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Evaluation of Interaction Hydro-priming Seed and Imazethapyr Herbicide to Control Weeds pea(Chickpea)

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Abstract

In order To study the efficacy of different doses of Imazethapyrherbicides to control weeds and seed hydro-priming Chickpea experiment rainfed crop year 2015–2016 at the Agricultural Research Station of Lorestan University in a factorial Randomised Complete Block Design with three replications Was conducted. The first factor in two levels (seed hydro-priming and non-priming) and second factor at six levels of the Imazethapyr herbicide in concentrations of 250, 500, 750, 1000 cc and weeding and non-weeding. The interaction effect meaningful seed yield, dry matter yield and performance of herbicides on weed density in 30 days after spraying at 1%, So, respectively, as well as other traits at 5%. The highest herbicide efficacy on dry weight of weeds and weed density (67/14% and 71/37%) at 15 days after spraying, in treatments (1000 cc Imazethapyr + non-priming and 250 cc Imazethapyr + non-priming) Was observed. The highest herbicide efficacy on dry weight of weeds and weed density (87/37 % and 91/80 %) at 30 days after spraying, in treatments (500 cc Imazethapyr + priming and 750 cc Imazethapyr + non-priming) Was observed. The highest seed yield (873 kg) of treatment (weeding + priming) was observed. The highest forage yield (948/20 kg/ha) in treatment (250 cc Imazethapyr + non-priming) was obtained. The highest number of branches (6.5) in treatment (750 cc Imazethapyr + non-priming), was obtained. The highest plant height (26.2 cm) in the treatment (weeding + non - priming) was obtained. In this experiment could Imazethapyr herbicides to control weeds, on the other hand the negative effects it causes slow growth, severe burning plant and a decrease in grain yield, so it is recommended that these herbicides can be used in dry conditions.

Keywords: Forage, height, pursuit, weeding, yield