

## Neuropharmacological Activity of Ethanolic Extract from the Leaves of *Pericampylus glaucus* in Experimental Animals

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**SUMMARY.** Present research was designed to evaluate the neuropharmacological activity of ethanol extract of *Pericampylus glaucus* in experimental animals. The sedative and anxiolytic activity were assessed by open field, cage crossing and head dipping test at dosage rate of 400, 600, and 800 mg/kg (b.wt.), orally. Furthermore, rotarod and force swimming test were employed for muscle relaxant and antidepressant activity. Diazepam was used as a standard in whole studies that was injected intraperitoneally at dose rate of 5 mg/kg (b.wt.). A non significant ( $p > 0.05$ ) in square crossing were noted with ethanol extract of *P. glaucus* at dose rate of 400 mg/kg (b.wt.) that decreased significantly ( $p < 0.01$ ) with ethanol extract at doses of 600 and 800 mg/kg (b.wt.) in open field test. A dose dependent decreased ( $p < 0.001$ ) in crossing of cages and dipping head were found with extract receiving groups in cage crossing and head dipping test. *P. glaucus*, did not show any muscle relaxant effect caused significant ( $p < 0.001$ ) increase in stay time. Moreover, caused significant ( $p < 0.001$ ) increase in mobility and decrease in immobility time. The findings of this study revealed significant neuropharmacological potential of *P. glaucus*.

**RESUMEN.** La presente investigación se diseñó para evaluar la actividad neurofarmacológica del extracto etanólico de *Pericampylus glaucus* en animales de experimentación. La actividad sedante y ansiolítica se evaluó por los ensayos de campo abierto, cruce de jaula y prueba de inmersión de la cabeza a una dosis de 400, 600 y 800 mg/kg (b.wt.), por vía oral. Además, se emplearon pruebas de natación rotatoria y de fuerza para el relajante muscular y la actividad antidepressiva. Se usó diazepam como estándar en estudios completos que se inyectaron por vía intraperitoneal a una tasa de dosis de 5 mg/kg (peso total). Se observó una diferencia significativa ( $p > 0.05$ ) en el cruce con el extracto de etanol de *P. glaucus* a una dosis de 400 mg/kg (b.wt.) que disminuyó significativamente ( $p < 0.01$ ) con el extracto de etanol en dosis de 600 y 800 mg/kg (b.wt.) en la prueba de campo abierto. Una disminución dosis-dependiente ( $p < 0,001$ ) se encontró en el cruce de las jaulas y la inmersión de la cabeza con grupos receptores de extractos. *P. glaucus* no mostró ningún efecto relajante muscular que causara un aumento significativo ( $p < 0,001$ ) en el tiempo de permanencia. Además, causó un aumento significativo ( $p < 0,001$ ) en la movilidad y una disminución en el tiempo de inmovilidad. Los hallazgos de este estudio revelaron un potencial neurofarmacológico significativo de *P. glaucus*.

**KEY WORDS:** antidepressant activity, force swimming, muscles relaxant, neuropharmacology, *Pericampylus glaucus*.

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