

INFLUENCE OF WILD OAT SEED BURIAL IN SOIL UNDER DIFFERENT RAINFALL REGION ON GROWTH AND SEED PRODUCTION .

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ABSTRACT

A pot experiment was conducted during growing season 2012-2013 to evaluate the growth and seed production of wild Oat *Avena fatua* L. which had grown under different environmental condition . The study included two factors :The first was wild Oat seed burial in soil at 0.0 , 1 , 4 , 8 cm. while the second factor , it was grown under different rainfall 300 , 400 , 500 mm. The results showed that the seeds on soil surface or 1cm. depth in soil had supper pass significantly in percentage of emergences than 4 or 8 cm. depth in soil . On other hand , plant that had emerged at 4cm. seed depth had significantly increased in number of tillers , dry weight and seed production up to 65.2 , 77.2 , 89.1 % respectively according to plants had grown from seed on soil surface . However , 500 mm. rainfall gave a good results in percentage of emergence , number of tillers , and dry weight per plant comparison with 300 or 400mm. rainfall. There is a gradually increasing in seeds production when the rainfall increased from 300 to 500mm. The interaction between 500mm. rainfall with seed burial at 4cm. in soil gave a high number of tillers , high Dwt of plant and high seed production but with less percentage of wild Oat emergence if it compared with other treatment.

Key words: Wild Oat , rainfull , depth of weed seeds.

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