



## Antinociceptive Activity of *Malva sylvestris* L.

Patricia Fontes ESTEVES<sup>1,3</sup>, Alice SATO<sup>2,3</sup>, Maria A. ESQUIBEL<sup>1,3</sup>,  
Fátima de CAMPOS-BUZZI<sup>4</sup>, Aleandra V. MEIRA<sup>4</sup> & V. CECHINEL-FILHO<sup>4\*</sup>

<sup>1</sup> Programa de Pós-graduação em Biotecnologia Vegetal–Universidade Federal  
do Rio de Janeiro (UFRJ), 21941-590, Rio de Janeiro, RJ.

<sup>2</sup> Departamento de Ciências Naturais–Universidade Federal  
do Estado do Rio de Janeiro (UNIRIO), 22290-240, Rio de Janeiro, RJ.

<sup>3</sup> Laboratório de Fisiologia Vegetal/Instituto de Biofísica Carlos Chagas Filho/Universidade Federal  
do Rio de Janeiro (UFRJ), 21941-590, Rio de Janeiro, RJ.

<sup>4</sup> Núcleo de Investigações Químico-Farmacêuticas (NIQFAR),  
Universidade do Vale do Itajaí (UNIVALI), 88302-202, Itajaí, SC.

**SUMMARY.** The antinociceptive activity of *Malva sylvestris* (Malvaceae) aqueous extract (10 mg/kg, i.p.) was evaluated against classical models of pain in mice, indicating promising results. It showed significant antinociceptive activity in writhing test (76.4% of inhibition) and also inhibited the neurogenic (61.8%) and inflammatory (46.6%) phases of the formalin model. When analysed against capsaicin-induced pain model, the aqueous extract was also effective with inhibition of 62.9%, but it did not cause significant activity against hot-plate model. The results suggest that the antinociception caused by aqueous extract is related to the inhibition of prostaglandins synthesis pathway cyclooxygenase and unrelated to the stimulation of the opioid receptors.

**KEY WORDS:** Antinociception, Aqueous extract, Capsaicin test, Formalin test, *Malva sylvestris* L., Writhing test.

\* Author to whom correspondence should be addressed. E-mail: cechinel@univali.br