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Efficacy of Three Different Herbicides to the Control of Wild Barley (Hordeum spontaneum C. Koch) in Relation to Plant Growth Stage and Nitrogen Fertilizer Additive

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Abstract : To study the effect of nitrogenous additive spray solution on the efficacy of three herbicides i.e. pinoxaden (Trade name: Axial), sulfosulfuron+metsulfuron-methyl (Trade name: Total) and sulfosulfuron (Trade name: Apirus) in controlling wild barley (Hordeum spontaneum C. Koch), in different growth stages, a greenhouse experiment as a split plot in a completely randomized design in three replications was conducted. One month after treatments, all plants were harvested and growth parameters were determined. The data were analyzed with computer. The results showed that the herbicide applications with and without nitrogen additive caused significant reductions in growth parameters of wild barley at 2-4 leaf stage. However, the plants were not killed by this herbicide. Plants were killed completely due to applications of the two other herbicides i.e. Apirus and Total at 2-4 leaf. There was no significant difference between the effect of these two herbicides. There was no significant difference between the highest rate of each herbicide used alone and that of the lowest rate with nitrogenous additive.

Keywords: growth stage, herbicide, nitrogen, wild barley

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