

# EFFECTS OF N, P, K FERTILIZERS APPLICATION ON YIELD OF PURLE YAM IN MEKONG DELTA ACID SULPHATE SOILS

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## Summary

The objective of this study was to evaluate effects of N,P,K fertilizers application on growth and yield of yam cultivated in Mekong delta acid sulphate soils. The treatments included (i) Fully fertilized plot (NPK), (ii) potassium omission plot (NP), (iii) phosphorus omission plot (NK), (iv) nitrogen omission plot (PK). Results showed that N nutrition was an important factor affecting yield of yam which was contributed by good development of tuber length and diameter. Without application of P and K led to reduce the yield. Application 90 N - 60 P<sub>2</sub>O<sub>5</sub> - 90 K<sub>2</sub>O kg ha<sup>-1</sup> led to increase tuber yield of purple yam, which were in range of Dong Thap Muoi (17,1 ton ha<sup>-1</sup>), Hau river valley (14,1 ton ha<sup>-1</sup>), Long Xuyen quadrangle (13.4 ton ha<sup>-1</sup>) and Ca Mau peninsula (10 ton ha<sup>-1</sup>). Following the NPK application, response of the tuber yield was in range of N>K>P: 4.9-8.5 ton ha<sup>-1</sup>; 0.1-3.4 ton ha<sup>-1</sup> và 0.6-2.6 ton ha<sup>-1</sup>.

**Keywords:** *NPK fertilizers, acid sulphate soils, purple yam, omission plot technique, Mekong delta.*