

Toxic effect of high dose of *Desmodium trilflorum* D.C (Heen Udupiyaliya) w.s.r. to body weight, liver and kidney function in rats

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Abstract

The aim of this study was to examine general, hepatic and renal toxicities with chronic daily administration of *Desmodium trilflorum* D.C (Heen Udupiyaliya). This was tested in rats using hot water extract (HWE) of leaves of *Desmodium trilflorum* D.C (Family; Papilionaceae, Heen Udupiyaliya in Sinhala and Sirupullady in Tamil). A high dose of *D. trilflorum* (187.5 mg/kl) or water (control) were orally administered to two groups of rats (n = 6 group) daily for 4 weeks. These rats were observed daily for overt signs of clinical toxicity. Blood samples were collected at one week's intervals and levels of serum proteins, SGOT, SGPT, Creatinine, Blood urea were determined. Body weights of these rats were determined weekly and food intake was noted. The results show that chronic administration (4 weeks) of high dose of (187.5 mg/kl) *D. trilflorum* did not induce any overt signs of toxicity, stress or aversive behaviors in contrast or produced significant ($p > 0.05$) change in any of the serum parameters investigated. *D. trilflorum* treatment caused a not more significant ($p, 0.05$) impairment (0.26 - 0.86%) in body weight after four weeks. It is concluded that chronic administration of *D. trilflorum* appears to be non toxic to liver and kidney.

Keywords: *Desmodium trilflorum* D.C, liver toxicity, renal toxicity, body weight, Heen Udupiyaliya

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