

## NEW INFORMATION ANF CONCLUASION OF THE DISSERTATION

**Dissertation title:** Evaluation of direct effect and residual effect of nitrogen, phosphorus, potassium fertilizer to the yield and quantities of rice in Mekong Delta

**Specialty:** Crop Science; Code: 9620110

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**Course:** 2013-2018

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### Main contents of the dissertation:

- Evaluating the direct effect of N fertilizer, residual and cumulative effect of P fertilizer and K fertilizer into rice yield and milling quality with triple-crop system on alluvial soil in Can Tho.

- Evaluating the direct effect of fertilizer N, residual and cumulative effect of fertilizer P and K fertilizer into rice yield and milling quality with double-crop system on acid sulphate soil in Hau Giang.

### New information and conclusion of the dissertation:

- This is the first systematic study to determine the direct and residual effect of N, P, K inorganic fertilizers for rice with triple - crop system on alluvial soil and double-crop system on acid sulphate soil in Mekong Delta.

- The results showed that K fertilizer with 30 kg  $K_2O \cdot ha^{-1} \cdot crop^{-1}$  did not increase rice yield, comparing to no K fertilizing during of 4 years of cultivation. The results were consistent in both the triple-crop on alluvial soil in Can Tho and the double-crop on acid sulphate soil in Hau Giang.

- The study determined that the treatment of non-P in one crop had an insignificant influence into the rice yield of all experimanrtal crops on the triple-crop in Can Tho and the doule-crop in Hau Giang. In the case of 2-4 previous seasons without applying P fertilizer but when it was applied again, its rice yield was equivalent to that of applying P continuously.

- No fertilizer and no N fertilizing reduced the quality of milled rice recovery and increased the percentage of chalkiness. They were not affected by no P and K fertilizing treatment on both systems with triple-crop and double-crop in Mekong Delta.

Supervisors



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