



## Preliminary Experimental Diuretic Activity of Plants Used by Cuban Population

Maykel PÉREZ <sup>\*1</sup>, Maria BOFFILL <sup>2</sup>, Francisco MORON <sup>3</sup>, Emilio MONTEAGUDO <sup>2</sup>,  
Mario L. SUEIRO <sup>4</sup> & Geydi LORENZO <sup>5</sup>

<sup>1</sup> Vicerrectorate of Research. Villa Clara Medical Sciences University.  
Circunvalation Rd. and Acueduct Rd. Santa Clara, Villa Clara, Cuba. P.O.: 50200

<sup>2</sup> Experimental Toxicology Unit. Villa Clara Medical Sciences University. Cuba

<sup>3</sup> Havana Medical Sciences University. Cuba

<sup>4</sup> Central University "Marta Abreu". Santa Clara. Villa Clara. Cuba.

<sup>5</sup> Molecular Immunology Centre. Villa Clara delegation. Cuba.

**SUMMARY.** Diuretic activity of five medicinal plants (*Cassia alata* L., *Zanthoxylum fagara* L., *Nectandra coriacea* Sw, *Costus pictus* D. Don, and *Persea americana* Miller) used by Cuban population was assessed. Plants decoctions (30 %) were applied to Wistar male rats (400 mg/kg BW), based on total solids and completed with physiological saline solution up to a total constant administration volume of 40 ml/kg BW and administered to 7 experimental groups: 5 treated, a positive control (furosemide, 20 mg/kg) and a negative control (NaCl, 0,9 %). Animals were placed in metabolic cages, decoctions administered and urinary excretion quantified after ½, 1, 2, 3, 4, 5 and 6 h. After the urinary excretion, diuretic action and diuretic activity were calculated. Urine volumes were increased in all treated groups when compared to negative control, being superior in *C. alata* and *P. americana* and, at the same time, similar to the reference diuretic used.

**KEY WORDS:** Diuretics, Medicinal plants, Rats.

\* Author to whom correspondence should be addressed. E-mail: maykelpm@ucm.vcl.sld.cu