cerasus	Fruit	3	3	-0.7922320209317137	--
Prunus dulcis	Seed	8200	8200		--
Prunus laurocerasus	Leaf	413	456	0.23876656464824977	--
Prunus persica	Fruit	--	--		--
Prunus persica	Seed	--	--		--
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.
Psidium guajava	Fruit	--	1000	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	Plant	--	--		--
Sambucus nigra	Flower Essent. Oil	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sambucus nigra	Leaf Essent. Oil	--	--		--
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.
Trifolium pratense	Flower	--	12	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	280	1.5029713053954576	--
Vaccinium corymbosum	Fruit Juice	--	--		--
Vaccinium macrocarpon	Fruit	--	--		--
Vaccinium myrtillus	Fruit Juice	--	--		--
Vanilla planifolia	Fruit	--	--		--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Zea mays	Silk Essent. Oil	1000	1000		--
Zea mays	Shoot	--	--		--
Zea mays	Husk Essent. Oil	--	--		--
Zingiber officinale	Rhizome	--	--		--