

STORAGE BEHAVIOR OF GRAPE BERRIES TREATED WITH GA₃,
BAGGED AND STORED AT DIFFERENT TEMPERATURES


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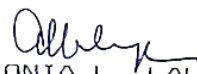
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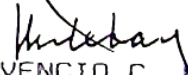
This thesis entitled, STORAGE BEHAVIOR OF GRAPE BERRIES TREATED WITH GA₃, BAGGED AND STORED AT DIFFERENT TEMPERATURES, prepared and submitted by MAYTINEE AKARAMAYTEEKUL in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE (Crop Science), is hereby accepted.


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BIOGRAPHICAL SKETCH

The author was born on May 8, 1962 in Nakornrajasima Province, Thailand. She is the sixth of the nine children of Mr. Mongseng and Mrs. Gung Sengtang.

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ABSTRACT

AKARAMAYTEEKUL, MAYTINEE, Institute of Graduate Studies, Central Luzon State University, Muffoz, Nueva Ecija, Philippines, June, 1990. STORAGE BEHAVIOR OF GRAPE BERRIES TREATED WITH GA_3 , BAGGED AND STORED AT DIFFERENT TEMPERATURES.

Adviser: Prof. Danilo T. Eligio

The study was conducted to determine the behavior of grapes treated with GA_3 applied at full-bloom at the concentration of 250 ppm. One kilogram of freshly harvested berries was placed in either polyethylene bag (8" x 12' x 0.08 mm) or newsprint and stored under ambient and air-conditioned room. The experiment was set-up following the Completely Randomized Design.

GA_3 application reduced the number of seeds and width of the individual berry resulting in reduced berry weight and cluster weight. Berry length and number of berries / cluster remained the same.

Daily weight loss was greater in GA_3 - treated berries, unbagged and stored at ambient condition. Lower weight loss was observed in controlled berries

placed inside the polyethylene bag and stored inside an air-conditioned room.

Total soluble solids remained the same in all treatments during the first four days of storage. On the fourth day onward, GA₃ treated berries and unbagged registered higher total soluble solid.

The pH of the berries was relatively low ranging from 3.47 to 3.98. Higher pH values were noted on GA₃-treated berries in polyethylene bag and stored in ambient condition.

Titratable acidity decreased with time. On the tenth day of storage, GA₃ treated berries had the lowest titratable acidity while bagged berries had higher titratable acidity than unbagged berries.

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