

Effect of Row Direction and plant distribution on growth Characteristics of Maize

(*Zea mays* L .)

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ABSTRACT

This study was conducted at the field of the College of agriculture / University of Diala ,during autumn season 2006 , to determine the influence of plant rows orientation in addition to find best plants distribution including fixed plant density . The design used was the randomized complete block design (R . C . B . D .) ,in a factorial experiment with three replications , the replicate include , two plant rows orientation (East-West , North-South) and the plants distribution (20 x100 , 40 x 50 ,80 x25) cm. Between plants and rows respectively . Characters evaluated were number of days from planting to 75% flowering (tasseling and silking), plant high (cm) , leaf area (L A) (ds²) , Leaf Area Index (L A I) ,Stem diameter (cm). The results were as follows : 1- Plant height, (L A) and (L A I) are significantly affected by row direction . 2- silk appearance, plant height , L A and L A I are significantly affected by plants distribution. 3- Significant interaction effect were observed between plant row direction and plants distribution on plant high , L A and L A I .