

ABSTRAK

Krim probiotik diperlukan untuk meningkatkan manfaat produk biskuit dan membuat produk probiotik dapat disimpan pada suhu ruangan. Penelitian ini bertujuan untuk mengevaluasi berbagai jenis gula dalam krim probiotik terhadap viabilitas sel, umur simpan, preferensi panelis, dan komposisi kimia. Viabilitas sel *Lactiplantibacillus plantarum* Dad-13 mencapai 8 log CFU/g. Produk disimpan pada suhu 25 °C, 37 °C, dan 45 °C selama 35 hari, kemudian diuji viabilitas selnya, dan diperkirakan umur simpannya. Kemudian, kesukaan panelis dan komposisi kimianya diuji. GT yang dapat menjaga viabilitas sel selama penyimpanan. GT merupakan pengolahan gula dengan umur simpan paling lama, yaitu sekitar 9 minggu. Evaluasi sensorik menunjukkan GT dan GJ dengan skor keseluruhan tertinggi yaitu 5,53 dan 5,26. Jenis gula yang digunakan mempengaruhi kadar abu, total kalori, dan total gula. GK memiliki kadar abu tertinggi, dan GJ memiliki total kalori tertinggi dan total gula terendah. Penggunaan jenis gula pada krim probiotik mempengaruhi umur simpan, evaluasi sensorik, dan komposisi kimia.

Kata kunci : Gula Tebu, Gula Kelapa, Gula Jagung (Gula Rendah Kalori), *Lactiplantibacillus plantarum* Dad-13

ABSTRACT

Probiotic cream is needed to increase the benefits of biscuit products and to make probiotic products that can be stored at room temperature. This study aims to evaluate different types of sugar in probiotic creams on cell viability, shelf-life, panelist preferences, and chemical composition. Cell viability of *Lactiplantibacillus plantarum* Dad-13 reached 8 log CFU/g. The product was stored at 25 °C, 37 °C, and 45 °C for 35 days, then tested for cell viability, and shelf life was estimated. Then, the panelists' preferences and chemical composition were tested. CSF that can maintain cell viability during storage. LCS is a sugar treatment with the most extended shelf life, around 9 weeks. Sensory evaluation showed CS and LCS with the highest overall scores of 5.53 and 5.26. The type of sugar used affects the ash content, total calories, and total sugar. CoS has the highest ash content, and LCS has the lowest total calories and sugar. The use of the type of sugar in probiotic cream affects shelf life, sensory evaluation, and chemical composition.

Keywords : Cane Sugar, Coconut Sugar, Corn Sugar (Low Calories Sugar), *Lactiplantibacillus plantarum* Dad-13.