



# Actividad fagocítica y toxicidad del extracto acuoso de Schinus molle L. sobre Mus musculus BALB/c [

2023

text (article)

Analítica

**Introduction:** Traditional medicine could be a safe alternative to enhance the immunity of immunocompromised patients prone to recurrent infections.**Objective:** To evaluate the phagocytic activity and in vivo toxicity of the aqueous extract of Schinus molle L. on Mus musculus BALB/c.**Material and Methods:** Experimental study that used a single dose of aqueous extract of Schinus molle leaves of 2000 mg/kg. In vivo phagocytosis was determined in 10 specimens of M. musculus BALB/c that met the inclusion and exclusion criteria, which were randomly and equally distributed in the control and experimental groups. The specimens of the experimental group were inoculated intraperitoneally with 0.5 ml of Staphylococcus aureus suspension and 0.5 ml of the aqueous extract. Those of the control group were inoculated with 0.5 ml of the same bacterial inoculum and 0.5 ml of sterile saline solution. The toxicity of the extract was evaluated by the method of the acute toxicity classes in 12 specimens of mice with the same characteristics that fulfilled the same criteria applied in the evaluation of phagocytosis in vivo.**Results:** The results demonstrate that 57.1% of the macrophages exposed to the aqueous extract of S. molle showed significant phagocytic activity, finding an average of 21 phagocytosed bacteria per macrophage. No significant signs or symptoms of toxicity were evidenced in the specimens during the 14 days of experimentation.**Conclusions:** The aqueous extract of S. molle significantly increased in vivo phagocytosis of peritoneal macrophages from M. musculus BALB/c, without clinical evidence of toxicity and in the absence of mortality

**Introduction:** Traditional medicine could be a safe alternative to enhance the immunity of immunocompromised patients prone to recurrent infections.**Objective:** To evaluate the phagocytic activity and in vivo toxicity of the aqueous extract of Schinus molle L. on Mus musculus BALB/c.**Material and Methods:** Experimental study that used a single dose of aqueous extract of Schinus molle leaves of 2000 mg/kg. In vivo phagocytosis was determined in 10 specimens of M. musculus BALB/c that met the inclusion and exclusion criteria, which were randomly and equally distributed in the control and experimental groups. The specimens of the experimental group were inoculated intraperitoneally with 0.5 ml of Staphylococcus aureus suspension and 0.5 ml of the aqueous extract. Those of the control group were inoculated with 0.5 ml of the same bacterial inoculum and 0.5 ml of sterile saline solution. The toxicity of the extract was evaluated by the method of the acute toxicity classes in 12 specimens of mice with the same characteristics that fulfilled the same criteria applied in the evaluation of phagocytosis in vivo.**Results:** The results demonstrate that 57.1% of the macrophages exposed to the aqueous extract of S. molle showed significant phagocytic activity, finding an average of 21 phagocytosed bacteria per macrophage. No significant signs or symptoms of toxicity were evidenced in the specimens during the 14 days of experimentation.**Conclusions:** The aqueous extract of S. molle significantly increased in vivo

phagocytosis of peritoneal macrophages from M. musculus BALB/c, without clinical evidence of toxicity and in the absence of mortality

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMzQ5NDc4MzU>

---

**Título:** Actividad fagocítica y toxicidad del extracto acuoso de Schinus molle L. sobre Mus musculus BALB/c [electronic resource]

**Editorial:** 2023

**Tipo Audiovisual:** Schinus molle inmunomodulación toxicidad plantas medicinales macrófagos fagocitosis  
Schinus molle immunomodulation toxicity medicinal plants macrophages phagocytosis

**Documento fuente:** Revista Habanera de Ciencias Médicas, ISSN 1729-519X, Vol. 22, N°. 2 (Marzo-Abril 2023), 2023

**Nota general:** application/pdf

**Restricciones de acceso:** Open access content. Open access content star

**Condiciones de uso y reproducción:** LICENCIA DE USO: Los documentos a texto completo incluidos en Dialnet son de acceso libre y propiedad de sus autores y/o editores. Por tanto, cualquier acto de reproducción, distribución, comunicación pública y/o transformación total o parcial requiere el consentimiento expreso y escrito de aquéllos. Cualquier enlace al texto completo de estos documentos deberá hacerse a través de la URL oficial de éstos en Dialnet. Más información: <https://dialnet.unirioja.es/info/derechosOAI> | INTELLECTUAL PROPERTY RIGHTS STATEMENT: Full text documents hosted by Dialnet are protected by copyright and/or related rights. This digital object is accessible without charge, but its use is subject to the licensing conditions set by its authors or editors. Unless expressly stated otherwise in the licensing conditions, you are free to linking, browsing, printing and making a copy for your own personal purposes. All other acts of reproduction and communication to the public are subject to the licensing conditions expressed by editors and authors and require consent from them. Any link to this document should be made using its official URL in Dialnet. More info: <https://dialnet.unirioja.es/info/derechosOAI>

**Lengua:** Spanish

**Enlace a fuente de información:** Revista Habanera de Ciencias Médicas, ISSN 1729-519X, Vol. 22, N°. 2 (Marzo-Abril 2023), 2023

---

## Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- [informa@baratz.es](mailto:informa@baratz.es)