

Performance of okra (*Abelmoschus esculentus* L.) under increasing plant populations

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Abstract:

This research study was carried out in 2009 summer growing season in Al-Baqaa area near Amman to test six increasing rates of plant populations on growth and yield of okra, variety 'Clemson spineless'. Treatments consisted of six planting populations (10, 20, 30, 40, 50 and 60 thousand plants/ha). Field lay out was a randomized complete block design with three replications. The results showed that increasing plant population increased yield up to 50,000 plants/ha. Although, there was an increasing trend, okra yield under 60,000 plants/ha was not significant over that of the 50,000 plants/ha. However, plant population significantly affected plant height, number of leaves per plant, number of pods per plant and number of branches per plant but there was no significant effect of different plant populations on dry pod weight. Constant trend towards higher pod N, P and K contents by using lower planting populations were significantly noticed. At the conditions of this study, it could be concluded that, the okra yielding ability was statistically similar under the most higher plant populations of 40, 50 and 60 thousand plants/ha.

Key words: okra, *Abelmoschus esculentus*, growth, yield, plant population, Jordan.