STUDY TO SELECT SUITABLE VARIETIES FOR MARKET ORIENTED SWEET POTATO PRODUCTION AT THAI NGUYEN UNIVERSITY OF AGRICULTURE AND FORESTRY

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Summary

With the purpose of selection is 1-2 sweet potatoes for production of goods in Thai Nguyen, an experiment was carried out in the Upland Crops Research Area, Thai Nguyen University of Agriculture and Forestry. The experiment including 10 treatments (10 varieties of sweet potato) is arranged in a complete randomized block design with tree replicates. Experimental results show that: The tested sweet potato varieties had growing period from 100 to 115 days (spring crop) and 95 to 110 (winter crop), suitable for cropping system in Thai Nguyen province. Most varieties of sweet potato were infected by string borers; varieties KLC266, KLC268, South Korea, Nhat tim and Hoang Long were slightly infected by *Cylas formicarius*; KLC266 and Korean varieties suffered severely from leaf curling deseases. KL20-209 variety had the highest yield (27.35 to 28.79 tons/ha). Do Phu Luong variety had the highest quality ranking by use of sweetness, dry matter content, starch content, sugar content. Do Phu Luong variety with high yield, good quality, high resilience to environmental stresses was selected to recommend to production for fresh food purposes. KL20-209 variety with high yield, high dry matter content and starch content should be selected to introduce to producers for the purpose of processing and animal husbandry feed.

*Keywords*: Quality, commodity production, productivity, sweet potatoes, Thai Nguyen.