

Dr. Duke's Phytochemical and Ethnobotanical Databases

List of Plants for BETA-BOURBONENE

Plant	Part	Low PPM	High PPM	StdDev	Reference
Acinos alpinus	Shoot		20.0	-0.2600573163374	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		20.0	-0.2600573163374	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.)
Agastache rugosa	Shoot				Jim Duke's personal files.
Boswellia sacra	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Boswellia sacra	Resin, Exudate, Sap		10000.0		Chiavari, G., Gtalletti, G. C., Piccaglia, R., Mohamud, M. A. 1991. Differentiation Between Resins Boswellia carterii and Boswellia frereana (Frankincense) of Somali Origin. J. Essent. Oil Res. 3 (3):185-186.
Calamintha nepeta	Shoot		5.0	-0.39348912091230565	Kirimer, N., Baser, K.H.C., Ozek, T. and Kurkcuoglo, M. 1992. Composition of the Essential Oil of Calamintha nepeta subsp. glandulosa. J. Ess. Oil Res. 4:189-190
Calamintha nepeta	Leaf		8.0	-0.5168073241260414	Akgul, A., De Pooter, H.L., and De Buyck, L.F. 1991. The Essential Oils of Calamintha nepeta subsp. glandulosa and Ziziphora clinopodioides from Turkey. J. Ess. Oil Res., 3: 7-10.
Callicarpa americana	Leaf		3.0	-0.5477054809216564	--
Chamaemelum nobile	Plant				--
Glechoma hederacea	Plant	1.0	6.0	-0.4787226141963027	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Hypericum perforatum	Plant	0.25	4.5	-0.489936417763645	--
Hyptis suaveolens	Shoot		15.0	-0.3045345845290352	Mallvarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of Hyptis suaveolens (L.) Poit. J. Ess. Oil Res. 5: 321.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Hyptis suaveolens</i>	Shoot		15.0	-0.3045345845290352	Mallvarapu, G.R., Ramesh, S., Kaul, P.N., Bhattacharya, A.K., and Rao, B.R.R. 1993. The Essential Oil of <i>Hyptis suaveolens</i> (L.) Poit. J. Ess. Oil Res. 5: 321.
<i>Leonotis leonurus</i>	Se		4.0		Pedro, L.G., Barroso, J.G., Marques, N.T., Ascensao, L., Pais, M.S.S. and Scheffer, J.J.C. 1991. Composition of the Essential Oil from Sepals of <i>Leonotis leonurus</i> R. Br. J. Ess. Oil Res. 3: 451-3
<i>Lonicera japonica</i>	Flower	0.001	0.062	-0.7693715123563478	Schlotzhauer, W.S., S.D. Pair, and R.J. Horvat. 1996. Volatile constituents from the flowers of Japanese Honeysuckle. J. Agric. Food Chem. 44:206-209.
<i>Lycopus virginicus</i>	Plant	53.0	132.0	0.46323688546044917	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Magnolia denudata</i>	Bulb				--
<i>Magnolia denudata</i>	Twig				--
<i>Magnolia denudata</i>	Bark				--
<i>Magnolia denudata</i>	Flower				--
<i>Melissa officinalis</i>	Shoot	1.0	48.0	-0.010984614464242788	Deutsche Apot. Zitt. 129(4):155-163. W. Schulze et al. Die Melisse.
<i>Mentha spicata</i>	Leaf	2.0	50.0	-0.2572628070428749	--
<i>Mentha pulegium</i>	Plant	15.0	30.0	-0.2993017571188262	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Mentha spicata</i>	Essential Oil				--
<i>Mentha longifolia</i>	Shoot	1.0	535.0	4.321101307401028	--
<i>Micromeria congesta</i>	Leaf	45.0	55.0	-0.22636465024725982	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 fruticosa</i>	Shoot		10.0	-0.3490118527206704	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.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Micromeria myrtifolia	Shoot		0.1	-0.4370768437401082	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		10.0	-0.3490118527206704	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.
Micromeria varia	Shoot	0.0			--
Micromeria varia	Shoot		0.0	-0.43796638910394087	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. flav. & Fragr. J. 10(3): 199-202.
Monarda fistulosa	Plant	1.0	62.0	-0.06007394768219075	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda didyma	Plant	5.0	70.0	-2.6699532303189845E-4	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Monarda didyma	Leaf	50.0	90.0	-0.010077552677954457	--
Monarda didyma	Flower		10.0	-0.5826574853920841	Flavour and Fragrance Journal, 6: 80.
Myroxylon balsamum	Plant				--
Nepeta racemosa	Shoot		50.0	0.006806292812411298	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. J. Ess. Oil Res. 5: 215-7.
Nepeta racemosa	Shoot		50.0	0.006806292812411298	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. J. Ess. Oil Res. 5: 215-7.
Ocimum gratissimum	Flower	95.0	145.0	1.9537073405462937	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
Ocimum basilicum	Plant				--
Ocimum basilicum	Shoot Essent. Oil		3800.0	-1.183040531089796	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum gratissimum	Leaf	40.0	70.0	-0.13367017986041468	Charles, D.J. and Simon, J.E. 1992. A New Geraniol Chemotype of <i>Ocimum gratissimum</i> L. J. Ess. Oil Res. 4: 231-234.
Origanum vulgare	Shoot Essent. Oil		7500.0	-0.07953213654385216	--
Origanum vulgare	Plant		8.0	-0.46377087610651296	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum vulgare	Plant		9.0	-0.45629500706161813	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum vulgare	Plant		2.0	-0.5086260903758821	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Panax ginseng	Shoot				--
Panax ginseng	Flower Essent. Oil				--
Pelargonium graveolens	Essential Oil				--
Pelargonium citrosum	Shoot		1.0	-0.4290709354656138	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. J. Am. Mosq. Contr. Assoc. 12(1):69-74.
Perilla frutescens	Shoot Essent. Oil		12000.0	1.262572667633647	Nguyen, X. D., La, D. M., Lu'u, D. C., Leclercq, P. A. 1995. Essential Oil Constituents from the Aerial Parts of <i>Perilla frutescens</i> (L.) Britton. J. Essent. Oil Res., 7(4): 429-432.
Pycnanthemum tenuifolium	Shoot	16.0	400.0	3.120215066226877	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum montanum	Shoot	91.0	104.0	0.4871607892820716	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Pycnanthemum pilosum	Leaf	10.0	35.0	-0.34995727742972005	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Pycnanthemum albescens</i>	Shoot	16.0	54.0	0.04238810736571947	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum virginianum</i>	Shoot	6.0	232.0	1.6257788549879333	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Pycnanthemum pilosum</i>	Flower	10.0	35.0	-0.11296029540349557	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Salvia gilliesii</i>	Shoot		44.0	-0.04656642901755096	Velasco-Negueruela, A. et al. 1993. The Essential Oil of <i>Salvia gilliesii</i> Benth. J. Ess. Oil Res. 5: 319-320.
<i>Salvia officinalis</i>	Leaf Essent. Oil				--
<i>Satureja montana</i>	Plant	4.0	85.0	0.11187104035039094	--
<i>Satureja cilicica</i>	Shoot		2.0	-0.42017548182728676	Tumen, G. Baser, K.H.C. and Kirimer, N. 1993. The Essential Oil of <i>Satureja cilicica</i> P.H. Davis. J. Ess. Oil Res. 5: 547-548.
<i>Satureja douglasii</i>	Plant		533.0	3.4610603724632867	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Sideritis mugronensis</i>	Flower	10.0	15.0	-0.48871804739436636	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
<i>Sideritis pauli</i>	Shoot		10.0	-0.3490118527206704	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of <i>Sideritis pauli</i> Pau. FFJ7: 47-8. 1992.
<i>Sideritis germanicolpitana</i>	Plant	6.0	9.0	-0.45629500706161813	J. Essential Oil, 4: 533.
<i>Sideritis mugronensis</i>	Leaf	15.0	25.0	-0.41175359102095016	Manez, S., Jimenez, A., and Villar, A. 1991. Volatiles of <i>Sideritis mugronensis</i> Flower and Leaf. J. Ess. Oil Res., 3: 395-397.
<i>Sideritis athoa</i>	Shoot		4.0	-0.4023845745506327	Ozek, T., Baser, K.H.C. and Tumen, G. 1993. The Essential Oil of <i>Sideritis athoa</i> Papanikolaou Et Kokkini. J. Ess. Oil Res. 5: 669-670.
<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.

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<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>	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
<i>Teucrium salviastrum</i>	Shoot		1.56	-0.42408948142815067	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
<i>Teucrium kotschyianum</i>	Leaf		640.0	3.3887196948397023	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium asiaticum</i>	Shoot		0.87	-0.4302273444385963	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
<i>Teucrium scorodonia</i>	Shoot		4.88	-0.3945565753489049	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
<i>Teucrium pseudoscorodonia</i>	Shoot		2.45	-0.4161725276900396	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
<i>Teucrium divaricatum</i>	Leaf		90.0	-0.010077552677954457	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
<i>Teucrium oxylepis</i>	Shoot		2.92	-0.4119916644800259	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.

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Teucrium micropodioides	Leaf		20.0	-0.44265174781656524	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium cyprium	Leaf		105.0	0.08261691770889089	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
Teucrium oxylepis	Shoot		0.34	-0.43494193486690963	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six Teucrium Species from the Iberian Peninsula and the Balearic Islands. Phytochemistry 29(4): 1165-9.
Thymus cilicicus	Shoot		47.0	-0.019880068102569832	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 funkii	Shoot		8.0	-0.36680275999732453	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 x citriodorus	Plant		20.0	-0.37406044756777473	Stahl-Biskup, E. and Holthuijzen, J. 1995. Essential oil and glycosidally bound volatiles of lemon-scented thyme, Thymus x citriodorus (Pers.) Schreb. Flav. & Fragr. J. 10: 225-229.
Thymus longicaulis	Shoot		9.0	-0.3579073063589975	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 longicaulis	Shoot		0.0	-0.43796638910394087	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 riatarum	Shoot		0.1	-0.4370768437401082	Iglesias, J., Vila, R., Canigual, S., Bellakdhar, and I Idrissi, A. 1991. Analysis of the Essential Oil of Thymus riatarum. J. Ess. Oil Res. 3: 43-4.

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Thymus funkii	Shoot		8.0	-0.36680275999732453	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 longicaulis	Shoot		9.0	-0.3579073063589975	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 mastichina	Plant		10.0	-0.4488191380167233	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Vitex agnus-castus	Leaf		0.2	-0.5650084487272009	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.