COTTON VARIETIES RESPONSE TO VARIABLE PLANT DENSITIES.

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ABSTRACT

Studying the effect of distance between holes and number of plants in hole in two cotton varieties lashata and Coker-310 by conducted factorial experiment in Randomized Complete Block Design (RCBD) with three replicates at summer season 2011 in Agricultural Technical College Mosul Al-Rashidia fields where the distance between holes 20, 30 and 40 cm and the number of plants in hole 1, 2 and 3 plants. The results declared that Lashata were superior over Coker-310 variety in number of sympodia branches in plant and number of bolls in plant and boll weight (g) and seed index (g) and seed cotton yield (Kg/h.) were the increasing percentage in seed cotton yield arrived 41.78% from Coker-310 variety which noticed were earlier than Lashata variety and the variation between the two varieties were little and not significant for plant height and number of monopodia branches in plant and lint index and lint percentage. The distance 40 cm between holes significantly affected plant height and were superior over the distances 20 and 30 cm in mean number of bolls in plant which reflect over seed cotton yield mean (Kg/h.) and significantly increasing were observed in number of sympodia branches in plant and boll weight when planted in distance 30 cm between holes, the higher plant height and also higher earliness percentage in yield were recorded when we leave two plants in hole and also noticed significantly increasing in number of sympodia branches in plant and number of bolls in plant and seed cotton yield at leaving three plants in hole.

Key words: plant population , cotton , Lashata , Coker-310 , Mosul .