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USE OF BULKY ORGANIC MANURE ON RED YELLOW LATASOLS

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The effect of farm yard manure (FYM) ; N-fertilizer and irrigation frequency on the growth and yield of chillies (PC 1) on Calcic Red Latasols was studied in two experiments ; one during Yala, and the other during Maha. Application of 12.5 t/ha of FYM did not produce a significant yield increase over the control plots, although the organic matter content of the soil was always greater in manured plots than in unmanured plots. In the Yala trial, irrigating to field capacity once in five days caused a significant yield reduction of 22% compared with irrigation to field capacity once in three days, and this was unaffected by the application of FYM. There was no significant difference in yield between 45 and 90 kg N/ha application as urea. But there was a significant increase in total N content of soil with the higher N-fertilizer level than the lower N-fertilizer level. Even though the total N supplied in the form of FYM was almost same or double the amount supplied by the N-fertilizer, there was no significant improvement in total N content of soil by FYM application at 12.5 and 25.0 t/ha. In the Maha trial FYM application or irrigation frequency did not produce any significant effect on the yield but there was a 17.5% reduction in yield by reducing the N-fertilizer rate recommended by the Department of Agriculture (90 kg N/ha to 22.5 kg/ha). There was no evidence for any short term improvement in water holding capacity of the soil or nutrient uptake by chillies as a result of FYM applications.