Chronic toxicity study of *Portulaca grandiflora* Hook

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ABSTRACT

We investigated the toxic effects of *Portulaca grandiflora* aqueous extract given to male and female Wistar rats for 8 months. The rats were divided into five groups of each sex that were control groups, three experimental groups and recovery groups. The control groups received 5 ml of distilled water/kg per day. The experimental groups were orally given the water extract of *Portulaca grandiflora* at doses of 10, 100 and 1000 mg/kg per day. The recovery groups received 1000 mg/kg per day for 8 months and were continued husbandry without giving the extract for further 14 days. Changes in the body weights, actual and relative organ weights were not significantly demonstrated in all groups throughout the study. No significant alteration in hematological, biochemical and histopathological parameters was observed in all female groups given the extract. It was found that any significant changes in hematological and biochemical parameters in the male rats at the doses of 100 and 1000 mg/kg per day were not dose-related. In addition, no histopathological lesions were observed in the male animals. Our results suggested that the water extract of *Portulaca grandiflora* at the doses given in the study did not induce any detrimental effects in the rats.

Keywords: *Portulaca grandiflora*; Toxicity
