Abstract

In Andaman district, the total banana cultivated area in the year 2012-13 was 378.5 ha and it was decreased to 278.5 ha in the year 2014-15. It has been seen that the total quantity of production of banana was decreased from 6727.5 metric tonnes to 3202.0 metric tonnes due to decrease in cultivated area and poor management practices. Considering the year round availability, nutritional value, uses, prices, popularity and production, cv. China banana- AAB (*Musa paradisiaca*) is considered the most valuable fruit crop in Andamans. Field experiment were carried out at Indian Council of Agricultural Research – Krishi Vigyan Kendra, Central Island Agricultural Research Institute, Sippighat, Andaman and Nicobar Islands and the data from this study revealed that the planting systems significantly influenced the bunch yield of banana. It has been observed that the China banana planted under high density planting (2 x 3 m plant to plant and row to row) significantly registered higher bunch yield of 38.31 t ha\(^{-1}\) than that of normal planting (2 x 2 m plant to plant and row to row) which gave a production of 28.21 t ha\(^{-1}\) of bunch yield. Fertigation levels exerted significant effect on the bunch yield. Fertigation at 125 percent recommended NK g pit\(^{-1}\)(F\(_4\)) recorded the highest bunch yield of 42.05 t ha\(^{-1}\) followed by fertigation at 100 percent recommended NK g pit\(^{-1}\)(F\(_3\)) with 39.39 t ha\(^{-1}\). The lower bunch yield was recorded from 50 percent recommended NK g pit\(^{-1}\)(F\(_2\)) with 23.73 t ha\(^{-1}\). It was observed that 3 percent *Panchagavya* (G\(_3\)) performed better with the yield of 34.91 t ha\(^{-1}\), followed by Gibberellic acid (34.61 t ha\(^{-1}\)) at 50 ppm. There is significant interaction effect among the planting systems, fertigation levels and growth regulators on bunch yield. The highest bunch yield was obtained from the combination of high density planting with fertigation level at 125 percent recommended NK and application of *Panchagavya* at 3 percent (54.80 t ha\(^{-1}\)). The lowest bunch yield was recorded from combination of normal planting with fertigation level at 50 percent recommended NK and application of GA\(_3\) at 50 ppm (21.06 t ha\(^{-1}\)).