

**APPLICATION OF COW MANURE AND ARRANGEMENT OF PLANTING
DISTANCE ON PLANT GROWTH AND YIELD PEANUTS
(*Arachis hypogaeae* L.)**

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ABSTRACT

Peanut production in Indonesia continues to decline every year, this is due to the low quality of the soil and the application of conventional production techniques. One effort to increase peanut production is through the application of cow manure and the implementation of the Jajar Legowo planting system. The aim of this research is to analyze the effect of a combination of cow manure compost and the Jajar Legowo planting system on the growth and yield of peanut production. This research was carried out in Tamanan, Tamanan District, Jember Regency. This research was designed using the RAKF method consisting of 2 factors and 3 repetitions. The first factor is cow manure consisting of 0 tons/ha; 10 tons/ha; 20 tons/ha; 30 tons/ha; and 40 tonnes/ha. The second factor is setting plant distances which consist of conventional plant distances of 40 cm x 20 cm; and row legowo 40 cm x 20 cm x 20 cm. The results of the study showed that the combination treatment dose of 20 tons/ha of cow manure and row spacing of row legowo (40 x 20 x 20 cm) gave the best results in the number of fruity pods (18.92 pods) and fresh weight of roots and pods (155.83 g). A single treatment of cow manure at a dose of 20 tons/ha gave the best results on plant height (15.96 cm), number of pods (24.50 pods), wet weight of pods (31.71 g), and wet weight of pithy pods (27.96g). A single treatment of jajar legowo planting distance (40 x20 x20 cm) gave the best results in terms of number of pods (23.88 pods), wet weight of pods (33.33 g), and wet weight of pithy pods (28.93 g).

Keywords: *Peanuts, Conventional Plant Spacing, Compost*