

AFFECTS OF EARTHWORM MANURE AND FOLIAR FERTILIZER HI-BORON 7-14 ON YIELD COMPOSITION FACTORS AND YIELD OF RICE VARIETY OM18 IN THE WINTER SPRING AND SUMMER AUTUMN SEASON OF 2019-2020

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Summary

The objective of the study was to evaluate effects of earthworm manure combined with foliar fertilizer HI-BORON 7-14 on yield composition factors and yield of rice variety OM18 in the winter-spring and summer-autumn season 2019-2020. The field experiment included four treatments and four replications in Long Xuyên city, An Giang province. Each treatment has an area of 48 m² (8 m x 6 m). Treatments of season 1 (winter-spring): The control treatment (NT1) only applied N, P, K (85 kg N - 45 kg P₂O₅ - 45 kg K₂O/ha); (NT2): Incorporation of N, P, K and foliar fertilizer Hi-Boron 7-14; (NT3): Incorporation of N, P, K and earthworm manure Atiga (300 kg.ha⁻¹); (NT4): Incorporation of N, P, K, earthworm manure Atiga (300 kg.ha⁻¹) and foliar fertilizer Hi-Boron 7-14. Treatments of season 2 (summer - autumn) were carried on the former experiment 1. However, treatments did not apply earthworm manure Atiga and spray foliar fertilizer Hi-Boron 7-14 (only Applied 85 kg N-45 kgP₂O₅-45kg K₂O/ha). The results showed that incorporation of N, P, K, earthworm manure Atiga (300 kg.ha⁻¹) and foliar fertilizer Hi-Boron 7-14 in winter-spring season increases rice shoots, panicle per m², grains per panicle and yield 11.3% compared to the control treatment (without applying earthworm manure Atiga and spray foliar fertilizer Hi-Boron 7-14). In summer - autumn season the yield increases 14.9% compared with applying only N, P, K in summer – autumn in the same treatment although the weight of 1000 seeds was not significantly different.

Keywords: *Earthworm manure Atiga, foliar fertilizer Hi-Boron 7-14, rice variety OM18, yield composition factor, yield.*