



## Mutagenic Activity of Glycoalkaloids from *Solanum palinacanthum* Dunal (Solanaceae) found in the Brazilian cerrado

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**SUMMARY.** Solanaceous plants are widely distributed around the world and they are traditionally used as drugs for the treatment of cancer and herpes, and include familiar foods such as potato, tomato and egg-plant and some berries popular in Brazil. As part of a program of research on pharmacologically active new molecules, the aim in this study was to assess the mutagenic effects of *Solanum palinacanthum*, known popularly as joá. The crude 95% ethanol extract and purified solamargine obtained from the fruits of *S. palinacanthum* Dunal were investigated by the Ames test, using the *Salmonella typhimurium* strains TA98, TA97a, TA100 and TA102 as test organisms, with and without metabolic activation. The concentrations tested ranged from 0.07 to 15.0 mg/plate for the crude ethanolic extract and from 1.25 to 5.0 mg/plate for the solamargine. The results showed a mutagenic effect of both the extract and the solamargine in the TA98 strain (without metabolic activation). The present study showed the potential mutagenicity and suggests confirming this effect in other models, before recommending their indiscriminate consumption by the population.

**KEY WORDS:** Glycoalkaloids, Medicinal plants, Mutagenicity, Solamargine, *Solanum palinacanthum*.

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