

THE EFFECT OF *Mimosa pudica* EXTRACT TOWARDS THE PRODUCTION OF ANTIVENOM IMMUNOGLOBULIN G (IgG) IN RATS (*Rattus norvegicus*) IMMUNIZED WITH JAVAN SPITTING COBRA (*Naja sputatrix*) TOXOID

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ABSTRACT

In the field of herbal medicine, *Mimosa pudica* has been discovered to possess many beneficial properties, including wound-healing, antimicrobial, analgesic, antivenom, and immunostimulant activities. The aim of this research is to explore the capabilities of *Mimosa pudica* in stimulating the production of antivenom immunoglobulins in rats immunized with toxoid derived from *Naja sputatrix*. The subjects were grouped into five groups: a negative control (C-), a positive control immunized with toxoid (C+), and treatment groups T1, T2 and T3 immunized with toxoid and given daily oral administration of ethanolic *Mimosa* extract with concentrations of 1000, 500 and 250 mg/kg BW respectively for 14 days. Blood sample was taken and the obtained sera were tested with an Enzyme-Linked Immunosorbent Assay (ELISA) test. The results were analyzed using statistical ANOVA and Duncan Multiple Range Test. The conclusions of the research are *Mimosa pudica* extract can stimulate and increase the production of antibodies (Ig) in rats immunized with *Naja sputatrix* toxoid and the optimum dose for the treatment with *Mimosa extract* is 250 mg/kg BW.

Keywords: *Mimosa pudica*, immunostimulant, antivenom immunoglobulins, toxoid