## ABSTRACT

## THE EFFECT OF ARTIFICIAL RIPENING USED THE CALSIUM CARBIDA (CaC<sub>2</sub>) ON PHYSICAL AND CHEMICAL PROPERTIES OF BANANAS (*Musa Pradasiaca L*)

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Banana is one of the best horticulture product in Indonesia. All this time, the ripening of banana have not decently done by the farmers. Artificial ripening was carried out with the addition of carbide have produced fruit that is not accordance with consumen demand. The aims of this research to determine the effect of carbide mass and ripening media on the physical and chemical quality of Ambon banana and Kepok banana. The result showed the average of room temperature between 28.43 to 28.48 °C, the average temperature of the non vacuum media between 30.15 to 31.1 °C, and the average temperature of vacuum media ranged from 30.43 to 31.58 °C. The average of relative humidity from 74.76 to 75.28%, the average humidity of the non vacuum media between 77.52 to 79.45% and the vacuum media ranged from 78.28 to 80.24%. Water content of bananas in the non vacuum media ranged from 69.6 to 80.5% and the vacuum media ranged from 72.0 to 77.7%. Vitamin C levels of bananas with non vacuum media ranged from 49.9 to 108.5 mg per 100 g and vacuum media ranged from 17.6 to 35.2 mg per 100 g. The stringency of bananas in the non vacuum media ranged from 2.0 to 3.3 N and vacuum media ranged from 0.5 to 2.7 N. The content soluble solid of bananas in the non vacuum media ranged from 19.2 to 26.6 °brix and vacuum media ranged from 10.5 to 12.62 °brix.

Keywords: bananas, artificial ripening, calcium carbide.