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Neuropharmacological evaluation of *Caladium bicolor* (Araceae) leaf extracts in rodents

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Caladium bicolor Aiton (Araceae) is used traditionally in treatment of boils, wound ulcers and convulsion. C. bicolor leaves were collected, dried and powdered. Extraction was done by maceration in methanol to yield the whole extract (WE). Successive extraction was done using n-hexane, ethyl acetate and methanol in a Soxhlet apparatus at temperatures of 69.0, 76.5 and 64.7°C to obtain HE, EA and ME extracts respectively. Preliminary phytochemical screening was done using the whole extract. Neuropharmacological studies were carried out using standard methods at doses of 100, 200 and 400 mg/kg orally. Phytochemical screening revealed the presence of carbohydrates, proteins alkaloids and flavonoids. WE showed varying protection against strychnine-induced convulsion. HE, EA and ME increased latency ($P<0.01$) to pentylenetetrazole-induced seizures (PTZ) induced convulsion as well as offered varying protection against hind limb extension seizures. Extracts had no significant effect on motor co-ordination. HE shortened onset of phenobarbitone induced sleep time ($P<0.001$). WE increased the duration of sleep ($P<0.05$). HE reduced the number of head dips ($P<0.01$) at 200 and 400 mg/kg respectively. WE, HE and ME significantly increased the duration of stay on the open arm of the elevated plus maze. EA and ME at doses of 100 and 200 mg/kg, and HE at a dose of 400 mg/kg significantly reduced the duration of immobility ($P<0.05$) in the forced swim test. The extract may possess anticonvulsant, CNS depressant, anxiolytic and antidepressant properties.

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