IDENTIFICATION OF NITROGEN FERTILIZER DOSE AND RANSPLANTING DENSITY FOR KN6 RICE VARIETY IN RED RIVER DELTA REGION IN VIET NAM

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Summary

In this study, KN6 rice variety, which is qualitative variety with high ability of intensive farming, was evaluated as promising rice variety and was recommended to confirm for trial manufacture at Northern provinces. The level of nitrogen fertilizer was 90-110-130 kg N/ha in the spring season and 80-100-120 kg N/ha in the summer season on background of 8 ton manure fertilizer + 100 kg P₂O₅ + 90 kg K₂O/ha, transplanting density is 40-45-50 hills/m². The study results showed that the transplanting density and N fertilizer had small effect to growth duration and plant height, but it caused influence to pest infection and the yield of KN6 variety. In the spring season, in the experimental formulas, the growth duration of variety fluctuated from 132-135 day, plant height was about 112.5 – 116.0 cm. Corresponding to summer season, growth duration of this variety was about 112-115 days, plant height was about 110-115 cm. The dosage (level) of N fertilizer and transplanting density had clear influence to pest infection, growth and yield in the KN6 variety. In the spring season, at the level of 110 kg N/ha and 45 hills/m² transplanting density and in the summer seasons, at the level 100 kg N/ha and 45 hills/m² transplanting density, KN6 variety obtained the highest yield and economic efficiency. In the thick transplanting density 50 hills/m², the high level of N fertilizer 130 kg N/ha in the spring season and 120 kg N/ha in the summer season, KN6 variety was infected rice leaf folder in the spring; rice leaf blight and sheat blight of rise in the summer heavier than that in the other N fertilizer level and density, reduced the yield and economic efficiency of KN6 variety.

Keywords: Transplanting density, rice, high qualitative rice, dose of nitrogen fertilizer, yield, economic efficiency.