



## South American Medicinal Flora: A Promising Source of Novel Compounds with Antiprotozoal Activity

Valeria P. SÜLSEN<sup>1</sup>, Silvia I. CAZORLA<sup>2</sup>, Fernanda M. FRANK<sup>2</sup>, Claudia ANESINI<sup>1</sup>,  
Liliana V. MUSCHIETTI<sup>1</sup> & Virginia S. MARTINO<sup>1\*</sup>

<sup>1</sup> *Cátedra de Farmacognosia, IQUIMEFA (UBA-CONICET)*, <sup>2</sup> *Cátedra de Inmunología, IDEHU (UBA-CONICET), Facultad de Farmacia y Bioquímica, Departamento de Microbiología, Facultad de Medicina, Universidad de Buenos Aires, Buenos Aires, Argentina.*

**SUMMARY.** Native populations of South America have employed herb-based preparations for the treatment of parasite diseases. In this review, some examples of South American medicinal plants from which bioactive molecules have been isolated are presented. Results of our research related to the study of novel compounds with antiprotozoal activity are also presented herein. Peruvin and psilostachyin, two sesquiterpene lactones isolated from the Argentine medicinal species *Ambrosia tenuifolia*, presented significant *in vitro* activity on *Trypanosoma cruzi* epimastigotes and trypomastigotes. Psilostachyin also presented *in vivo* activity in *T. cruzi* infected mice. Both compounds were also active on *Leishmania* spp. The results obtained suggest that psilostachyin could be considered a potential lead molecule in the development of novel trypanocidal agents.

**KEY WORDS:** Antiprotozoal activity, Sesquiterpene lactones, South American medicinal species.

\*Author to whom correspondence should be addressed. *E-mail:* vmartino@ffyba.uba.ar