



Trypanocidal activity of *Erythrina speciosa* Andr. (Leguminosae)

Viviane K. GRAÇA-DE-SOUZA ¹, Teresinha J. FARIA ², Carolina PANIS ³, Rafael A. MENOLLI ⁴, Ivo MARGUTI ³, Lucy M. YAMAUCHI ¹, Sueli F. YAMADA-OGATTA ¹ & Phileno PINGE-FILHO ^{3*}

¹ Departamento de Microbiologia, ² Departamento de Química &
^{3*} Departamento de Ciências Patológicas, Universidade Estadual de Londrina,
Rodovia Celso Garcia Cid (PR 445, Km 380), Londrina, PR, Brasil
⁴ Centro de Ciências Médicas e Farmacêuticas,
Universidade Estadual do Oeste do Paraná, Cascavel, PR, Brasil.

SUMMARY. Investigation of the bioactive crude extracts from the leaves of *Erythrina speciosa* Andr. (Leguminosae-Papilionoideae) from Brazil led to the isolation of nororientaline as a new alkaloid in this plant. The activity of crude extract and alkaloids, isolated from leaves of *E. speciosa* were evaluated against *Trypanosoma cruzi* epimastigotes and trypomastigotes *in vitro*. Our results show that crude alcoholic extract of *E. speciosa* (Et-Es) and alkaloids containing nororientaline at 250 µg/mL, 500 µg/mL and 1000 µg/mL inhibited 50, 60 and 80 % of epimastigote growth, respectively ($p < 0.001$). Et-Es showed activity against trypomastigote forms in 80 % and 60 % at 1000 µg/mL and 500 µg/mL, respectively. When tested against macrophages, the same extract did not affect the cell viability as measured by luminescent assay, suggesting that it should be considered as a leading structure for further research.

KEY WORDS: *Erythrina speciosa*, Nororientaline, Trypanocidal activity.

* Author to whom correspondence should be addressed. *E-mail:* pingefilho@uel.com.br