

## **PERFORMANCE OF THREE MAIZE HYBRIDS (*Zea mays* L.) TO PLANT DENSITY AND NITROGEN FERTILIZER.**

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### **ABSTRACT**

A field experiment was carried out in the autumn season 2013 at AL-Hawija district 60 km west Kirkuk city to Performance evaluation of three maize hybrids (DKC 6842, DKC 6610 and Tietar) to two plant densities (66667 and 88889 plant/ha) and three nitrogen fertilizer (300, 350 and 400 kg urea/ha) by using RCBD design in split-split plot with three replications, the main plots represented by the plant density, sub plots represented by nitrogen fertilizer levels and sub-sub plots were represented by the hybrids. The results showed a significant differences between two plant densities for traits no. of days to 50% tassilling and plant height only, so a significant differences between nitrogen fertilizer levels in traits no. of days to 50% tassilling and silking, plant height and ear height. Any traits of yield and it's components for plant did not affected significantly to plant density and fertilizer levels. The hybrids significantly differ in all traits were studied except ear height and 500 grain weight. The hybrids response for nitrogen fertilizer was more than it's response to plant density, the hybrid DKC 6842 were more response than other hybrids to nitrogen fertilizer and plant density.

**Key words :** plant density, nitrogen fertilizer, maize hybrids.

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