

B189 Effects of *Achyrocline satureioides* on mean blood pressure and heart rate of the rat.

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Achyrocline satureioides (Lam) D. C., Asteraceae, (v.n. "marcela", "marcelita", "falso yateí-caá") is a medicinal plant whose aqueous extracts of the aerial parts are widely used in folk medicine in Argentina and other countries of South America for the treatment of several human ailments, particularly those related to gastrointestinal dysfunction as choleric, hepatoprotective and antispasmodic. Previous pharmacological *in vivo* studies have reported anti-inflammatory, analgesic, sedative, immunostimulating and antioxidant properties. The aim of the present study was to determine the cardiovascular effects of the aqueous extract of *A. satureioides* in the anesthetized rat.

A. satureioides was collected in Buenos Aires province. Aqueous extract was prepared as infusion 5% P/V (1). 200 g of plant material (aerial part) dried and ground were stored 20 minutes after addition of boiling water and then filtered. The filtrate was freeze-dried and the resulting powder was considered as the aqueous extract. Dilutions of 1% (M1), 2% (M2), 4% (M4) and 8% (M8) were made and intravenously administered to Wistar rats weighing 220-250 g, which were previously anaesthetized with pentobarbital (40 mg/kg). The femoral vein and the carotid artery of the rats were cannulated for extract administration and blood pressure measurement respectively. A Statham transducer and a Grass polygraph were used for this purpose.

Marcela extracts induced a concentration dependent decrease in mean blood pressure when compared with the administration of saline solution (SS): M1: $-9.5 \pm 2.7^*$ mm Hg, M2: $-15.2 \pm 2.8^{**}$ mm Hg, M4: $-23.6 \pm 4.4^{**}$ mm Hg, M8: $-38.5 \pm 4.3^{**}$ mm Hg vs. SS: 1.7 ± 0.3 mm Hg; * $p < 0.05$, ** $p < 0.01$, $n = 7$. The 8% dilution of the extract also decreased the heart rate (M8: -26 ± 5.8 beats/min vs. SS: -3.8 ± 2.9 beats/min, $p < 0.01$, $n = 7$). Methyl atropine (MA: 1.2 mg/kg iv) slightly antagonized the decrease in blood pressure (MA + M8: -25.1 ± 2.2 mm Hg, $n = 4$ vs. M8: -38.5 ± 4.3 mm Hg, $n = 7$, $p < 0.05$).

The aqueous extract of *A. satureioides* induced significant changes on mean blood pressure and heart rate of the rat. The activation of muscarinic receptors seems to be only partially involved in these effects.

Acknowledgements: This work was supported by grant SECYT-UBA B 079.

References: 1. Farmacopea Argentina VI ed. pag. 581, 1978.

B190 Bois Bandé, a popular aphrodisiac in the light of science

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The Caribbean island of Grenada furnishes the popular aphrodisiac drug Bois Bandé, which consists of the stem bark and the roots of a native tree growing in the island's rain forest. Contrary to Grenadian sources (1) the drug does not stem from *Roupala montana* Aubl. (Proteaceae) but *Chione venosa* (Sw.) Urban (Rubiaceae), a plant known under the same vernacular name in other islands of the West Indies (2). The drug's morphological and anatomical features are presented. Anatomical characteristics are conspicuous agglomerations of stone cells and fibers in the cortical parts of the plant.

Folk medicine recommends to leave a piece of the crude drug in white rum over a period of one week. Accordingly, samples of stem bark and roots collected in Grenada were powdered and extracted with methanol 40%. The resulting extract was fractionated by CC on silica gel 60 using chloroform, chloroform-methanol and chloroform-methanol-water mixtures as mobile phases. The polar fractions yielded free sugars as glucose, mannose, fructose and saccharose which were identified by TLC and GC-MS after derivatization. Purification of the more apolar fractions by HPLC on RP 8 material with methanol-water as mobile phase yielded glycosylated terpenoids.

This is the first time that anatomical and phytochemical characteristics of this drug are presented.

Acknowledgements: We thank David William Taylor, The University of Michigan, USA, for identifying the herbarium samples and Telfor Bedeau, nature guide in Grenada, for guiding us to the drug-furnishing trees.

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