

List of All Chemicals

P Pinus strobus (Pinaceae)

Common name(s)

Eastern White Pine; White Pine

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 <input type="button" value="All"/>	Low PPM	High PPM	StdDev	*Reference
15-HYDROXY-ABIETIC-ACID	Resin, Exudate, Sap	--	--		*
15-HYDROXY-DEHYDROABIETIC-ACID	Resin, Exudate, Sap	--	--		*
3-BETA-ACETOXY-ANTICOPALIC-ACID	Resin, Exudate, Sap	--	--		*
3-BETA-HYDROXYANTICOPALIC-ACID	Resin, Exudate, Sap	--	--		*
3-BETA-METHOXY-14-SERRATEN-21-ON	Plant	--	--		*
3-OXO-ANTICOPALIC-ACID	Resin, Exudate, Sap	--	--		*
8-ALPHA-HYDROXY-LABD-13-TRANS-ENE-15-OIC-ACID	Resin, Exudate, Sap	--	--		*
8-ALPHA-HYDROXYANTICOPALIC-ACID	Resin, Exudate, Sap	--	--		*
ABEOANTICOPALIC-ACID	Resin, Exudate, Sap	--	--		*
ABIETA-8-12-DIEN-18-ATE	Resin, Exudate, Sap	--	--		*
ABIETATE	Resin, Exudate, Sap	--	--		*
ABIETIC-ACID	Resin, Exudate, Sap	--	--		*

Activities (3)

Antifeedant
Protistocide
Schistosomicide

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

ALPHA-HUMULENE	Leaf Essent. Oil	--	--		*
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Activities (2)

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

AMINO-ACIDS	Leaf	--	4530.0	-1.03	List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6,</i> Springer-Verlag, Berlin, 1969-1979.
AMINO-ACIDS	Seed	--	4620.0	-1.0	List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6,</i> Springer-Verlag, Berlin, 1969-1979.
ANTICOPALIC-ACID	Wood	--	--		*
ANTICOPALIC-ACID	Leaf	--	--		*
BETA-CARYOPHYLLENE	Leaf Essent. Oil	--	--		*
CHRY SIN	Wood	--	--		*

Activities (60)

AntiHIV	
AntiMDR	
Anti aflatoxin IC50=8.19 uM	
Anti aflatoxin IC50=2.08 ppm	
Antiaggregant	
Antiallergic	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiangiogenic	
Antibacillary	
Antibacterial	
Anticonvulsant	
Antiestrogenic	
Antigout	
Antiherpetic 40-75 ug/ml	Amoros, M., Simoes, C.M.O., Girre, L., et al. Synergistic Effect Of Flavones And Flavonols Against Herpes Simplex Virus Type 1 In Cell Culture. Comparison With The Antiviral Activity Of Propolis. <i>J. of Natural Products</i> 55(12):1732-1740, 1992.
Antihypertensive	
Antileukemic >genistein	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antiproliferant	
Antiproliferant >genistein	
Antiproliferant (colon)	
Antisalmonella	
Antishigellic	
Antispasmodic	Biochem Pharmacol, 40(10): 2227.
Antistaphylococcic	
Antistress	
Antithrombic	
Antitumor (Breast)	
Antitumor (Colon)	
Antiviral 40-75 ug/ml	Amoros, M., Simoes, C.M.O., Girre, L., et al. Synergistic Effect Of Flavones And Flavonols Against Herpes Simplex Virus Type 1 In Cell Culture. Comparison With The Antiviral Activity Of Propolis. <i>J. of Natural Products</i> 55(12):1732-1740, 1992.
Anxiolytic	
Apoptotic	
Aromatase-Inhibitor IC80=1 uM/l	
CNS-Depressant	
CYP1A1-Inhibitor	
Cancer-Preventive	
Caspase-3-Inhibitor	
Caspase-9-Inhibitor	
Cytotoxic >genistein	
Cytotoxic	
DNA-Protective	
Estrogenic	
Fungicide 2.5 mM	Geibel, M. 1994. Sensitivity of the Fungus <i>Cytospora personii</i> to the Flavonoids of <i>Prunus cerasus</i> . <i>Phytochemistry</i> . 38(3): 599-601. 1995.
Hepatoprotective IC50=8.19 uM	

Hepatoprotective
 IC50=2.08 ppm
 Hypotensive
 Hypouricemic
 ICAM-1-Inhibitor
 JNK-Inhibitor
 MAO-Inhibitor
 Mutagenic
 Myorelaxant
 NO-Genic
 Pesticide
 Radioprotective
 Termitifuge
 Testosterogenic
 Topoisomerase-I-Inhibitor
 VEGF-Inhibitor
 Vasodilator
 Vasorelaxant
 Xanthine-Oxidase-Inhibitor

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

Santti, R., Makela, S., Strauss, L., Korman, J., Kostian, M. L. 1998. Phytoestrogens: Potential Endocrine Disruptors in Males. Toxicol Ind Health, 14: 223-237.

CIS-ABIENOL Plant -- -- *

COMMUNIC-ACID Resin, Exudate, Sap -- -- *

CONIFERIN Bark -- -- *

Activities (2)

Herbicide IC90-95=1,000 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.
 Pesticide

CONFERYL-ALCOHOL Bark -- -- *

Activities (6)

Antiaggregant IC50=29 uM Laekeman, G.M., Van Hoof, L., Haemers, A., Vanden Berghe, D.A., Herman, A.G., and Vlietinck, A.J. Eugenol a Valuable Compound for In Vitro Experimental Research and Worthwhile for Further In Vivo Investigation. Phytotherapy Research 4(3): 93, 1990.

Antioxidant EC50=13-18 ug/ml

Antiprostaglandin

Antiradicular EC50=13-18 ug/ml

Fungicide ED50=125 ug/ml 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.

Pesticide

CRYPTOSTROBIN Wood -- -- Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

CYCLOANTICOPALIC-ACID Resin, Exudate, Sap -- -- *

D-PINITOL Fruit -- -- *

DEHYDROABIETATE Resin, Exudate, Sap -- -- *

DEHYDROABIETIC-ACID Resin, Exudate, Sap -- -- *

Activities (5)				
Allergenic	Mitchell, J. and Rook, A.J. 1923. Botanical Dermatology: plants and plant products injurious to the skin. Vancouver: Greengrass, 1979. xiii, 787 p.: ill.			
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Pesticide				
Protisticide				
Schistosomicide	Farnsworth, N.R. and Cordell, G.A. A Review of Some Biologically Active Compounds Isolated From Plants as Reported in the 1974-1975 Literature. J. Nat. Prod. 39: 420, 1976.			

DIHYDROABIETIC-ACID	Wood	--	22000.0	*
DIHYDROPINOSYLVIN	Bark	--	--	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Activities (3)				
Antibacterial	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Fungicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Pesticide				

ELLIOTIC-ACID	Resin, Exudate, Sap	--	--	*
EO	Root	--	--	*
FAT	Plant	--	--	*
ISOPIMARIC-ACID	Wood	--	--	*

Activities (2)				
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Pesticide				

ISOPIMARIC-ACID	Resin, Exudate, Sap	--	--	*
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Activities (2)				
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Pesticide				

LAEVOPIMARIC-ACID	Resin, Exudate, Sap	--	--	*
LEUCOCYANIDIN	Plant	--	--	*

Activities (1)				
Capillari-protective				Merck 11th Edition

LEVOPIMARIC-ACID	Resin, Exudate, Sap	--	--	*
MANOYOXIDE	Bark	--	--	*
MUCILAGE	Plant	--	--	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activities (3)				
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.			
Demulcent				
Hypocholesterolemic				
NEOABIETIC-ACID	Resin, Exudate, Sap	--	--	*

Activities (4)				
Antifeedant Pesticide Protisticide Schistosomicide	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
NEOABIETINIC-ACID	Plant	--	--	*
NUCLEIC-ACIDS	Plant	--	--	*
PALUSTRIC-ACID	Resin, Exudate, Sap	--	--	*
PIMARA-8,15-DIEN-18-ATE	Resin, Exudate, Sap	--	--	*
PIMARIC-ACID	Resin, Exudate, Sap	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
PINOBANKSIN	Wood	--	--	*
PINOCEMBRIN	Wood	--	--	*

Activities (9)				
Anesthetic	Jung, J.H., Pummangura, S., Chaichantipyuth, c., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of Melodorum fruticosum. Phytochemistry. 29(5): 1667-1670. 1990.			
Antibacterial IC 3 ug/ml	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antileukemic				
Antiseptic				
Artemicide LC50=12 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, c., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of Melodorum fruticosum. Phytochemistry. 29(5): 1667-1670. 1990.			
Candidicide IC 0.1-3 mg/ml	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Cytotoxic ED50=21				
Fungicide				
Pesticide				
PINOMYRICETIN	Bark	--	--	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
PINOQUERCETIN	Bark	--	--	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
PINORESINOL	Bark	--	--	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Activities (2)				
Antioxidant (> tocopherol)				
cAMP-Phosphodiesterase-Inhibitor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
PINOSTROBIN	Bark	--	--	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Activities (6)				
Antiinflammatory				
Aromatase-Inhibitor IC52=1 uM/l	Journal of Medicinal Food 2: 235.1999.			
COX-1-Inhibitor IC36=100 ug/ml				
COX-2-Inhibitor IC7=100 ug/ml				
Fungicide 2.5 mM	Geibel, M. 1994. Sensitivity of the Fungus Cytospora personii to the Flavonoids of Prunus cerasus. Phytochemistry. 38(3): 599-601. 1995.			
Pesticide				

PINOSTROBIN Wood -- -- Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Activities (6)

Antiinflammatory

Aromatase-Inhibitor IC52=1 uM/l Journal of Medicinal Food 2: 235.1999.

COX-1-Inhibitor IC36=100 ug/ml

COX-2-Inhibitor IC7=100 ug/ml

Fungicide 2.5 mM Geibel, M. 1994. Sensitivity of the Fungus *Cytospora personii* to the Flavonoids of *Prunus cerasus*. *Phytochemistry*. 38(3): 599-601. 1995.

Pesticide

PINOSYLVIN Bark -- -- Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.

Activities (5)

Antibacterial

Antifeedant

Fungicide

Pesticide

Phytoalexin Russell, G. B., *Phytochemical resources for crop protection*, N. Z. J. Technol., 2, 1986, 127-134.

PINOSYLVIN-MONOMETHYL-ESTER Plant -- -- *

RHODOXANTHIN Leaf -- -- *

Activities (1)

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

SANDARACOPIMARIC-ACID Resin, Exudate, Sap -- -- *

Activities (2)

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

Pesticide

SANDARACOPIMARIC-ACID Wood -- 22000.0 *

Activities (2)

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

Pesticide

SCLAREOLIC-ACID Resin, Exudate, Sap -- -- *

STROBAL Bark -- -- *

STROBIC-ACID Plant -- -- J.S. Glasby *Dict.Pls Containing 2ndary Metabolite*. 1991.

STROBIC-ACID Resin, Exudate, Sap -- -- *

STROBINIC-ACID Resin, Exudate, Sap -- -- *

STROBOL Bark -- -- List, P.H. and Horhammer, L., *Hager's Handbuch der Pharmazeutischen Praxis*, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

STROBOPININ Wood -- -- *

TECTOCHRYSIN Wood -- -- *

TETRADECYL-ACETATE Leaf -- -- *

TRANS-ABIENOL Plant -- -- *