

## **Evaluation of the Performance of Lowland Rice-ratooned Rice-vegetable as Influenced by Fertilizer Rates in Sawah Rice Systems**

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### **Abstract**

The trial was conducted at the Federal University of Agriculture; Abeokuta, Nigeria in 2010/2011 and 2011/2012 cropping season to evaluate the performance of lowland rice-ratooned rice-okra as influenced by fertilizer rates in sawah rice based system. Field was manually cleared and banded but power tilled, puddled and leveled with inlet and outlet connections for irrigation and drainage. Fertilizer treatments evaluated on lowland rice were 90:45:45, 60:30:30, 45:22.5:22.5 and 30:15:15 NPK kg ha<sup>-1</sup> whereas those of ratooned rice were 0, 30, 60 and 90 kg N ha<sup>-1</sup>. Grain yield, chlorophyll content and plant height at maturity of the main lowland rice were similar. The ratooned rice crop treated with N-fertilizer had similar grain yield. The total grain yield of the two crops of rice ranged between 4.47 and 5.65 t ha<sup>-1</sup> year<sup>-1</sup>. The okra leaf chlorophyll content and okra pod weight obtained from the previous N-fertilizer plot of 60 and 90 kg N ha<sup>-1</sup> were similar but significantly higher than those of 0 and 30 kg N ha<sup>-1</sup>. Thus, fertilizer combination of 30:15:15 kg NPK ha<sup>-1</sup> for lowland rice and 60 kg N ha<sup>-1</sup> for ratooned rice in sawah rice based production system enhanced the productivity of succeeding okra plant.