

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in *Cinchona pubescens***

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALKALOIDS	Bark	50000.0	150000.0	1.435390254524195	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	PROANTHOCYANIDIN-B2	Bark		691.0	1.0	--
0	PROANTHOCYANIDIN-A-2	Bark		11.0	1.0	--
32	QUININE	Bark	21800.0	65753.0	1.0	--
0	PROANTHOCYANIDIN-B5	Bark		182.0	0.9999999999999999	--
0	EO	Bark		50.0	-0.960720063548411	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
6	CINCHONIDINE	Bark		25600.0	-1.0	--
0	PROANTHOCYANIDIN-C1	Bark		36.0	-1.0	--
0	CINCHONINONE	Stem				--
0	SUCCIRUBINE	Bark				--
32	QUININE	Root		1300.0		--
0	CINCHONAIN-IIA	Bark		327.0		--
0	QUERCETIN-3-O-ALPHA-L-RHAMNO-GLUCOSIDE	Leaf				--
1	CINCHONAMINE	Stem				--
0	2-HYDROXY-1,3,4,6-TETRAMETHOXY-ANTHRAQUINONE	Tissue Culture				--
0	DIHYDROQUININE	Stem				--
0	CINCHONININE	Bark		28767.0		--
0	CINCHONININE	Shoot		1000.0		--
1	RUBIADIN	Tissue Culture				--
32	QUININE	Stem		112.0		--
0	CINCHONAIN-ID	Bark		51.0		--
2	PURPURIN-1-METHYL-ETHER	Tissue Culture				--
1	CINCHONAMINE	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,4,5-TRIHYDROXY-1-METHOXY-ANTHRAQUINONE	Tissue Culture				--
0	DIHYDROQUININE	Leaf				--
0	CINCHONININE	Stem				--
0	3-EPIQUINAMINE	Leaf				--
32	QUININE	Shoot		700.0		--
0	CINCHONAIN-IC	Bark		44.0		--
2	PURPURIN	Tissue Culture				--
5	CHRYSAZIN	Tissue Culture				--
1	1-HYDROXY-2-HYDROXYMETHYLANTHRAQUINONE	Tissue Culture				--
2	DIHYDROQUINIDINE	Leaf				--
0	CATECHOL-TANNINS	Bark		80000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
3	3-BETA,17-BETA-CINCHOPHYLLINE	Leaf				--
2	QUINIDINONE	Stem				--
0	CINCHONININE	Root		2700.0		--
0	CINCHONAIN-IB	Bark		836.0		--
43	PROTOCATECHUIC-ACID	Leaf				--
0	CHRYSANTHEMIN	Leaf				--
0	ANTHRAGALLOL-1,2-DIMETHYL-ETHER	Tissue Culture				--
2	DIHYDROQUINIDINE	Stem		52.0		--
3	3-ALPHA,17-BETA-CINCHOPHYLLINE	Stem				--
23	QUINIDINE	Shoot		100.0		--
0	CINCHONININE	Leaf				--
0	CINCHONAIN-IA	Bark		396.0		--
77	CHLOROGENIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALIZARIN-2-METHYL-ETHER	Tissue Culture				--
0	DIHYDROCINCHONINE	Stem				--
3	3-ALPHA,17-BETA-CINCHOPHYLLINE	Leaf				--
23	QUINIDINE	Leaf		400.0		--
6	CINCHONIDINE	Leaf		2200.0		--
38	(-)-EPICATECHIN	Bark				--
102	CAFFEIC-ACID	Leaf				--
2	ALIZARIN-1-METHYL-ETHER	Tissue Culture				--
0	DIHYDROCINCHONINE	Tissue Culture				--
3	3-ALPHA,17-ALPHA-CINCHOPHYLLINE	Stem				--
23	QUINIDINE	Root		500.0		--
6	CINCHONIDINE	Shoot		600.0		--
0	DIHYDROXY-TRIMETHOXY-ANTHRAQUINONE	Tissue Culture				--
102	CAFFEIC-ACID	Bark				--
11	ALIZARIN	Tissue Culture				--
0	DIHYDROCINCHONIDINE	Stem				--
2	10-METHOXYCINCHONAMINE	Leaf				--
23	QUINIDINE	Stem		48.0		--
6	CINCHONIDINE	Stem				--
0	DIHYDROXY-DIMETHOXY-ANTHRAQUINONE	Tissue Culture				--
3	QUINOVIC-ACID	Bark				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	DIHYDROCINCHONIDINE	Tissue Culture				--
0	QUINOVIC-ACID-3-O-ALPHA-L-RHAMNOside	Stem		130.0		--
2	10-METHOXYCINCHONAMINE	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	QUINAMINE	Leaf				--
6	CINCHONIDINE	Root		1000.0		--
0	DIHYDROXY-2-METHYL-ANTHRAQUINONE	Tissue Culture				--
0	NICOTIFLOROSIDE	Leaf				--
0	CYANIDIN-3-O-ALPHA-L-RHAMNOSIDE	Leaf				--
3	QUINOVIC-ACID	Stem				--
3	CINCHONAIN-III-B	Bark				Takechi, M., Tanaka, Y., Takehara, M., Nonaka, G. I., Nishioka, I. 1985. Structure and Antiherpetic Activity Among the Tannins. Phytochemistry 24 10: 2245-2250.
0	QUINAMINE	Tissue Culture				--
0	CINCHONICINOL	Bark		9589.0		--
0	6,7-DIHYDROXY-1-METHOXY-2-METHYL-ANTHRAQUINONE	Tissue Culture				--
30	HYPEROSIDE	Leaf				--
23	QUINIDINE	Bark				--
0	CUPREINE	Bark				--
0	METHYLSUCCIRUBINE	Bark				--
32	QUININE	Leaf	400.0	9200.0		--
3	CINCHONAIN-IIB	Bark		291.0		--
0	QUINAMINE	Stem				--
0	CINCHONAMINONE	Bark		13014.0		--
0	2-HYDROXY-1,3,4-TRIMETHOXY-ANTHRAQUINONE	Tissue Culture				--
1	HYDROQUININE	Tissue Culture				--