

List of All Chemicals

P Cinchona officinalis (Rubiaceae)

Common name(s)

Lojabark; Quinine

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 All	Low PPM	High PPM	StdDev	*Reference
3-ALPHA,17-BETA-CINCHOPHYLLINE	Leaf	--	--		*
Activities (3)					
Amebicide IC50=3.50 ug/ml					Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Cytotoxic IC50=0.4 ug/ml					Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Pesticide					
3-BETA,17-BETA-CINCHOPHYLLINE	Leaf	--	--		*
Activities (3)					
Amebicide IC50=1.62 ug/ml					Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Cytotoxic IC50=2.24 ug/ml					Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Pesticide					
AVICULARIN	Leaf	--	--		*
Activities (7)					
Aldose-Reductase-Inhibitor IC32=1 uM					Shimizu, M., Ito, T., Terashima, S., Hayashi, T., Arisawa, M., Morita, N., Kurokawa, S., Ito, K., and Hashimoto, Y. 1984. Inhibition of Lens Aldose Reductase by Flavonoids. Phytochemistry, 23: 1885-1888.
Aldose-Reductase-Inhibitor IC84=10 uM					Shimizu, M., Ito, T., Terashima, S., Hayashi, T., Arisawa, M., Morita, N., Kurokawa, S., Ito, K., and Hashimoto, Y. 1984. Inhibition of Lens Aldose Reductase by Flavonoids. Phytochemistry, 23: 1885-1888.
Antibiotic					CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Cyclooxygenase-Activator 100 uM					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.
Diuretic					CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Pesticide					
Tissue-Thromboplastin-Inhibitor IC50=54.8 uM					
CINCHONIDINE	Bark	--	--		*
Activities (6)					
Antiflu					
Antiherpetic					
Antimalarial 150-500 mg/man/4 x day					
Antipyretic					=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp.;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Antiviral					
Pesticide					
CINCHONINE	Bark	--	--		*

Activities (7)

Antiaggregant IC50=125-180 uM				
Antimalarial LD50=152 (ipr rat)	Merck 11th Edition			
Antipyretic	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp			
MDR-Inhibitor 250 mg/kg igs rat	Genne, P., Duchamp, O., Solary, E., Magnette, J., Belon, J. P., Chauffert, B. 1995. Cinchonine Per OS: Efficient Circumvention of P-Glycoprotein-Mediated Multidrug Resistance. <i>Anticancer Drug Design</i> , 10(2): 103-118.			
MDR-Inhibitor 5 uM				
PAF-Inhibitor IC50=125-180 uM				
Pesticide				

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

Activities (3)

Antiarrhythmic 450-600 mg/man/day	Martindale's 29th			
Antimalarial	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.			
Pesticide				

QUINIDINE Bark -- -- *

Activities (23)

Abortifacient				
Allergenic				
Amebicide IC50=16.6 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture.</i> Plenum Press, New York. 445 pp.			
Analgesic	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs.</i> Chapman & Hall, New York. 941 pp.			
Antiarrhythmic 72 mg/kg ipr mus				
Antiarrhythmic ED50=60 uM/kg	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs.</i> Chapman & Hall, New York. 941 pp.			
Anticholinergic	Martindale's 28th			
Antihiccup				
Antimalarial 10 mg/kg/orl/man/8 hrs	Martindale's 29th			
Antipyretic	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp			
Antitachycardic				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.			
Cardiodepressant	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.			
Dermatitogenic				
Emetic				
Hemolytic	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs.</i> Chapman & Hall, New York. 941 pp.			
Hypotensive	Martindale's 29th			
Immunosuppressant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.			
Laxative	Martindale's 29th			
MDR-Inhibitor 100 uM	Critchfield, J. W., Welsh, C. J., Phang, J. M., Yeh, G. C. 1994. Modulation of Adriamycin Accumulation and Efflux by Flavonoids in HCT-15 Colon Cells. Activation of P-Glycoprotein as a Putative Mechanism. <i>Biochem Pharmacol</i> , 48(7): 1437-1445.			
MDR-Inhibitor IC50=1-12 uM				
Myorelaxant	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs.</i> Chapman & Hall, New York. 941 pp.			
Oxytotic				

QUININE Bark -- -- *

Activities (32)

Abortifacient	
Allergenic	
Amebicide IC50=14.8 ug/ml	
Analgesic	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.
Anesthetic	Wealth of India.
Antibacterial	
Antidysenteric	
Antifeedant	
Antifibrillary	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antihemorrhoidal	Wealth of India.
Antilumbagic	Wealth of India.
Antimalarial IC50=0.18 ug/ml	Vlietinck, A.J. and Dommissie, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Antineuralgic	Wealth of India.
Antineuritic	Wealth of India.
Antipyretic	Merck 11th Edition
Antisciatic	Wealth of India.
Antitrypanosomic	
Antiyeast	
Apertif	
Astringent	
Cardiodepressant	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.
Cytotoxic IC50=183 ug/ml	Vlietinck, A.J. and Dommissie, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Dermatitigenic	
Flavor FEMA 5-83 (-100)	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
MDR-Inhibitor IC50=4-17 uM	
Oxytocic	
Pesticide	
Phototoxic	
Protisticide	
Spermicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Stomachic	Merck 11th Edition
Trypanocide	

TANNIN Bark -- -- *

Activities (35)

Anthelmintic	
AntiHIV	
Antibacterial	
Anticancer	
Anticariogenic	
Antidiarrheic	
Antidysenteric	
Antihepatotoxic	
Antihypertensive	
Antilipolytic	
Antimutagenic	
Antinephritic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antiphidic	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC50=1.44 ug/ml	
Antioxidant 1/3 quercetin	
Antiradicular 500 mg/kg/day orl mus	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antiradicular 1/3 quercetin	
Antirenitic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Antitumor	
Antitumor-Promoter	
Antiulcer	
Antiviral	
Cancer-Preventive	HerbalGram No. 22 - Spring 1990, page 14.
Carcinogenic	
Chelator	
Cyclooxygenase- Inhibitor	
Glucosyl- Transferase-Inhibitor	
Hepatoprotective	
Immunosuppressant	
Lipoxygenase- Inhibitor	
MAO-Inhibitor	
Ornithine- Decarboxylase- Inhibitor	
Pesticide	
Psychotropic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. Chem. Pharm. Bull. 38(4): 1049-1052, 1990.
Xanthine-Oxidase- Inhibitor	