

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Cinchona pubescens*

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Refernce Citation |
|------------------|--|----------------|---------|----------|-------------------|---|
| 38 | (-)-EPICATECHIN | Bark | | | | -- |
| 1 | 1-HYDROXY-2-HYDROXYMETHYLANTHRAQUINONE | Tissue Culture | | | | -- |
| 2 | 10-METHOXYCINCHONAMINE | Leaf | | | | -- |
| 2 | 10-METHOXYCINCHONAMINE | Tissue Culture | | | | -- |
| 0 | 2,4,5-TRIHYDROXY-1-METHOXY-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 0 | 2-HYDROXY-1,3,4,6-TETRAMETHOXY-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 0 | 2-HYDROXY-1,3,4-TRIMETHOXY-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 3 | 3-ALPHA,17-ALPHA-CINCHOPHYLLINE | Stem | | | | -- |
| 3 | 3-ALPHA,17-BETA-CINCHOPHYLLINE | Stem | | | | -- |
| 3 | 3-ALPHA,17-BETA-CINCHOPHYLLINE | Leaf | | | | -- |
| 3 | 3-BETA,17-BETA-CINCHOPHYLLINE | Leaf | | | | -- |
| 0 | 3-EPIQUINAMINE | Leaf | | | | -- |
| 0 | 6,7-DIHYDROXY-1-METHOXY-2-METHYL-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 11 | ALIZARIN | Tissue Culture | | | | -- |
| 2 | ALIZARIN-1-METHYL-ETHER | Tissue Culture | | | | -- |
| 3 | ALIZARIN-2-METHYL-ETHER | Tissue Culture | | | | -- |
| 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 | ANTHRAGALLOL-1,2-DIMETHYL-ETHER | Tissue Culture | | | | -- |
| 102 | CAFFEIC-ACID | Leaf | | | | -- |
| 102 | CAFFEIC-ACID | Bark | | | | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|------------------|----------------|---------|----------|--------|--|
| 0 | CATECHOL-TANNINS | Bark | | 80000.0 | | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |
| 77 | CHLOROGENIC-ACID | Leaf | | | | -- |
| 0 | CHRYSANTHEMIN | Leaf | | | | -- |
| 5 | CHRYSAZIN | Tissue Culture | | | | -- |
| 0 | CINCHONAIN-IA | Bark | | 396.0 | | -- |
| 0 | CINCHONAIN-IB | Bark | | 836.0 | | -- |
| 0 | CINCHONAIN-IC | Bark | | 44.0 | | -- |
| 0 | CINCHONAIN-ID | Bark | | 51.0 | | -- |
| 0 | CINCHONAIN-IIA | Bark | | 327.0 | | -- |
| 3 | CINCHONAIN-IIB | Bark | | 291.0 | | -- |
| 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. |
| 1 | CINCHONAMINE | Stem | | | | -- |
| 1 | CINCHONAMINE | Tissue Culture | | | | -- |
| 0 | CINCHONAMINONE | Bark | | 13014.0 | | -- |
| 0 | CINCHONICINOL | Bark | | 9589.0 | | -- |
| 6 | CINCHONIDINE | Bark | | 25600.0 | -1.0 | -- |
| 6 | CINCHONIDINE | Leaf | | 2200.0 | | -- |
| 6 | CINCHONIDINE | Shoot | | 600.0 | | -- |
| 6 | CINCHONIDINE | Stem | | | | -- |
| 6 | CINCHONIDINE | Root | | 1000.0 | | -- |
| 0 | CINCHONININE | Bark | | 28767.0 | | -- |
| 0 | CINCHONININE | Shoot | | 1000.0 | | -- |
| 0 | CINCHONININE | Stem | | | | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|------------------------------------|----------------|---------|----------|--------------------|---|
| 0 | CINCHONININE | Root | | 2700.0 | | -- |
| 0 | CINCHONININE | Leaf | | | | -- |
| 0 | CINCHONINONE | Stem | | | | -- |
| 0 | CUPREINE | Bark | | | | -- |
| 0 | CYANIDIN-3-O-ALPHA-L-RHAMNOSIDE | Leaf | | | | -- |
| 0 | DIHYDROCINCHONIDINE | Stem | | | | -- |
| 0 | DIHYDROCINCHONIDINE | Tissue Culture | | | | -- |
| 0 | DIHYDROCINCHONINE | Stem | | | | -- |
| 0 | DIHYDROCINCHONINE | Tissue Culture | | | | -- |
| 2 | DIHYDROQUINIDINE | Leaf | | | | -- |
| 2 | DIHYDROQUINIDINE | Stem | | 52.0 | | -- |
| 0 | DIHYDROQUININE | Stem | | | | -- |
| 0 | DIHYDROQUININE | Leaf | | | | -- |
| 0 | DIHYDROXY-2-METHYL-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 0 | DIHYDROXY-DIMETHOXY-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 0 | DIHYDROXY-TRIMETHOXY-ANTHRAQUINONE | Tissue Culture | | | | -- |
| 0 | EO | Bark | | 50.0 | -0.960720063548411 | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |
| 1 | HYDROQUININE | Tissue Culture | | | | -- |
| 30 | HYPEROSIDE | Leaf | | | | -- |
| 0 | METHYLSUCCIRUBINE | Bark | | | | -- |
| 0 | NICOTIFLOROSIDE | Leaf | | | | -- |
| 0 | PROANTHOCYANIDIN-A-2 | Bark | | 11.0 | 1.0 | -- |
| 0 | PROANTHOCYANIDIN-B2 | Bark | | 691.0 | 1.0 | -- |
| 0 | PROANTHOCYANIDIN-B5 | Bark | | 182.0 | 0.9999999999999999 | -- |
| 0 | PROANTHOCYANIDIN-C1 | Bark | | 36.0 | -1.0 | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|--|----------------|---------|----------|--------|---|
| 43 | PROTocatechuic-acid | Leaf | | | | -- |
| 2 | PURPURIN | Tissue Culture | | | | -- |
| 2 | PURPURIN-1-METHYL-ETHER | Tissue Culture | | | | -- |
| 0 | QUERCETIN-3-O-ALPHA-L-RHAMNO-GLUCOSIDE | Leaf | | | | -- |
| 0 | QUINAMINE | Leaf | | | | -- |
| 0 | QUINAMINE | Tissue Culture | | | | -- |
| 0 | QUINAMINE | Stem | | | | -- |
| 23 | QUINIDINE | Shoot | | 100.0 | | -- |
| 23 | QUINIDINE | Leaf | | 400.0 | | -- |
| 23 | QUINIDINE | Stem | | 48.0 | | -- |
| 23 | QUINIDINE | Root | | 500.0 | | -- |
| 23 | QUINIDINE | Bark | | | | -- |
| 2 | QUINIDINONE | Stem | | | | -- |
| 32 | QUININE | Leaf | 400.0 | 9200.0 | | -- |
| 32 | QUININE | Root | | 1300.0 | | -- |
| 32 | QUININE | Stem | | 112.0 | | -- |
| 32 | QUININE | Shoot | | 700.0 | | -- |
| 32 | QUININE | Bark | 21800.0 | 65753.0 | 1.0 | -- |
| 3 | QUINOVIC-ACID | Bark | | | | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |
| 3 | QUINOVIC-ACID | Stem | | | | -- |
| 0 | QUINOVIC-ACID-3-O-ALPHA-L-RHAMNOSIDE | Stem | | 130.0 | | -- |
| 1 | RUBIADIN | Tissue Culture | | | | -- |
| 0 | SUCCIRUBINE | Bark | | | | -- |