



## Biological Activities of *Castela coccinea* Griseb. Extracts

María Noel CAMPAGNA <sup>1</sup>, María Soledad RATTI <sup>1</sup>, Mariela SCIARA <sup>2</sup>,  
Eleonora GARCÍA VESCOVI <sup>2</sup>, Martha GATTUSO <sup>1</sup> \* & María Laura MARTÍNEZ <sup>1</sup> \*

<sup>1</sup> *Farmacobotánica; <sup>1</sup> Microbiología, Facultad de Ciencias. Bioquímicas y Farmacéuticas,*  
*Universidad Nacional de Rosario, Suipacha 531 – S2002LRK Rosario, Argentina.*

*SUMMARY.* Infusions of leaf and bark of *Castela coccinea* Griseb. (Simaroubaceae) were traditionally used

against dysentery. In this work, anti-bacterial and antioxidant activity were studied in *C. coccinea* extracts. The highest DPPH scavenging activity was detected in ethanolic leaf extracts with an IC<sub>50</sub>= 0.015 mg/ml. Bark ethanolic extracts showed inhibition of lipoperoxidation and free radical scavenging. However, a previous work evidenced that this extract is toxic at a concentration needed to show antioxidant activity. It might be considered that wood could be used instead of bark extract as the first one showing higher scavenging activity (Wood 55 %, Bark 33 % of DPPH scavenging) and good inhibition of lipoperoxidation. It is a very interesting fact the high tannin and mucilage content, which are localized particularly in leaves. The high antioxidant activity and abundant mucilage and tannin contents could justify, at least in part, its popular use.

### INTRODUCTION

**KEY WORDS:** Antioxidant activity, *Castela*, mucilage, Simaroubaceae.

\* Author to whom correspondence should be addressed. *E-mail:* mlmartin@fbioyf.unr.edu.ar, marthagattuso@fibertel.com.ar