THE POSTHARVEST CONTROL OF MANGO ANTHRACNOSE AND DIPLODIA STEM-END ROT USING HOT WATER TREATMENT AND SELECTED FUNGICIDES

A Thesis

Presented to the

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In Partial Fulfillment

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Master of Science in Biology

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by

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APPROVAL SHEET

This Thesis entitled "THE POSTHARVEST CONTROL OF MANGO ANTHRACNOSE AND DIPLODIA STEM-END ROT USING HOT WATER TREATMENT AND SELECTED FUNGICIDES" prepared and submitted by CECILE T. ALINSONORIN in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN BIOLOGY, has been examined and is recommended for acceptance and approval for the ORAL EXAMINATION.

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ABSTRACT

The effectiveness of hot water treatment and fungicide application in the postharvest control of anthracnose and diplodia stem-end rot in 'Carabao' mango was determined.

Freshly harvested mature green mangoes were dipped in hot water at different temperatures and durations of dipping. For the fungicide treatment, the fruits were immersed in 1000 ppm, 750 ppm, and 500 ppm suspensions of three different fungicides: benomyl, mancozeb, and copper oxychloride.

Anthracnose and diplodia stem-end rot infection was controlled at a temperature of 53°C and 10-minute duration of dipping. Of the fungicides used benomyl and mancozeb gave the least and highest incidence of infection, respectively.

Visual quality of the fruits, regardless of the treatment showed a steady decline in physical appearance starting on the fourth day after treatment. Ripening was accelerated and no adverse effect on pulp quality was observed in fruits dipped in hot water.

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