ABSTRACT

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STUDY OF GERMINATION, HEATING-COOLING CYCLE, AND REFRIGERATED STORAGE TIME TOWARDS RESISTANT STARCH AND ORGANOLEPTIC CHARACTERISTICS OF WHITE SWEET POTATO (*IPOMOEA BATATAS* L.)

(xiv + 69 pages: 23 tables, 41 figures, 26 appendices)

Resistant starch is classified as undigestible starch in human digestive systems. Its functional characteristics allow it to act as dietary fiber. Amount of resistant starch in food can be increased by germination, heating-cooling cycle, and refrigerated storage. This research objective is to determine the germination time with the highest resistant starch and to determine heating-cooling cycle that mostly increased resistant starch content of white sweet potato. The results show that one day germination of white sweet potato have the highest resistant starch and one day germination of white sweet potato with five heating-cooling cycle and seventy-two hours storage increasing resistant starch significantly from 0.74 g/100 g to 2.06 g/100 g. There is significant correlation between amylose and resistant starch. Sample with high amylose content also have high resistant starch content.

Keywords: *amylose, resistant starch, white sweet potato*

References: 62 (1989-2017)