Acute Intraperitoneal Toxicity of Sesbania grandiflora (Katuray) Methanolic Flower Extract in Swiss Albino Mice

Authors: Levylee Bautista, Dawn Grace Santos, Aishwarya Veluchamy, Jesusa Santos, Ghafoor Haque, Jr. I, Rodolfo Rafael **Abstract:** Sesbania grandiflora is widely used in traditional medicine to treat a wide range of ailments. Assessment of its toxic properties is hence crucial when considering public health protection because exposure to plant extracts may pose adverse effects on consumers. This study aimed to investigate the acute intraperitoneal toxicity of S. grandiflora flower methanolic extract (SGFME) in Swiss albino mice. Four different concentrations (11.25, 22.5, 40, and 90 mg/kg) of SGFME were administered intraperitoneally and immediate behavioral and clinical signs were observed. All concentrations of SGFME treated mice exhibited gasping and faster respiratory rate, writhing, reddening and fanning of the ears, paralysis of the hind leg, and mortality. Such reactions may be attributed to the histamine and saponin content of S. grandiflora. Results of this study suggests that intraperitoneal administration of SGFME produced significant adverse effect in mice, therefore, caution should be exercised in using it as herbal remedy since there is little control over its quality.

Keywords: acute toxicity test, histamine, medicinal plants, Sesbania grandiflora

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