

List of All Chemicals

P Teucrium cyprium (Lamiaceae)

Common name(s)

'Cyprus' Germander

How used

Medicinal

*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.

Chemical	Part	Low PPM	High PPM	StdDev	*Reference
	All				
1,8-CINEOLE	Leaf	--	--	-0.53	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.

Activities (67)

(-)-Chronotropic 87 nl/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
(-)-Inotropic 87 nl/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
Acaricide LC100=6 uM	
Allelopathic	
Allergenic	
Anesthetic	
Anthelmintic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiacetylcholinesterase IC50=41 ug/ml	
Antiallergic	J. Food Hyg. Soc. Jap. 33(6): 569.
Antibacterial 50 ppm	
Antibronchitic	
Anticariogenic	
Anticatarrh	Martindale's 29th
Anticholinesterase IC50=50-70	
Antifatigue	
Antihalitosis	American Health, 12(4): 17, 1993.
Antiinflammatory	
Antilaryngitic	
Antinociceptive	
Antipharyngitic	
Antiplaque	
Antirheumatic	
Antirhinitic	
Antiseptic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antisinusitic	
Antispasmodic	
Antistaphylococcic 50 ppm	
Antitussive	
Antiulcer	
CNS-Stimulant	
Candidicide	
Carcinogenic	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Choleretic	
Convulsant	
Counterirritant	Martindale's 29th
Cytochrome-P450-Inducer	
Decongestant	
Degranulant 0.3 ul/ml	
Dentifrice	Martindale's 29th

Edemagenic inj	
Expectorant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
FLavor FEMA 1-200	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Fungicide	
Gastroprotective	
Gram(+)icide	
Gram(-)icide	
Hepatotonic	
Herbicide IC50=78 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Hypotensive	
Inflammatory inj	
Insectifuge	
Irritant	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
Myorelaxant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Nematicide	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Neurotoxic	
P450-Inducer	
Pediculicide 2.3 x pyrethrin	
Perfume	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Pesticide	
Rubefacient	Martindale's 29th
Secretagogue	
Sedative	
Spasmogenic	
Surfactant	
Testosterone-Hydroxylase-Inducer	
Transdermal	
Trichomonicide LD100=1,000 ug/ml	

1-OCTEN-3-OL	Leaf	--	--	-0.55	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.
ALLO-AROMADENDRENE	Leaf	--	--	-0.2	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.
ALPHA-CADINENE	Leaf	--	1090.0	2.64	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.
ALPHA-CARYOPHYLLENE	Leaf	--	375.0	1.45	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.
ALPHA-CEDRENE	Leaf	--	195.0	1.24	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.

Activities (3)

Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Perfume	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

ALPHA-COPAENE	Leaf	--	65.0	0.03	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.
ALPHA-HIMACHALENE	Leaf	--	--	-1.0	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.
ALPHA-HUMULENE	Leaf	--	50.0	-0.38	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.

Activities (2)

Antitumor	Zheng, G-Q., Kenney, P.M., and Lam, L.K.T. Sesquiterpenes From Clove (Eugenia caryophyllata) As Potential Anticarcinogenic Agents. Journal of Natural Products 55(7): 999-1003, 1992.
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

ALPHA-PINENE	Leaf	--	430.0	-0.2	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.
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Activities (28)

Allelochemic	
Allergenic	
Antiacne	
Antibacterial	
Antifeedant	
Antiflu	Economic & Medicinal Plant Research, 5: 195.
Antiinflammatory 500 mg/kg	
Antipneumonic	
Antiseptic	
Antispasmodic	
Antistaphylococcic	
Antiviral	Economic & Medicinal Plant Research, 5: 195.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Coleoptophile	
Expectorant	Michael Castleman 1991. The Healing Herbs. Rodale Press, Emmaus, PA 436 pp.
FLavor FEMA 15-150	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Herbicide IC50=30 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Insecticide 0.82 uM/fly	
Insectifuge 50 ppm	
Insectiphile	J. Stored. Prod. Res., 22:141, 1986.
Irritant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
P450-2B1-Inhibitor IC50=0.087 uM	
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Sedative	Lawrence Review of Natural Products, Jun-90.
Spasmogenic	
Tranquilizer	Lawrence Review of Natural Products, Jun-90.
Transdermal	

ALPHA-TERPINENE Leaf -- 130.0 -0.25 Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.

Activities (13)

ACE-Inhibitor 100 ug/ml (weak activity)	
Acaricide	
Aldose-Reductase-Inhibitor 100 ug/ml	Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.
Antiacetylcholinesterase IC50=1.0 mM	
Antinitrosaminic	
Antispasmodic	
FLavor FEMA 1-40	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Insecticide 0.86 uM/fly	
Insectifuge	
P450-2B1-Inhibitor IC50=0.76 uM	
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Spasmogenic	

ALPHA-TERPINEOL Leaf -- 145.0 -0.34 Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.

Activities (23)

ACE-Inhibitor 100 ug/ml (weak activity)	
Aldose-Reductase-Inhibitor 100 ug/ml	Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.
Allelopathic	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
Antiacne	
Antibacterial MIC=800-1,600 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Anticancer	Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY.
Anticariogenic MIC=800-1,600 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Antiinflammatory	
Antiproliferant	
Antiseptic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Cicatrizant ED50=240 ug/g mus	
FLavor FEMA 5-40	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Insecticide 1.29 uM/fly	
Interleukin-6-Inhibitor	
Mosquitofuge > Deet	
Motor-Depressant	Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	
Sedative	Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC
Termiticide IC100=5 mg/g	
Transdermal	
Vulnerary ED50=240 ug/g mus	

ALPHA-TERPINOLENE	Leaf	--	--	-0.5	Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.
ANETHOLE	Leaf	--	90.0	-0.33	Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.

Activities (36)

Allergenic	
AntiNF-kB	
AntiTNF	
Antibacterial MBC=200 ug/ml	
Antigenotoxic 40-400 mg/kg orl mus	
Antihepatotic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiinflammatory	
Antioxidant	
Antiradicular	
Antisalmonella MIC=200 ug/ml	
Antiseptic 200 ug/ml	
Antispasmodic	
Antitumor	
Antiyeast	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide	
Carminative	Merck 11th Edition
Dermatitogenic	
Digestive	Michael Castleman 1991. The Healing Herbs. Rodale Press, Emmaus, PA 436 pp.
Estrogenic	Australian J. Med Herbalism, 7: 29.
Expectorant	Martindale's 29th
Fungicide	Wolf, R.B. Effects Of p-Methoxycinnamaldehyde From Star Anise And Related Cinnamic Acid Derivatives On Velvetleaf Germination. Journal of Natural Products, 49(1): 156-158, 1986.
Gastrostimulant	
Hepatotoxic 695 mg/kg orl mus/days	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Immunostimulant	Economic & Medicinal Plant Research, 1: 124.
Insecticide	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Irritant	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
Lactagogue	
Leucocytogenic	Economic & Medicinal Plant Research, 1: 124.
Mutagenic	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Nephroprotective	Toxicol Appl. Pharmacol. 1996.
Pesticide	
Secretagogue	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Secretolytic	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Sweetener 13 x sucrose	
Sympathomimetic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

BETA-BISABOLENE Leaf -- -- -0.43 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.

Activities (6)

Abortifacient	
Antirhinoviral IC50=1,800?	Denyer, C.V., Jackson, P., Loakes, D.M., Ellis, M.R., and Yound, D.A.B. Isolation of Antirhinoviral Sesquiterpenes From Ginger (Zingiber officinale). Journal of Natural Products, 57(5): 658-662, 1994.
Antiulcer IC57=100 mg/kg	Yamahara, J., et al. Stomachic principles in ginger. II. Pungent and anti-ulcer effects of low polar constituents isolated from ginger, the dried rhizoma of... Yakugaku Zasshi 112: 645-655 (1992).
Antiviral IC50=1,800?	Denyer, C.V., Jackson, P., Loakes, D.M., Ellis, M.R., and Yound, D.A.B. Isolation of Antirhinoviral Sesquiterpenes From Ginger (Zingiber officinale). Journal of Natural Products, 57(5): 658-662, 1994.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Stomachic	

BETA-BOURBONENE Leaf -- 105.0 0.08 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.

BETA-CARYOPHYLLENE Leaf -- 600.0 -0.04 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.

BETA-CUBEBENE Leaf -- -- -0.32 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.

BETA-GUAIENE Leaf -- 610.0 1.73 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.

BETA-PHELLANDRENE Leaf -- 50.0 -0.34 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.

Activities (3)

Expectorant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.				
Fungicide	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. <i>Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D)</i> , 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.				
Perfumery	Merck 11th Edition				

BETA-PINENE	Leaf	--	115.0	-0.26	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
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Activities (13)

Allergenic					
Antiinflammatory					
Antiseptic	Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.				
Antispasmodic					
Candidicide					
Flavor FEMA 15-600	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry				
Herbicide	Keeler, R.F. and Tu, A.T. eds. 1991. <i>Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6)</i> Marcel Dekker, Inc. NY. 665 pp.				
Insectifuge	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.				
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. <i>Flavor and Fragrance Substances</i> , in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals.</i> VCH Publishers, New York. 3560-4253.				
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry				
Pesticide					
Spasmogenic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals.</i> The Pharmaceutical Press, London. 296pp.				
Transdermal					

BORNEOL	Leaf	--	65.0	-0.4	Arnold, N., Bellomaria, B., Velentini G. and Rafaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. <i>J. Ethnopharm.</i> 35: 105-113.
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Activities (35)

(-)-Chronotropic 29 ug/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
(-)-Inotropic 29 ug/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
Allelochemic	
Analgesic	
Antiacetylcholine	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antibacterial MIC=125-250 ug/ml	
Antibronchitic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiescherichic MIC=125 ug/ml	
Antifeedant	
Antiinflammatory	
Antiotitic	
Antipyretic	
Antisalmonella MIC=125 ug/ml	
Antispasmodic ED50=0.008 mg/ml	
Antistaphylococcic MIC=250 ug/ml	
Antiyeast MIC=250 ug/ml	
CNS-Stimulant	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
CNS-Toxic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Candidicide MIC=250 ug/ml	
Choleretic	
FLavor FEMA<1	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Fungicide	
Hepatoprotective	
Herbicide IC50=470 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Herbicide IC50=470 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Inhalant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Insect-Repellent	
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Irritant	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
Myorelaxant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	
Sedative	Medline (post 1990 searches filed in my computer)
Tranquilizer	

CAMPHENE Leaf -- -- -0.19 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.

Activities (9)

Allelopathic	Wright, C.W. (Ed) 2002. Medicinal & Aromatic Plants - Industrial Profiles. Artemisia. 344pp. Maffei, M. (Ed) 2002. Vetiveria. The Genus Vetiveria. Taylor & Francis. NY, NY. 191pp. Southwell, I., Lowe, R. (Eds) 1999. Tea Tree. The Genus Melaleuca. Harwood Acad. Pub. Amsterdam, Netherlands.
Antilithic?	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antioxidant	Jim Duke's personal files.
Expectorant	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
FLavor FEMA 15-175	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Hypocholesterolemic?	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Pesticide	
Spasmogenic	Fitoterapia No.59-1984.

CARVACROL Leaf -- 155.0 -0.34 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.

Activities (37)

Allergenic	
Anesthetic	
Anthelmintic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antialzheimeran?	L. Gracza (1985) as cited by Buchbauer re antiacetylcholinesterase.
Antiatherosclerotic IC50=5.53 uM	
Antibacterial MIC 170-290	Chalchat, J.C. et Garry, R.P.*, Bastide, P., Fabre, F. et Malhuret, R. Correlation Composition Chimique/Activite Antimicrobienne: V - Contribution a la Comparaison de 2 Methodes de Determination Des Cml. Plantes medicinales et phytotherapie, 25: 184-193.
Antibacterial MIC=39-625	Russell, G. B., Phytochemical resources for crop protection, N. Z. J. Technol., 2, 1986, 127-134.
Anticholinesterase?	L. Gracza (1985) as cited by Buchbauer re antiacetylcholinesterase.
Antidiuretic	Lawrence Review of Natural Products, Mar-92.
Antiinflammatory IC50=4 uM	
Antimelanomic IC50=120 uM/l	
Antioxidant	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.
Antioxidant (LDL) IC50=5.53 uM	
Anti plaque MIC=39-625 ug/ml	Osawa, K., Matsumoto, T., Maruyama, T., Takiguchi, T., Okuda, K., and Takazoe, I., Studies of the antibacterial activity of plant extracts and their constituents against periodontopathic bacteria, Bull Tokyo Dent. Coll., 31 (1), 1990, 17-21
Antiprostaglandin	
Antiradicular 600 x thymol	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.
Antiseptic 1.5 x phenol	
Antispasmodic	
Antistaphylococcic	
Antistreptococcic	
Antitussive	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Candidicide MIC<0.1 ug/ml	
Candidicide 100- 150 ug/ml	
Carminative	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Cyclooxygenase- Inhibitor #NAME?	
Enterorelaxant	J. Aromatherapy 4: 22.
Expectorant	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Flavor FEMA 10- 125	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Insectifuge	
Irritant	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Nematicide MLC=1 mg/ml	
Pesticide	
Prostaglandin- Inhibitor	
Tracheorelaxant	
Trichomonicide LD100=150 ug/ml	
Vermifuge	

CARYOPHYLLENE- Leaf -- 275.0 0.74 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.

Activities (8)

Antiedemic	Shimizu,*M., et al. 1990. Anti-inflammatory Constituents of Topically Applied Crude Drugs. IV.1) Constituents and Anti-inflammatory Effect of Paraguayan Crude Drug 'Alhucema' (Lavandula latifolia Vill.)2). Chem. Pharm. Bull. 38(8): 2283-2284, 1990.
Antifeedant	Bettarini, F., Borgonovi, G.E., et al. 1991. Antiparasitic Compounds from East African Plants: Isolation and Biological Activity of Anonaine, Matricarianol, Canthin-6-One and Caryophyllene Oxide. Insect Sci. Applic. 14(1): 93-99, 1993.
Antiinflammatory	Shimizu,*M., et al. 1990. Anti-inflammatory Constituents of Topically Applied Crude Drugs. IV.1) Constituents and Anti-inflammatory Effect of Paraguayan Crude Drug 'Alhucema' (Lavandula latifolia Vill.)2). Chem. Pharm. Bull. 38(8): 2283-2284, 1990.
Antitumor	Zheng, G-Q., Kenney, P.M., and Lam, L.K.T. Sesquiterpenes From Clove (Eugenia caryophyllata) As Potential Anticarcinogenic Agents. Journal of Natural Products 55(7): 999-1003, 1992.
Calcium-Antagonist ED50=32 uM gpg	
Fungicide	
Insecticide	Bettarini, F., Borgonovi, G.E., et al. 1991. Antiparasitic Compounds from East African Plants: Isolation and Biological Activity of Anonaine, Matricarianol, Canthin-6-One and Caryophyllene Oxide. Insect Sci. Applic. 14(1): 93-99, 1993.
Pesticide	

CITRONELLAL	Leaf	--	80.0	-0.39	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.
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Activities (20)

Acaricide	
Allergenic	
Antibacterial	
Antiseptic 3.8 x phenol	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antistaphylococcic	
Antistreptococcic	
Candidicide	
Embryotoxic	
FLavor FEMA <1	Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry
Fungicide	
Insectifuge	Merck 11th Edition
Irritant	Zebowitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Motor-Depressant	Buchbauer et al, e.g. Buchbauer et al, 1993. Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi, R., Buttery, R.G and Sugisawa, H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC
Mutagenic?	
Nematicide MIC 1 mg/ml	Shoyakugaku Zasshi, 44: 183.
P450-2B1-Inhibitor IC50=1.56 uM	
Perfumery	
Pesticide	
Sedative ED=1 mg/kg	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Teratogenic	

DELTA-CADINENE	Leaf	--	1250.0	4.98	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.
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Activities (9)

Aldose-Reductase-Inhibitor	
Antiacne	
Antibacterial MIC800 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Anticariogenic MIC800 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Antistreptococcic	
Cytochrome-P450-Inducer	
P450-Inducer	
Pesticide	
Testosterone-Inducer	

EO	Leaf	--	13000.0	0.13	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.
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GAMMA-CADINENE	Leaf	--	--	-0.49	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.
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GAMMA-ELEMENE	Leaf	--	--	-0.91	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.
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GAMMA-TERPINENE Leaf -- 210.0 0.03 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.

Activities (11)

ACE-Inhibitor 100 ug/ml (weak activity)

Acaricide

Aldose-Reductase-Inhibitor 100 ug/ml Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.

Antiacetylcholinesterase IC23=1.2 mM

Antifeedant Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Antioxidant Jim Duke's personal files.

FLavor FEMA 1-40 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Insectifuge Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Irritant Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

Perfumery Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Pesticide

ISOPULEGOL Leaf -- -- -0.42 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.

Activities (3)

Antiacetylcholinesterase IC50=2.0 mM

FLavor FEMA 5-30 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Perfumery Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

LIMONENE Leaf -- 39.0 -0.41 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.

Activities (60)

AChE-Inhibitor	Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, <i>Oest. Biochem. & Physiol.</i> , 23, 1985, 383-8.
Acaricide LC100=8 uM	
Allelochemic	
Allergenic 1/20th carene	
Antiacetylcholinesterase IC22-26=1.2 mM	
Antiadenomic	
Antialzheimeran?	Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, <i>Oest. Biochem. & Physiol.</i> , 23, 1985, 383-8.
Antiasthmatic	
Antibacterial	Revista Itiliana Eppos, 12: 5, 1994.
Anticancer	
Antiesophagitic	
Antifeedant	
Antiflu	Economic & Medicinal Plant Research, 5: 195.
Antiinflammatory	
Antilithic	
Antilymphomic	
Antimetastatic (Stomach)	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antiobesity	
Antiseptic	
Antispasmodic ED50=0.197 mg/ml	Fitoterapia No.59-1984.
Antitumor	
Antitumor (Breast)	
Antitumor (Colon)	
Antitumor (Pancreas)	
Antitumor (Prostate)	
Antitumor (Stomach)	
Antiviral	
Apoptotic	
Bronchoprotectant	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidistat	
Chemopreventive	
Cholesterolytic	
Detoxicant	
Enterocontractant	J. Aromatherapy 4: 22.
Expectorant	
FLavor	
Fungiphilic	J. Agric. Food Chem. 43: 2283.
Fungistat	
GST-Inducer	
Herbicide IC50=45 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Histaminic	
Immunomodulator	
Insecticide 0.37 uM/fly	
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Interleukin-6-Inhibitor	
Irritant	
Lipolytic	
Myorelaxant 50 mg/kg	
NO-Genic	
Nematicide IC=100 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Ornithine-Decarboxylase-Inhibitor ~750 mg/kg (diet)	
Ozone-Scavenger	
P450-Inducer	
Peristaltic	
Pesticide	
Photosensitizer	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
Sedative ED=1-32 mg/kg	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Transdermal	

LINALOL	Leaf	--	80.0	-0.4	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.
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MYRCENE	Leaf	--	39.0	-0.16	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.
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Activities (22)

ACE-Inhibitor 100 ug/ml

Aldose-Reductase-Inhibitor 100 ug/ml Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.

Allergenic

Analgesic Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.

Antibacterial

Anticonvulsant

Antimutagenic Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.

Antinitrosaminic

Antinociceptive 10-20 mg/kg ipr mus Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.

Antinociceptive 20-40 mg/kg scu mus Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.

Antioxidant Jim Duke's personal files.

Antispasmodic Jim Duke's personal files.

Chemopreventive Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

FLavor FEMA 0.5-9 Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry

Fungicide Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.

Hypothermic

Insectifuge

Irritant Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

Myorelaxant 100-200 mg/kg

P450-2B1-Inhibitor IC50=0.14 uM

Perfumery Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Pesticide

MYRTENAL	Leaf	--	65.0	0.75	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.
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Activities (5)

Antimalarial IC50=5-50 ug/ml Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

Antiplasmodial IC50=5-50 ug/ml Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

Herbicide Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.

Perfumery Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry

Pesticide

MYRTENOL	Leaf	--	180.0	1.1	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.
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Activities (2)

Antimalarial IC50=5-50 ug/ml Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

Antiplasmodial IC50=5-50 ug/ml Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

NEROL	Leaf	--	50.0	-0.13	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.
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Activities (10)					
Antibacterial	HerbalGram No. 17.				
Antihelicobacter					
Antiseptic	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.				
Antiulcer					
Estrogenic					
FLavor FEMA 1-20	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				
Perfumery	Merck 11th Edition				
Pesticide					
Sedative	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.				
Trichomonicide ED100=300 ug/ml					

P-CYMENE	Leaf	--	170.0	-0.26	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.
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Activities (16)					
Analgesic	Martindale's 28th				
Antiacetylcholinesterase IC40=1.2 mM					
Antibacillary					
Antibacterial					
Antiflu					
Antirheumatalgic	Martindale's 28th				
Antiviral					
FLavor FEMA 12-250	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				
Fungicide	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.				
Herbicide IC50=50 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.				
Insectifuge	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.				
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.				
Laxative	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.				
Pesticide					
Sedative	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.				
Trichomonicide LD100=50 ug/ml					

PINOCARVONE	Leaf	--	39.0	-0.16	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.
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Activities (1)					
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				

SABINENE	Leaf	--	2770.0	1.5	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.
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Activities (5)					
Antibacterial					
Antihelicobacter					
Antiseptic					
Antiulcer					
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				

SPATHULENOL	Leaf	--	--	-0.77	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.
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TERPINEN-4-OL	Leaf	--	--	-0.34	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.
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Activities (23)

Allelopathic	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
Antiacetylcholinesterase IC21-24=1.2 mM	
Antiacne	
Antiallergic	
Antiasthmatic	Chin. J. Tuber. Respir. Dis., 4:203, 1982.
Antibacterial	
Antioxidant	
Antiseptic	Flav. & Frag. J. 9: 129.
Antispasmodic	
Antitussive	Chin. J. Tuber. Respir. Dis.
Antiulcer	
Bacteriostatic	Chin. J. Tuber. Respir. Dis.
Diuretic 0.1 ml/rat	
Fungicide	
Herbicide IC50=200 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Herbicide IC50=22 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Insectifuge	
Irritant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.
Pesticide	
Renoirritant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Spermicide ED100=0.015	
Vulnerary	Lawrence Review of Natural Products, Jan-91.

THYMOL Leaf -- -- -0.42 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.

Activities (71)

Acaricide	
Allergenic	
Analgesic	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Ancylostomicide	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Anesthetic	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Ankylostomacide	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Anthelmintic	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.
Antiacne	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Antiaggregant IC50=0.75	Tramil, 42: 511.
Antialzheimeran?	L. Gracza (1985) as cited by Buchbauer re antiacetylcholinesterase.
Antiarthritic	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Antiatherosclerotic IC50=4 uM	
Antibacterial MIC=50-400 ug/ml	
Antibronchitic	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Anticariogenic MIC=200-400 ug/ml	
Anticholinesterase	L. Gracza (1985) as cited by Buchbauer re antiacetylcholinesterase.
Antihalitotic	American Health, 12(4): 17, 1993.
Antiherpetic	Martindale's 28th
Antiinflammatory (=indomethacin)	
Antileptic	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Antimelanomic IC50=120 uM/l	
Antineuritic	
Antioxidant 100 ppm	Martindale's 28th
Antioxidant (LDL) IC50=4 uM	
Antiperiodontic MIC=50-200 ug/ml	

Antiplaque MIC=39-625 ug/ml	Osawa, K., Matsumoto, T., Maruyama, T., Takiguchi, T., Okuda, K., and Takazoe, I., Studies of the antibacterial activity of plant extracts and their constituents against periodontopathic bacteria, Bull Tokyo Dent. Coll., 31 (1), 1990, 17-21
Antiradicular EC=60	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JE05: 153-8.
Antirheumatic	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.
Antisalmonella	
Antiseptic 20 x phenol	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antispasmodic	
Antistaphylococcic	
Antistreptococcic MIC=200-400 ug/ml	
Antitrichinosis 5%	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
Antitussive	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.
Ataxigenic	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Candidicide 100 ug/ml (>Nystatin)	
Carminative	Yamamoto, A., Umemori, S., and Muranishi, S. 1993. Absorption Enhancement of Intrapulmonary Administered Insulin by Various Absorption Enhancers and Protease Inhibitors in Rats. J. Pharm. Pharmacol. 46: 14-18, 1994.
Counterirritant	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Culicide LC50=36-49 mg/l	
Cyclooxygenase-Inhibitor (=indomethacin)	
Dentifrice	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Deodorant	Martindale's 28th
Dermatitigenic	
Enterorelaxant	J. Aromatherapy 4: 22.
Enterotoxic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
Expectorant	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
FLavor FEMA 2-100	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	Merck 11th Edition
Gastroirritant	Martindale's 29th
Gram(+)icide MIC=200-400 ug/ml	
Gram(-)icide MIC=50-200 ug/ml	
Insecticide LC50=36-49 mg/l	
Insecticide 0.22 uM/fly	
Insectifuge	
Irritant	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Larvicide 10 ppm	Berenbaum, M. R., The natives knew, Chemtech, (May), 1990, 275-279.
Larvicide 58 ppm	
Larvicide LC50=36-49 mg/l	
Molluscicide	
Myorelaxant	J. Aromatherapy 4: 22.
Nematicide MLC=0.1 mg/ml	Shoyakugaku Zasshi, 44: 183.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Sedative	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Sprout-Inhibitor	Duke, J.A.. Personal Communication.
Tracheorelaxant	
Trichomonicide LD100=25 ug/ml	
Urinary-Antiseptic	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.
Varroacide	
Vermicide	Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.

TRANS-BETA-BERGAMOTENE	Leaf	--	105.0	1.35	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.
TRANS-BETA-FARNESENE	Leaf	--	155.0	1.52	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.

Activities (2)

Insectifuge Pesticide Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

TRANS-NEROLIDOL Leaf -- -- -0.58 Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.

TRANS-PINOCARVEOL Leaf -- 220.0 0.25 Arnold, N., Bellomaria, B., Velentini G. and Rifaiani, S.M. 1991. Comparative Study on Essential Oil of Some Teucrium Species from Cyprus. J. Ethnopharm. 35: 105-113.

Activities (2)

Antimalarial IC50=5-50 ug/ml Rukungu, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

Antiplasmodial IC50=5-50 ug/ml Rukungu, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.