

Title Cryogenic freezing of mango puree cv. arumanis
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Abstract

Mango is one of tropical fruit in Indonesia that high in productivity. In 2006, mango production reach 1,621,997 ton with total land area 195,503 hectare. At the peak season, mango price decreased drastically. To overcome this problem, mango fruit processed become intermediate product that is puree. Puree mango can use as raw material for syrup, jelly, confectionary, jam and others. In this research used mango cv. Arumanis which is sweet and high fiber. Mango selected good and not defect, cleaned, peeled and sliced. Mango sliced pulping using pulper and packing with plastic poliethylene (PE) and counted 250 gram/sample. Mango puree freezing with the liquid nitrogen. The objective of the research is to know the characteristic and quality of freezing mango puree during 6 month storage. The experimental design of this research was RAL with two factors, which is plastic thickness (0,04mm and 0,06mm) and freezing time (50, 60 and 70 second). After freezing, mango puree storage in freezer with temperature - 30°C during 6 month. The result show that during storage, chemical characteristic of mango puree decreased i.e TPT, vitamin C and total acid. In other way, pH value increased. In the end of storage, value of TPT, vitamin C, total acid and pH was 13-14.1 °brix, 0.38-0.49 %, 20.97-33.72 mg/100 gr and 4.7-4.8 respectively. From organoleptic test, all of panelist can accepted flavour, colour and taste of mango pure after storage 6 month.