

## **Allelopathic Effects of Saffron (*Crocus sativus*) Leaves and Corms on Seedling Growth of Redroot Pigweed (*Amaranthus retroflexus*) and Lambsquarter (*Chenopodium album*)**

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To study the allelopathic effects of saffron leaves and corms on redroot pigweed and Lambsquarter seedling growth, this experiment was conducted at greenhouse in 2005. For each species a factorial experiment in a completely randomized design with three replications was conducted. Factors included saffron organs at 2 levels (leaves and corms) and extract concentration at 4 levels (0.5, 1.5, 4.5 per 1000 ml of distilled water and check). The leaves and corms extract of saffron reduced the plant height, leaf area, leaf weight, stem weight, and per plant dry weight of both weeds. Comparing both species of redroot pigweed and Lambsquarter indicated that the allelopathic effects of saffron leaves was more in redroot pigweed and the allelopathic effects of corms was more in Lambsquarter.

**Keywords:** Saffron, allelopathy, weeds, biological control.