

**P-8 (77)****INHIBITORY EFFECT OF AMYGDALUS SCOPARIA LEAF EXTRACT ON SEED GERMINATION AND SEEDLING GROWTH OF AMARANTHUS RETROFLEXUS, CHENOPODIUM ALBUM, AND PHYSALIS ALKEKENGİ**

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Nowadays using different advantages of medicinal plants is very common in different branches of science especially in agriculture. Allelopathy phenomenon is one the major issues in most of medicinal plants to control weeds as one of the main problems in agriculture which cause enormous damages annually. As they're one of the most important factors which reduce the yield of agriculture productions, it makes farmers use chemicals and herbicides with harmful side effects in order to fight them. So a research has been done to evaluate the effect of one offars province native medicinal plant's Extract on seed germination and seedling growth of three kinds of common weeds in this region. It was a factorial experiment in randomized complete design with 3 replications and 2 treatments conducted in IAU, Jahrom branch, College of Agriculture. The first treatment was water extract of *Amygdalus scoparia* in 4 levels including 0%, 5%, 10%, and 15%. The second factor was weeds including *Amaranthus retroflexus*, *Chenopodium album*, and *Physalis alkekengi*. Characteristics included germination percentage, average germination period, germination rate, hypocotyl length, radicle length, seedling length, and wet weight were observed. The results indicated that the extract had a significant effect on reducing germination percentage and seedling growth of these three plants. As, *Chenopodium album*, and *Physalis alkekengi* didn't have any germination it can be said that the result of this study might be provide some useful information about application of weed management in crop plants.

**Keywords:** medicinal plant Extract, Allelopathy, Germination, weeds