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EFFECT OF INTRA ROW SPACING AND VARIETY ON THE GROWTH AND YIELD OF OKRA (*Abelmuschus esculentus* L. Moench) IN BAUCHI, BAUCHI STATE, NIGERIA

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ABSTRACT

The field experiment was conducted to evaluate the effect of intra row spacing and variety on the growth and yield of okra at the research farm of Abubakar Tafawa Balewa University, Bauchi, Gubi Campus, Bauchi State, Nigeria during the 2016 and 2017 rainy seasons. The treatments consisted of 3 spacing (20, 30 and 40cm) and 3 varieties (Kirikou, Yar-kodom and Clemson spineless) which were factorially combined and laid-down in a randomized complete block design (RCBD) and replicated three times. The result of the experiment revealed significant difference (P 0.05) in plant height, number of leaves, and number of pods per plant, pod length, pod girth, and yield per hectare. The use of wider intra row spacing significantly affected most of the parameters measured in the 2016 and 2017 except plant height that showed no significant difference in 2017. Among the varieties, assessed Clemson spineless consistently produced higher result on all measured characters and invariable higher yield. The interaction between intra row spacing and variety showed that the use of wider row spacing in combination with the varieties improved the plant height, stem girth and number of pods significantly. From the result obtained, it can be concluded that the use of wider spacing and improved varieties such as Clemson spineless can be adopted for okra production in Bauchi and its environs. The study recommended that farmers should adopt the use of wider intra-row spacing (30 cm and 40 cm) and Clemson spineless variety in the study area.

Keywords: Growth, Intra row-spacing, Okra, Variety, Yield.