EFFECT OF SWEET POTATO SUPPLEMENT ON CHANGES IN COOLING PROCESS AND QUALITY OF SHRIMP CRACKER

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Summary

Sweet potato root has high contents of starch and anthocyanin and cheap price (harvest season, broken and small roots). Therefore, utilization of the cheap sweet potato roots to develop new food product is concerned. Selection of sweet potato roots from varieties for shrimp cracker with good is necessary to study. The aims of the study (i) investigate sweet potato varieties (purple, yellow, white and milky) and (ii) investigate ratio of sweet potato (20, 30, 40 and 50%) influencing on cooling time (gel starch retrogradation) and quality (colour, hardness, expansion ratio, oil absorption ratio and sensory attributes) of shrimp cracker. The results were shown that supplement of purple sweet potato root gave cracker a short time of retrogradation and good quality. Cracker had good quality if dough was added with 40% of sweetpotato flesh. It was found that there were strong correlation coefficients (P<0.001) between colour and hardness of fresh cracker; between expansion ratio and oil absorption. This study contributes to develop new food product processed from sweet potato roots and improve food value – chain for sweet potato roots in Mekong delta.

Key words: cracker, hardness, expansion, sweet potato, retrogradation, oil absorption.