

ABSTRACT

Laily, Nadhifatul. **The Effect of Starch Type Edible Coating as Basic Materials and Storage Temperature on the Quality of Strawberries (*Fragaria x ananassa*)**
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Keywords: Edible coating, Cassava (*Manihot esculenta*) starch, Canna (*Canna edulis*) starch, Strawberry (*Fragaria x ananassa*)

Edible coating is one method to extend the storage age and decrease the loss of quality agricultural products are perishable like strawberries (*Fragaria x ananassa*). Edible coatings can be made from polysaccharide material such as cassava (*Manihot esculenta*) starch and canna (*Canna edulis*) starch to be safe for consumption. In this research, combining with the storage temperature. The aims of this study are to know the effect of type of starch edible coating materials, the storage temperature and combination treatment the storage temperature with type of starch edible coating material on the quality of strawberry (*Fragaria x ananassa*). Parameters observed is weight loss, respiration rate, color, texture and content of vitamin C.

This study was conducted in April-May 2013 in the Laboratory of Plant Physiology Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang. This study is an experimental study using a Completely Randomized Design (CRD) with 2 factors and 3 repetitions. The first factors are the type of starch edible coating material consisting of whitout edible coating application, with the application of edible coatings made from cassava starch (*Manihot esculenta*) and with the application of edible coating made from canna starch (*Canna edulis*). The second factor is the storage temperature consisting of room temperature (27-28°C) and cold temperature (8-10°C). In this study, well done combining the type of starch edible coating materials and storage temperature. The observation is done two days for 8 days of storage. The data that have been obtained are analyzed by variance (ANOVA) two ways analysis with confidence level 5%.

The result of this study shows that the type of starch edible coating material influence on the quality of strawberry (*Fragaria x ananassa*). Influence exerted between the coating made from cassava starch (*Manihot esculenta*) is not significantly different from coating made from canna starch (*Canna edulis*). However, the second coating significantly compared with strawberries (*Fragaria x ananassa*) without edible coating application. Strawberries (*Fragaria x ananassa*) are stored at cold temperature has better quality than strawberries (*Fragaria x ananassa*) were stored at room temperature. The combination treatment that is best for maintaining quality of strawberries (*Fragaria x ananassa*) is cold storage with application edible coating made from cassava starch (*Manihot esculenta*) (P1S2).