

***Euphorbia prostrate* L.**

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(
Chrysanthemum carinatum L.)

.(*Lathyrus odoratus* L.

: (% 10 5)

Gaillardia pulchella L.

(%10)

: (% 10 5)

()

(%333 %102.1)

.%10

(%166.6 %174.5)

Allelopathic Interaction of Prostrate Spurge *Euphorbia prostrata* L. with Three Species of Ornamental Plants

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ABSTRACT

This research was conducted to study the effect of prostrata spurge residues (shoot and root) on germination and growth of three species of ornamental plants which includes (*Chrysanthrum carinatum* L., *Gaillardia pulchella* L. and *Lathyrus odoratus* L.). Laboratory results showed that the aqueous extract of the residues at concentrations (5,10%) w:v caused a significant reduction in seed germination of the three species as compared with distilled water, The greatest reduction observed at the concentration (10%). The seedling growth showed an increase in the shoot length of *chrysanthemum* L. seedlings, but *gaillardia* L. and *lathyrus* L. shoot length was reduced, Moreover a reduction in the radicle length was seen in the three species. The results of green house experiment showed inhibition in seed germination of the three species of ornamental plants which sown in the soil containing (Spurge) residues that added at the ratio (5,10%) w:w and incubated for two weeks as compared with control soil (without residues), Also the results revealed a significant increase in the growth of the plants which grown in the soil containing spurge residues at the two ratios. The greatest increase which was found in the shoot length and its dry weight in *Gaillardia* L. reached to (102.1%,333%), but in the root length and its dry weight noticed in (*Chrysanthmum* L.) was (174.5% ,166.6%) at the (10%) ratio.
