



MACELA POWDER

1 pound (16 oz)

Retail Price: \$24.00

Description: Raintree's macela leaf powder (*Achyrocline satureioides*) has been milled into a fine powder which is suitable to stuff into capsules or to prepare your own teas, tinctures or extracts. It has been sustainably wild-harvested in the Brazilian Amazon and it is rich in active and beneficial phytochemicals that occur naturally in this plant. Phytochemical analysis of macela, which began in the mid-1980s, shows that it is a rich source of flavonoids—including novel ones never seen before. Many of its active properties are attributed to these flavonoids as well as to other chemicals (called terpenes) isolated in the plant.* This plant has two Latin names (*Achyrocline satureioides* and *Egletes viscosa*), however both names refer to the same plant. For more complete information on this unique rainforest plant, please see the Raintree Nutrition internet website and the online [Tropical Plant Database](#).

Traditional Uses:* applied externally for pain and inflammation; for respiratory problems (asthma, bronchitis, flu, and upper respiratory bacterial and viral infections); for arteriosclerosis; for viral infections (hepatitis, HIV, herpes, etc.); for gallbladder and liver disorders

Ingredients: 100% pure macela leaves (*Achyrocline satureioides*). No binders, fillers or additives are used. This plant is non-irradiated and not fumigated, and has grown naturally in the Amazon without pesticides or fertilizers.

Suggested Use: This plant is best prepared as an infusion (tea): Use one teaspoon of powder for each cup of water. Pour boiling water over herb in cup and allow to steep 10 minutes. Strain tea (or allow settled powder to remain in the bottom of cup) and drink warm. It is traditionally taken in 1 cup dosages, 2-3 times daily.

Contraindications:

- Not to be used during pregnancy or while breast feeding.

Drug Interactions: None reported.

Other Observations:

- One study demonstrated barbiturate potentiation activity when a hot water extract of macela was injected in mice; it remains unclear if this effect is evident when taken orally. In herbal medicine systems, the plant is used as a sedative. Therefore this plant might enhance or increase the action of sedatives and barbiturates. Use with caution when taking other prescription sedatives and pain-killers.
- A chemical in this plant has been documented with hypoglycemic effects in animal studies. People with hypoglycemia and/or diabetes should use with caution while monitoring blood glucose levels for this possible effect.

Clinical Documentation and Research:* This Raintree product has not been the subject of any clinical research. Available third-party documentation and clinical research on macela can be found at the Raintree website and on [PubMed](#). A partial listing of published research on macela is shown below:

Pain-Relieving, Anti-inflammatory, & Muscle Relaxant Actions:

Melo, C. M., et al. "12-Acetoxyhawtriwaic acid lactone, a diterpene from *Egletes viscosa*, attenuates capsaicin-induced ear edema and hindpaw nociception in mice: possible mechanisms." *Planta Med.* 2006 Jun; 72(7): 584-9.

Hnatyszyn, O., et al. "Flavonoids from *Achyrocline satureioides* with relaxant effects on the smooth muscle of guinea pig corpus cavernosum." *Phytomedicine.* 2004; 11(4): 366-9.

Rao, V. S., et al. "Ternatin, an anti-inflammatory flavonoid, inhibits thioglycolate-elicited rat peritoneal neutrophil accumulation and LPS-activated nitric oxide production in murine macrophages." *Planta Med.* 2003; 69(9): 851-3.

Guedes, M. M., et al. "Antinociceptive and gastroprotective effects of diterpenes from the flower buds of *Egletes viscosa*." *Planta Med.* 2002; 68(11): 1044-6.

Lima, M. A., et al. "Biologically active flavonoids and terpenoids from *Egletes viscosa*." *Phytochemistry.* 1996; 41(1): 217-23.

Souza, M. F., et al. "Anti-anaphylactic and anti-inflammatory effects of ternatin, a flavonoid isolated from

Egletes viscosa Less." *Braz. J. Med. Biol. Res.* 1992; 25(10): 1029-32.

Simoes, C. M., "Anti-inflammatory action of *Achyrocline satureioides* extracts applied topically." *Fitoterapia.* 1988; 59(5): 419–21.

Simoes, C. M., et al. "Pharmacological investigations on *Achyrocline satureioides* (Lam). D.C., Compositae." *J. Ethnopharmacol.* 1988 Apr; 22(3): 281–93.

Anti-microbial Actions:

Bettega, J. M., et al. "Evaluation of the antiherpetic activity of standardized extracts of *Achyrocline satureioides*." *Phytother. Res.* 2004; 18(10): 819-23.

Zanon, S. M., et al. "Search for antiviral activity of certain medicinal plants from Cordoba, Argentina." *Rev. Latinoamer. Microbiol.* 1999; 41(2): 59–62.

Abdel-Malek, S., et al. "Drug leads from the Kallaway herbals of Bolivia. 1. Background, rationale, protocol and anti-HIV activity." *J. Ethnopharmacol.* 1996; 50: 157–22.

Anesini, C., et al. "Screening of plants used in Argentine folk medicine for antimicrobial activity." *J. Ethnopharmacol.* 1993; 39(2): 119–28.

Vargas, V., et al. "Genotoxicity of plant extracts." *Mem. Inst. Oswaldo Cruz* 1991; 86(11): 67–70.

Vargas, V., et al. "Mutagenic and genotoxic effects of aqueous extracts of *Achyrocline satureioides* in prokaryotic organisms." *Mutat. Res.* 1990; 240(1): 13–18.

de Souza, C. P., et al. "Chemoprophylaxis of *schistosomiasis*: molluscicidal activity of natural products." *An. Acad. Brasil. Cienc.* 1984; 56(3): 333–38.

Cellular protective & Antioxidant Actions:

Morquio, A, et al. "Photoprotection by topical application of *Achyrocline satureioides* ('Marcela'). *Phytother. Res.* 2005; 19(6): 486-90.

Rivera, F., et al. "Toxicological studies of the aqueous extract from *Achyrocline satureioides* (Lam.) DC (Marcela)." *J. Ethnopharmacol.* 2004 Dec; 95(2-3): 359-62.

Polydoro, M., et al. "Antioxidant, a pro-oxidant and cytotoxic effects of *Achyrocline satureioides* extracts." *Life Sci.* 2004 Apr; 74(23): 2815-26.

Vieira, M. M., et al. "Ternatin, a flavonoid, prevents cyclophosphamide and ifosfamide-induced hemorrhagic cystitis in rats." *Phytother. Res.* 2004; 18(2): 135-41.

Gugliucci, A., et al. "Three different pathways for human LDL oxidation are inhibited *in vitro* by water extracts of the medicinal herb *Achyrocline satureioides*." *Life Sci.* 2002; 71(6): 693–705.

Kadarian, C., et al. "Hepatoprotective activity of *Achyrocline satureioides* (Lam.) D.C." *Pharmacol. Res.* 2002; 45(1): 57–61.

Souza, M.F., et al. "Inhibition by the bioflavonoid ternatin of aflatoxin B1-induced lipid peroxidation in rat liver." *J. Pharm. Pharmacol.* 1999; 51(2):125-9.

Desmarchelier, C., et al. "Antioxidant and free radical scavenging effects in extracts of the medicinal herb *Achyrocline satureioides* (Lam.) D.C. (marcela)." *Braz. J. Med. Biol. Res.* 1998; 31(9): 163–70.

Desmarchelier, C., et al. "Antioxidant and prooxidant activities in aqueous extracts of Argentine Plants." *Int. J. Pharmacog.* 1997; 35(2): 116–20.

Rao, V. S., et al. "Investigations on the gastroprotective and antidiarrhoeal properties of ternatin, a tetramethoxyflavone from *Egletes viscosa*." *Planta Med.* 1997 Apr; 63(2): 146-9.

Lima, M. A., et al. "Biologically active flavonoids and terpenoids from *Egletes viscosa*." *Phytochemistry.* 1996; 41(1): 217-23.

Rao, V. S., et al. "Protective effect of ternatin, a flavonoid isolated from *Egletes viscosa* Less., in experimental liver injury."

Pharmacology. 1994; 48(6): 392-7.

Cytotoxic & Anticancerous Actions:

Polydoro, M., et al. "Antioxidant, a pro-oxidant and cytotoxic effects of *Achyrocline satureioides* extracts." *Life Sci.* 2004 Apr; 74(23): 2815-26.

Arredondo, M. F., et al. "Cytoprotection by *Achyrocline satureioides* (Lam) D.C. and some of its main flavonoids against oxidative stress." *J. Ethnopharmacol.* 2004 Mar; 91(1): 13-20.

Ruffa, M. J., et al. "Cytotoxic effect of Argentine medicinal plant extracts on human hepatocellular carcinoma cell line." *J. Ethnopharmacol.* 2002; 79(3): 335–39.

Pessoa, C., et al. "Antiproliferative effects of compounds derived from plants of Northeast Brazil." *Phytother.*

Res. 2000 May; 14(3): 187-91.

Rojas De Arias, A., et al. "Mutagenicity, insecticidal and trypanocidal activity of some Paraguayan Asteraceae." *J. Ethnopharmacol.* 1995; 45(1): 35-41.

Arisawa, M. "Cell growth inhibition of KB cells by plant extracts." *Nat. Med.* 1994; 48(4): 338-47.

Gonzalez, A., et al. "Biological screening of Uruguayan medicinal plants." *J. Ethnopharmacol.* 1993; 39(3): 217-20.

Immunostimulant Actions:

Santos, A. L., et al. "Immunomodulatory effect of *Achyrocline satureioides* (Lam.) D.C. aqueous extracts." *Phytother. Res.* 1999; 13(1):65-66.

Puhlmann J, et al. "Immunologically active metallic ion-containing polysaccharides of *Achyrocline satureioides*." *Phytochemistry.* 1992; 31(8): 2617-21.

Wagner, H., et al. "Immunostimulating polysaccharides (heteroglycanes) of higher plants." *Arzneimforsch.* 1985; 35(7): 1069-75.

Wagner, H., et al. "Immunostimulating polysaccharides (heteroglycanes) of higher plants/preliminary communication." *Arzneimforsch.* 1984; 34(6): 659-61.

Antidiabetic & Hypoglycemic Actions:

Gugliucci, A., et al. "The botanical extracts of *Achyrocline satureioides* and *Ilex paraguariensis* prevent methylglyoxal-induced inhibition of plasminogen and antithrombin III." *Life Sci.* 2002 Dec 6; 72(3): 279-92.

Carney, J. R., et al. "Achyrofurin, a new antihyperglycemic dibenzofuran from the South American medicinal plant *Achyrocline satureioides*." *J. Nat. Prod.* 2002; 65(2): 203-5.

This Raintree product is distributed through health food stores, health practitioners, and by [Raintree Nutrition](#). Please contact a health professional concerning other observations and/or effects of this product and/or if you have any disease, condition, or illness for which you are seeking treatment or products for.

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