Pelelehan gula kelapa dan suhu transisi gelas

Abstrak

The objective of this research was to reduce coconut sugar melting by enhancing glass transition temperature (Tg). Silicone dioxide (SiO2) and magnesium carbonate (MgCO3) were added before the coconut sugar was formed. Concentrations of SiO2 and MgCO3 were 0.5 %, 1.0 %, and 1.5 % respectively. Analysis was conducted for solidification temperature, moisture content, water activity, and glass transition temperature of coconut sugar. In this research, the glass transition temperature or coconut sugar was measured with differential thermal analyzer (DTA). The result showed that the addition of SiO and MgCO3 was not influenced toward moisture content of coconut sugar, but water activity was decreased. The solidification temperature and glass transition temperature were increased. The best coconut sugar was produced by addition of 1.5 % SiO3 with solidification temperature 72.67 Â°C, water activity 0.5, and glass transition temperature 70.45 Â°C