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Influence of plant density and fertilizer levels on the yield attributes, yield and economics of groundnut (*Arachis hypogaea* L.)

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ABSTRACT

Field experiments were conduced at Coconut Research Station, Tamil Nadu Agricultural University, Aliyarnagar during *Rabi*-summer seasons of 2006-07, 2007-08 and 2008-09 to study the effect of different plant densities and fertilizer levels on the yield attributes and yield of groundnut. The treatments comprised of three different plant densities *viz.*, 100%, 75% and 125% and three fertilizer levels *viz.*, 100%, 75% and 125% NPK kg ha^{-1}. The experiments were laid out in a factorial randomized block design replicated thrice. The results of the experiments revealed that among the different plant densities tried, 100% plant density recorded better yield attributes and pod yield of 2590, 2335 and 2340 kgha^{-1} with a BCR of 2.02, 1.90 and 1.88, respectively during the three years. Among the different fertilizer levels tried, 125% NPK recorded the maximum pod yield of 2658, 2410 and 2450 kgha^{-1} with a BCR of 2.05, 2.02 and 2.00, respectively during all the three years. Even though 125% NPK recorded better yield attributes and yield, it was comparable with 100% NPK fertilizers.

Key words : Groundnut, Plant density, Fertilizer management, Yield attributes, Yield

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