RESPONSE THREE GENOTYPES OF RAPESEED TO WEED CONTROL AND EFFECT OF THAT ON GROWTH CHARACTERISTICS .

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ABSTRACT

A field trial was conducted at experiment farm of Diyala Agriculture directorate in winter season 2007 – 2008. The objectives were to investigate the effect of herbicides [Trifluralin, Diclofop-methyl, Fusilad Forte, Hand-weeding and Control] on growth characteristics of three genotypes of (Brassica *spp*) [Pactol, Star, Srew]. The experiment was arranged in a split plot design within three replications. Herbicides were arranged in the main plots and genotypes in sub plots.

The results showed that significant different between herbicides treatments, Trifluralin gave high means in days from planting to 50% flowering (١٢١.٧٦ day), dry matterof rapeseed (٧.٨ $t.h^{-1}$), crop growth rate (٦.٤٢ $gm.m^{-2}.day$), number of primary branches (٧.٥ $branch.plant^{-1}$), leaf area (٧٨٣.١ cm^{-2}) and leaf area index (٤.٩).

Genotype Pactol gave more days from planting to50% flowering (١٢٢.٢٢day), dry matterof rapeseed (٨.٠ $t.h^{-1}$), crop growth rate (٦.٦٣ $gm.m^{-2}.day$), number of primary branches (٦.٨ branch. $plant^{-1}$), leaf area (٤٨٨.٦ cm^{-2}) and leaf area index (٥.٢).. There was signification interaction between herbicides and genotypes for all traits. Genotype Pactol with trifluralin produced highest dry matter of rapeseed (8.3 $t.h^{-1}$), crop growth rate (6.٧٦ gm. $m^{-2}.day$),leaf eara (940.7cm^{-2}) and leaf eara index (5.9)..