

Technical Data Report

for

Condurango (*Marsdenia cundurango*)



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Condurango

Family: Apocynaceae & Asclepiadaceae

Taxon: *Marsdenia cundurango* Rchb. F

Synonyms: *Marsdenia reichenbachii*, *Gonolobus condurango*, *Echites acuminata*

Common names: bejuco de condor, bejuco de sapo, condor plant, common condorvine, condurango, condurango blanco, eagle vine, tucacsillu

Part Used: Vine bark

| Herbal Properties & Actions | | |
|-----------------------------|-----------------------|--|
| Main Actions: | Other Actions: | Standard Dosage: Vine bark |
| calms nervous stomach | supports gallbladder | Infusion: 1 cup 3 times daily |
| reduces nausea | stops bleeding | Fluid Extract: 3 ml twice daily |
| stimulates appetite | kills cancer cells | Capsules: 2 grams twice daily |
| aids digestion | | |
| increases gastric juices | | |
| relieves stomach pain | | |
| expels intestinal gas | | |

Condurango is a tropical woody vine that can be found in the high mountain jungles and cloud forests between 2,000 and 3,000 m in elevation. It is indigenous to the lower slopes of the Andes in Peru, Ecuador and Colombia. It grows about 30 feet long and produces velvety heart-shaped leaves and small funnel-shaped greenish brown flowers. The vine grows to about 2 feet in diameter and is quite woody and sturdy. Condurango gets its local name, *condor vine* or *eagle vine*, from the large and weighty condor eagles that often use this sturdy vine as roosts and perches.

TRIBAL AND HERBAL MEDICINE USES

Condurango has long been used for a variety of digestive and stomach problems by the local people where this tropical vine grows. It aids digestion by being a bitter stimulant to increase digestive juices. It is also used to relieve nausea and vomiting, to calm nervous stomachs, to relieve stomach pain and cramps, for gastric ulcers, and to increase bile in the gallbladder, liver and pancreas.

Condurango was first introduced into the United States in 1871 in an official manner; it was given to the State Department in Washington by the Minister of Ecuador with official certificates from Ecuadorian doctors attesting to its ability to treat stomach cancer and syphilis. While it was never really proven effective for cancer during those early years, it became a trusted remedy for digestive disorders in the late 1800s and early 1900s and was included in the U.S. Pharmacopeia as well as several other European pharmacopeias.

In herbal medicine systems today in Peru condurango is considered an analgesic, appetite stimulant, carminative (expels intestinal gas), chologogue (increases gallbladder bile), hemostat (stops bleeding), stomachic (aids digestion), and tonic. It is often used for a variety of digestive disorders and is especially recommended for bleeding gastric ulcers. In Brazil, condurango is used for appetite loss, dyspepsia, gastralgia, gastritis, neuralgia, stomachaches, stomach cancer, stomach ulcers, and rheumatism.

PLANT CHEMICALS

Condurango contains a group of novel glycosides and steroids. After more than 100 years since it was introduced to the West as a plant active against cancer, a group of Japanese scientists published several studies and filed several Japanese and U.S., patents on these novel compounds as anti-tumor substances in the 1980s.¹⁻⁷ The vine bark is reported to contain an average of 1 to 3% of these various glycosides. However, since filing these patents, research has not progressed past animal studies and into human studies and the true anti-tumor effect in humans still remains unknown today.

Other constituents in condurango include hydroxylated pregnane derivatives, chlorogenic and caffeic acids, as well as various cyclitols, flavonoids, and coumarin derivatives.

BIOLOGICAL ACTIVITIES AND CLINICAL RESEARCH

Condurango has been reported with anti-inflammatory and antioxidant actions in animal studies.^{8,9} In test tube studies, it was shown to be highly active against the mycobacterium that causes tuberculosis¹⁰ but inactive against any of the viral strains they tested it against.¹¹ Its use as a digestive aid was studied and validated in the mid-1980s when scientists reported that it increased various digestive enzymes and juices in the stomach.¹²

CURRENT PRACTICAL USES

For more than 100 years condurango has been used as a remedy for many types of stomach and digestive problems here in the United States. It continues to be an excellent remedy to calm nervous and upset stomachs, relieve stomach pain, nausea, and intestinal gas, and to be an overall bitter digestive tonic for sluggish or poor digestion and to stimulate the appetite.

| Plant Summary |
|--|
| Main Actions (in order): stomachic, anti-emetic, chologogue, anti-ulcerous, pain reliever (stomach) |
| Main Uses: <ol style="list-style-type: none">1. for indigestion, nausea, vomiting and stomach pain2. as a bitter stomach tonic to increase appetite3. for gastric ulcers4. as a digestive aid to increase and stimulate digestive juices and bile5. for nervous eating disorders (anorexia, etc.) |
| Properties/Actions Documented by Research: antibacterial, anti-inflammatory, anti-leukemic, antioxidant, antitumorous, stomach stimulant |
| Other Properties/Actions Documented by Traditional Use: adaptogenic, alterative, analgesic, anti-emetic, appetite stimulant, bitter, chologogue, circulatory stimulant, emmenagogue, hemostat, nervine, stomach relaxant, tonic |
| Cautions: Avoid use if allergic to latex. |

Traditional Preparation: Condurango vine bark is traditionally prepared in fluid extracts and infusions.

Contraindications: One case report was published that a patient with a known latex allergy had an allergic reaction to a condurango tea.¹³ If you are allergic to latex, it is best to avoid using this plant.

Drug Interactions: None reported.

| WORLDWIDE ETHNOMEDICAL USES | |
|-----------------------------|---|
| Brazil | as a bitter tonic, depurative, and stomachic; for appetite loss, dyspepsia, digestive disorders, gastralgia, gastritis, neuralgia, stomachaches, stomach cancer, stomach ulcers, and rheumatism |
| Colombia | as a stomachic; for cancer |
| Ecuador | for cancer, inflammation, snakebite, stomach cancer, and syphilis |
| Germany | for dyspeptic complaints and loss of appetite |
| Latin America | for syphilis and venereal diseases |
| Peru | as an analgesic, appetite stimulant, carminative, cholagogue, hemostat, and tonic; for anemia, anorexia, bleeding ulcers, cancer, dyspepsia, digestive disorders, gastralgia, gastritis, snakebite |
| United Kingdom | as a adaptogenic, alterative, anti-emetic, appetite stimulant, bitter, circulatory stimulant, and stomach relaxant; for anorexia nervosa, gastric ulcers, nausea, nervous indigestion, and stomach cancer |
| United States | as an alterative, analgesic, antiseptic, appetite stimulant, bitter tonic, circulatory stimulant, cystostatic, digestive stimulant, diuretic, emmenagogue, hemostat, nervine, restorative, stomachic, stomach sedative, and tonic; for anorexia nervosa, beri-beri, cancer, catarrhal gastritis, digestive disorders, duodenal ulcers, gastric debility, gastric ulcers, gastritis, loss of appetite, nausea, rheumatism, snakebite, stomachaches, stomach cancer, stomach ulcers, syphilis, and ventricular ulcers |

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1. Hayashi, K., et al. "Antitumor active glycosides from condurango cortex." *Chem. Pharm. Bull.* 1980: 1954-1958.
2. Takase, M., et al. "Studies on the constituents of Asclepiadaceae plants. 49. Confirmation of the structures of antitumor-active glycosides in condurango cortex. Chemical transformation of the aglycone moiety." *Chem. Pharm. Bull.* 1982: 2429-2432.
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Ethnomedical Information on Condurango (*Marsdenia cundurango*)

| Part / Location | Documented Ethnomedical Uses | Type Extract / Route | Used For | Ref # |
|-----------------------|---|---|-------------|--------|
| Bark - Brazil | Used for stomach pain, gastritis, dyspepsia, neuralgia and rheumatism. Used as a depurative. | Not stated / Oral | Human Adult | ZZ1013 |
| Bark - Brazil | Used as a bitter tonic and stomachic; for dyspepsia, lack of appetite, digestive stimulant, stomach pain, gastralgia, stomach ulcers, and stomach cancer. | Infusion / Oral | Human Adult | ZZ1007 |
| Bark - Colombia | Used as a stomachic. | Not stated / Oral | Human Adult | ZZ1022 |
| Bark - Colombia | Used for cancer. | Infusion / Oral | Human Adult | A00709 |
| Bark - Ecuador | Used for snakebite, syphilis, and stomach cancer. | Not stated / Oral | Human Adult | ZZ1022 |
| Bark - Ecuador | Used for syphilis and cancer. | Infusion / Oral | Human Adult | T03050 |
| Bark - Ecuador | Used to treat inflammation. | Infusion / Not stated | Human Adult | K28882 |
| Bark - Germany | Used for dyspeptic complaints and loss of appetite. | Infusion / Oral | Human Adult | ZZ1058 |
| Bark - Latin America | Used for syphilis and venereal diseases. | Not stated / Oral | Human Adult | ZZ1049 |
| Bark - Peru | Used as an appetite stimulant, tonic, and hemostat; for bleeding ulcers. | Decoction / Oral | Human Adult | ZZ2013 |
| Bark - Peru | Used as a tonic, hemostat and carminative; for gastritis, dyspepsia, anemia, and cancer. | Infusion / Oral Tincture / Oral | Human Adult | ZZ1105 |
| Bark - Peru | Used as a tonic; for bleeding gastric ulcers, anemia, and snakebite. | Decoction / Oral | Human Adult | ZZ1101 |
| Bark + Root - Peru | Used as an analgesic and chologogue; for gastritis, dyspepsia, and cancer. | Decoction / Oral | Human Adult | ZZ1101 |
| Bark + Root - Peru | Used for cancer. | Infusion / Oral | Human Adult | ZZ2013 |
| Root - Peru | Used for gastralgia and dyspepsia. | Decoction / Oral | Human Adult | ZZ2013 |
| Root - Peru | Used as a carminative. | Tincture / Oral | Human Adult | ZZ1101 |
| Bark - Turkey | Used as an alterative and nervine. | Not stated / Oral | Human Adult | ZZ1022 |
| Bark - United Kingdom | Used as a alterative, circulatory stimulant, stomach relaxant, bitter, anti-emetic, adaptogenic, orexigenic; for nervous indigestion, anorexia nervosa, stomach cancer, gastric ulcers. | Infusion / Oral Fluid Extract / Oral | Human Adult | ZZ2024 |

| Part / Location | Documented Ethnomedical Uses | Type Extract / Route | Used For | Ref # |
|----------------------|--|----------------------|-------------|--------|
| Bark - United States | Used as a stomachic, diuretic, circulatory stimulant, and alterative. | Fluid Extract / Oral | Human Adult | ZZ1052 |
| Bark - United States | Used as a digestive bitter to stimulate gastric secretion and to stimulate the appetite. | Infusion / Oral | Human Adult | ZZ1065 |
| Bark - United States | Used as a bitter, emmenagogue, and stomach sedative; for digestive and stomach disorders and anorexia nervosa. | Infusion / Oral | Human Adult | ZZ1056 |
| Bark - United States | Used as a alterative, antiseptic, analgesic, diuretic, hemostat, nervine, stomachic and tonic; for beri-beri, cancer, gastritis, loss of appetite, rheumatism, snakebite and ventricular ulcers. | Various / Oral | Human Adult | ZZ1049 |
| Bark - United States | Used for gastric debility and stomach pain. | Decoction / Oral | Human Adult | ZZ2019 |
| Bark - United States | Used as a bitter tonic, stomachic, cystostatic, and digestive aid. | Not stated / Oral | Human Adult | ZZ1066 |
| Bark - United States | Used for gastric ulcers, stomach cancer, catarrhal gastritis, and as a tonic and restorative. | Decoction / Oral | Human Adult | ZZ2025 |
| Bark - United States | Used as an aromatic tonic and for cancer. | Fluid Extract / Oral | Human Adult | A05638 |
| Bark- United States | Improves digestion by stimulating the production of saliva and digestive juices. | Infusion / Oral | Human Adult | ZZ2018 |
| Bark - Various | Used as an alterative, nervine, and stomachic; for stomach cancer, duodenal ulcers, snakebite, and syphilis. | Not stated / Oral | Human Adult | ZZ1106 |

Presence of Compounds in Condurango (*Marsdenia cundurango*)

| Compound | Chemical Type | Plant Part | Plant Origin | Quantity | Ref # |
|-------------------------|-----------------|--|--|--|--|
| Aesculetin | Coumarin | Bark | Not stated | Not stated | T04060 |
| Amyrin, beta: | Triterpene | Trunk bark | Not stated | Not stated | A04027 |
| Amyrin, beta: cinnamate | Triterpene | Trunk bark Trunk bark Bark Bark | Not stated Not stated Not stated Not stated | Not stated Not stated Not stated Not stated | A03954 A04027 M08531 ZZ1047 |
| Bornesitol, D: | Carbohydrate | Leaf | Not stated | Not stated | A02619 |
| Boron | Inorganic | Trunk bark | Not stated | 350 ppm | A03969 |
| Caffeic acid | Phenylpropanoid | Bark Bark | Not stated Not stated | Not stated Not stated | T04060 T06297 |
| Caoutchouc | | Latex | Not stated | 60,000 ppm | ZZ1047 |
| Chlorogenic acid | Phenylpropanoid | Bark Bark | Not stated Not stated | Not stated Not stated | T04060 T06297 |
| Chlorogenic acid, neo: | Phenylpropanoid | Bark Bark | Not stated Not stated | Not stated Not stated | T04060 T06297 |
| Cichoriin | Coumarin | Bark | Not stated | Not stated | T04060 |
| Cinnamic acid | Phenylpropanoid | Trunk bark Trunk bark Bark | Not stated Not stated Not stated | Not stated Not stated Not stated | A03954 A04027 M08531 |
| Condurangin | Steroid | Trunk bark Trunk bark Bark Bark Bark Bark | Not stated Not stated Not stated Not stated Not stated Not stated | Not stated Not stated Not stated Not stated Not stated 20,000 ppm | A04019 J10154 M08530 M08531 T09563 ZZ1047 |

| Compound | Chemical Type | Plant Part | Plant Origin | Quantity | Ref # |
|---|---------------|------------------------------|---|---|--------------------------------------|
| Condurangogenin B | Steroid | Bark | Not stated | Not stated | T04204 T05163 |
| Condurangogenin C | Steroid | Bark | Not stated | Not stated | T05163 |
| Condurangoglycoside 10 | Steroid | Bark | Not stated | 00.12% | H13984 |
| Condurangoglycoside A | Steroid | Bark Bark Bark | Ecuador Not stated Not stated | Not stated 00.03030% Not stated | H04222 H13984 T08122 |
| Condurangoglycoside A hemiacetal | Steroid | Bark | Not stated | Not stated | T08122 |
| Condurangoglycoside A-0 | Steroid | Bark Bark Bark Bark | Ecuador Not stated Ecuador Japan | Not stated 00.18333% Not stated Not stated | H04222 H13984 T03050 W04489 |
| Condurangoglycoside A-1 | Steroid | Bark | Not stated | Not stated | T08122 |
| Condurangoglycoside B-0 | Steroid | Bark | Japan | 00.08% | M12438 |
| Condurangoglycoside C | Steroid | Bark Bark Bark | Ecuador Not stated Not stated | Not stated 00.03030% Not stated | H04222 H13984 T08122 |
| Condurangoglycoside C-0 | Steroid | Bark Bark | Ecuador Japan | Not stated Not stated | T03050 W04489 |
| Condurangoglycoside C-1 | Steroid | Bark | Not stated | Not stated | T08122 |
| Condurangoglycoside D-0 | Steroid | Bark Bark Bark | Ecuador Japan Japan | Not stated 00.01% Not stated | H04222 M12438 W04489 |
| Condurangoglycoside D-0, 20-iso-o-methyl: | Steroid | Bark Bark | Japan Japan | 00.001% Not stated | M12438 W04489 |
| Condurangoglycoside D-0, 20-o-methyl: | Steroid | Bark | Japan | 00.003% | M12438 |

| Compound | Chemical Type | Plant Part | Plant Origin | Quantity | Ref # |
|--------------------------|---------------|--|--|---|--------------------------------------|
| Condurangoglycoside E | Steroid | Bark Bark | Ecuador Not stated | Not stated Not stated | H04222 T13842 |
| Condurangoglycoside E-0 | Steroid | Bark Bark | Ecuador Not stated | Not stated Not stated | H04222 T13842 |
| Condurangoglycoside E-01 | Steroid | Bark | Japan | Not stated | T06252 |
| Condurangoglycoside E-02 | Steroid | Bark | Japan | Not stated | T06252 |
| Condurangoglycoside E-2 | Steroid | Bark Bark Bark | Ecuador Not stated Not stated | Not stated 00.01733% Not stated | H04222 H13984 T13842 |
| Condurangoglycoside E-3 | Steroid | Bark Bark Bark | Ecuador Not stated Not stated | Not stated 00.06333% Not stated | H04222 H13984 T13842 |
| Condurangoside A | Steroid | Bark | Not stated | 00.0045% | H13984 |
| Condurangoside A-0 | Steroid | Bark | Not stated | 00.06666% | H13984 |
| Condurangoside B | Steroid | Bark | Not stated | 00.011666% | H13984 |
| Condurangoside B-0 | Steroid | Bark | Not stated | 00.07666% | H13984 |
| Condurangoside C-0 | Steroid | Bark | Not stated | 00.05666% | H13984 |
| Condurangoside D-01 | Steroid | Bark | Not stated | 00.00426% | H13984 |
| Condurangoside FC | Steroid | Bark | Not stated | 00.01166% | H13984 |
| Condurangotriose, neo: | Carbohydrate | Bark Bark | Japan Japan | Not stated Not stated | T08594 T08953 |
| Conduritol | Carbohydrate | Leaf Trunk bark Trunk bark Bark | Not stated Not stated Not stated Not stated | Not stated Not stated Not stated 5,000 ppm | A02619 A04018 A04026 ZZ1047 |

| Compound | Chemical Type | Plant Part | Plant Origin | Quantity | Ref # |
|-------------------------|-----------------|---------------------------------------|--|--|----------------------------|
| Coumaric acid, para: | Phenylpropanoid | Bark | Not stated | Not stated | T04060 |
| Coumarin | Coumarin | Bark | Not stated | Not stated | T04060 |
| Cymarose, D | Steroid | Bark | Not stated | Not stated | ZZ1047 |
| Drevogenin D | Steroid | Trunk bark Bark | Not stated Not stated | Not stated Not stated | A03963 ZZ1047 |
| Drevogenin D, dihydro: | Steroid | Trunk bark Bark | Not stated Not stated | Not stated Not stated | A03963 ZZ1047 |
| Glycerol | Lipid | Trunk bark | Not stated | Not stated | A04027 |
| Glucose, D | Lipid | Bark | Not stated | Not stated | ZZ1047 |
| Hyperoside | Flavonol | Bark | Not stated | Not stated | T06297 |
| Inositol, D: | Carbohydrate | Leaf | Not stated | Not stated | A02619 |
| Kondurangamine A | Steroid | Bark | Peru | Not stated | J07602 |
| Kondurangamine B | Steroid | Bark | Peru | Not stated | J07602 |
| Kondurangin | Steroid | Trunk bark Stem bark | Not stated Not stated | 2.26% 3.30% | A04554 A04560 |
| Kondurangogenin A | Steroid | Trunk bark Trunk bark Stem bark | Not stated Not stated Not stated | Not stated Not stated Not stated | A03961 A03962 A04560 |
| Kondurangogenin A-1 | Steroid | Trunk bark | Not stated | Not stated | A03962 |
| Kondurangogenin C | Steroid | Trunk bark Trunk bark | Not stated Not stated | Not stated Not stated | A03961 A03962 |
| Kondurangogenin C-1 | Steroid | Trunk bark | Not stated | Not stated | A03962 |
| Kondurangoglycoside A | Steroid | Trunk bark | Not stated | Not stated | A03962 |
| Kondurangoglycoside A-1 | Steroid | Trunk bark | Not stated | Not stated | A03962 |

| Compound | Chemical Type | Plant Part | Plant Origin | Quantity | Ref # |
|--|---------------|--------------|--------------------------|--------------------------|------------------|
| Kondurangoglycoside C | Steroid | Trunk bark | Not stated | Not stated | A03962 |
| Kondurangoglycoside C-1 | Steroid | Trunk bark | Not stated | Not stated | A03962 |
| Leucanthemitol, L: | Carbohydrate | Leaf | Not stated | Not stated | A02619 |
| Marsdenia Cundurango Antitumor Substance | Unknown | Bark | Not stated | Not stated | T04212 |
| Marsdenia Cundurango Glycoside E-01 | Steroid | Bark | Not stated | 00.00197% | T05891 |
| Marsdenin | Steroid | Trunk bark | Not stated | Not stated | A03963 |
| Pinitol, D: | Carbohydrate | Leaf | Not stated | Not stated | A02619 |
| Quercitrin | Flavonol | Bark | Not stated | Not stated | T06297 |
| Rutin | Flavonol | Bark | Not stated | Not stated | T06297 |
| Saponarin | Flavone | Bark | Not stated | Not stated | T06297 |
| Sarcostin | Steroid | Trunk bark | Not stated | Not stated | A03963 |
| Sequoyitol | Carbohydrate | Leaf | Not stated | Not stated | A02619 |
| Sitosterol, beta: cinnamate | Steroid | Trunk bark | Not stated | Not stated | A03954 |
| Thevetose, D | Glycoside | Bark | Not stated | Not stated | ZZ1047 |
| Trifolin | Flavonol | Bark | Not stated | Not stated | T06297 |
| Umbelliferone | Coumarin | Bark | Not stated | Not stated | T04060 |
| Vanillin | Benzenoid | Bark Bark | Not stated Not stated | Not stated Not stated | T04060 T06297 |
| Viburnitol, L: | Carbohydrate | Leaf | Not stated | Not stated | A02619 |

Biological Activities of Condurango (*Marsdenia cundurango*)

| Plant Part - Origin | Activity Tested For | Type Extract | Test Model | Dosage | Result | Notes/Organism tested | Ref # |
|---------------------|----------------------------|---------------------|----------------|--------------|-----------|--|--------|
| Bark - Japan | Mutagenic Activity | MEOH ext H2O ext | Agar plate | 50 mg / disc | Inactive | <i>Salmonella typhimurium</i> | T06535 |
| Bark - Not stated | Allergenic Activity | H2O ext | Human Adult | 3 mg / ml | Active | Case report of allergic reaction in patient with known latex allergy. | J15455 |
| Bark - Not stated | Anti-tumor Activity | Fraction | IP Mouse | 8-32 mg / kg | Active | CA-Ehrlich-Ascites | T04248 |
| Bark - Ecuador | Anti-tumor Activity | Fraction | IP Mouse | Not stated | Active | CA-Ehrlich-Solid | T03050 |
| Bark - Not stated | Cytotoxic Activity | H2O ext | Cell culture | 10% | Inactive | HELA cells | T09507 |
| Bark - Not stated | Cytotoxic Activity | H2O ext | Cylinder plate | 5% | Equivocal | CA-Ehrlich-Ascites | T09507 |
| Bark - Not stated | Cytotoxic Activity | Acetone ext | Cylinder plate | 5% | Equivocal | CA-Ehrlich-Ascites | W03044 |
| Bark - Not stated | Antileukemic Activity | MEOH ext | Cell culture | Not stated | Active | mouse myeloid leukemia cells | MC1001 |
| Bark - Not stated | Bitter Tasting Effect | H2O ext | Human adult | Various | Active | | W04494 |
| Bark - Ecuador | Anti-inflammatory Activity | CH2CL2 ext | IG Mouse | 1.25 g / kg | Active | vs carrageenan- induced pedal edema | K28882 |
| Vine - Ecuador | Anti-inflammatory Activity | ETOH ext | IG Mouse | 1.25 g / kg | Active | 31.2% reduction of carrageenan- induced edema | L03441 |
| Vine - Ecuador | Lipid Peroxide Inhibition | ETOH ext | Rat liver | 100 mcg / ml | Active | 23.5% inhibition | L03441 |
| Not stated | Antimycobacterial Activity | ETOH ext | Broth culture | Not stated | Active | <i>Mycobacterium tuberculosis</i> | M27150 |
| Bark- Not stated | Antiviral Activity | H2O ext | Cell culture | 10% | Inactive | Virus-Herpes Type 2 Influenza A2 Vaccinia virus Poliovirus II | T09507 |

GI = Gastric Intubation IG = Intragastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously PO = Orally

| Plant Part - Origin | Activity Tested For | Type Extract | Test Model | Dosage | Result | Notes/Organism tested | Ref # |
|---------------------|-----------------------------|--------------|------------|--------------|-----------|---|--------|
| Vine - Ecuador | Antioxidant Activity | ETOH ext | In vitro | 100 mcg / ml | Equivocal | Did not increase superoxide scavenging activity but inhibited hydroxyl radical formation by 15.6% | L03441 |
| Vine - Ecuador | Xanthine Oxidase Inhibition | ETOH ext | In vitro | 100 mcg / ml | Inactive | | L03441 |
| Vine - Ecuador | Diastase Inhibition | Not stated | Not stated | 0.1% | Inactive | | T16353 |
| Vine - Ecuador | Biodiastase Inhibition | Not stated | Not stated | 1.0% | Inactive | | T16353 |
| Vine - Ecuador | Pancreatin Inhibition | Not stated | Not stated | 0.05% | Active | | T16353 |
| Bark - Not stated | Insecticidal Activity | H2O ext | In vitro | Various | Inactive | <i>Blatella germanica</i> | W03405 |
| Bark - Not stated | Insecticidal Activity | H2O ext | In vitro | Various | Inactive | <i>Oncopeltus fasciatus</i> | W03405 |
| Bark - Not stated | Insecticidal Activity | H2O ext | IV | 40 ml / kg | Inactive | <i>Periplaneta americana</i> | W03405 |

GI = Gastric Intubation IG = Intragastric IP = Intraperitoneally IV = Intravenously SC = Subcutaneously PO = Orally

Literature Cited - Condurango

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