

RESPONSE OF BREAD TO DIFFERENT HERBICIDES TREATMENT

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ABSTRACT

A field trial was conducted at the Experimental Farm, College of Agriculture , University of Baghdad , Abu- Ghraib , Iraq during seasons 2010/2011. The objectives were to investigate the activity of herbicides (Flucarbazone-sodium, Iodosulfuron+Mesosulfuron, Clodina fop-methyland Terbutryn +Triasulfulfuron) on performance of bread wheat and companion weeds . The design was Randomized Complete Block Design (RCBD) with four replications. Flucarbazone-sodium reduced number of weeds at period 30 , 60 and 90 days after spraying the herbicides and gave the lowest number of these plant were 10.5 , 13.1 and also 13.6 plants.m⁻² respectively. Also gave the lowest dry weight of weeds 24.5 g.m⁻² on the other hand the weedy treatment gave higher values of number of weeds were 116.5 , 137.2 and 158.1 plant.m² and highest values of dry weight of weeds 305.1 g.m⁻² therefore this herbicide caused reducing number of weeds at 30, 60 and 90 days after spraying the herbicides by 91.0% , 94.4% and 91.4% respectively. The results reflected on the biological activity of wheat, so it gave high value of height plant 104.8 cm, number of spike per square meter 456.6 spike, number of grain per spike 57.8 grain and grain yield 831.2 g.m⁻² , on the other hand the weedy treatment gave the lowest value of plant height 94 cm, number of spikes per unit area 306.3 spike.m⁻², number of grain per spike 43.5 and grain yield 367.7 g.m⁻². Herbicides Flucarbazone-sodium, Iodosulfuron+Mesosulfuron, Clodina fop-methyland Terbutryn +Triasulfulfuron caused increasing of grain yield by 55.8 % , 55.3% , 46.5% and 47.1% respectively according to weedy treatment . We can conclude from these results that herbicides Flucarbazone-sodium, Iodosulfuron+Mesosulfuron, Clodina fop-methyland Terbutryn +Triasulfulfuron were effective against weed and increasing grain yield of wheat.

Key Words: Bread Wheat, Herbicides, Weeds, Wheat yield.