

DETERMINATION OF SUITABLE PLANTING DENSITY FOR BANANA (VAR. DWARF CAVENDISH)

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Introduction: Choosing the correct planting density is vitally important for maximizing the yield potential of the plantation. For the highest possible yields of good quality fruit, there is an optimum plant density which should be maintained for the life of the plantation. This optimum, however, varies for each particular locality, cultivar, and soil type and management level.

Material and method: This experiment was carried out from banana (var. Dwarf Cavendish) with four replications and five treatments consist of (3×2, 2×2.5, 2×2, 2×1.5, 1.5×1.5m) in Gadgal Garden is located in 120km eastern of Chabahar for four years(2010-2012). The experiment was a Randomized Complete Block design. During 3 years we studied vegetative and generative processes for treatments.

Result and discussion: The results of combined analysis showed that survival percentage of suckers and numbers of their leaves were not significant at the 1% and 5% levels. The spacing of banana plants (2×1.5), (1.5×1.5) were the most survival percentage with 93%, 88.5% and the spacing of banana plant 3×2m was the least survival percentage with 70.25%. The results of combined analysis showed that weight of leaf, plant height, stem diameter, weight and length of banana bunch, length and number of fruits in each bunch were significant at 5%. At distance 3×2m we had the biggest bunches and fruit size. At distance 1.5×1.5m total yield per hectare increased due to the greater number of bunches, however, in put costs per hectare also increased. On the basis of the results gained from this research the best planting distances for establishment of banana garden (var. Dwarf Cavendish) in Bahookalat weather conditions is 3×2m (3m between rows and 2m between plants).

Key Words: Banana, planting density, var. Dwarf Cavendish



The 1st International Conference on New Ideas in Agriculture
Islamic Azad University Khorasgan Branch
26-27 Jan. 2014, Isfahan, Iran

