

ABSTRACT

CHARACTERISTICS OF PINEAPPLE SYRUP (ANANAS COMOSUS L. MERR) WITH THE ADDITION OF GUM ARABIC AS A STABILIZING AGENT

**By
NUR FITRI YANI**

This study aimed to analyze the physicochemical and sensory characteristics of pineapple syrup with the addition of gum arabic as a stabilizing agent. The research was conducted using a quantitative method with variations in gum arabic concentrations (0%, 0.25%, 0.5%, 0.75%, 1%, and 1.25%) and three replications. The obtained data were analyzed descriptively. Pineapple syrup was prepared with a sugar concentration of 65%. The observed parameters included viscosity measured using an Ostwald viscometer, pH measured using a pH meter, and sensory evaluation using a hedonic test (scale of 1–5) conducted by 30 untrained panelists for aroma, color, and taste. The results showed that increasing gum arabic concentration led to an increase in viscosity, indicated by a longer flow time (47.6–56.6 seconds) in the Ostwald viscometer. The pH value of pineapple syrup increased gradually from 5.43 (0%) to 5.52 (1.25%). The sensory evaluation results indicated that the highest level of preference was obtained at 1% gum arabic concentration, with scores of 3.9 (liked) for aroma, 3.7 (liked) for color, and 4.1 (liked) for taste.

Keywords: pineapple syrup, gum arabic, stabilizer, viscosity, sensory.

ABSTRAK

KARAKTERISTIK SIRUP NANAS (*Ananas comosus L. Merr*) DENGAN PENAMBAHAN GUM ARAB SEBAGAI BAHAN PENSTABIL

Oleh
NUR FITRI YANI

Penelitian ini bertujuan untuk menganalisis karakteristik fisikokimia dan sensori sirup nanas dengan penambahan gum arab sebagai bahan penstabil. Penelitian dilakukan menggunakan metode kuantitatif dengan perlakuan variasi konsentrasi gum arab (0%; 0,25%; 0,5%; 0,75%; 1%; dan 1,25%) dengan tiga kali ulangan. Data yang diperoleh dianalisis secara deskriptif. Sirup nanas dibuat dengan kadar gula 65%. Parameter yang diamati meliputi viskositas menggunakan viskometer Ostwald, pH menggunakan pH meter, serta uji sensori hedonik skala 1–5 oleh 30 panelis tidak terlatih terhadap parameter aroma, warna, dan rasa. Hasil penelitian menunjukkan bahwa peningkatan konsentrasi gum arab menyebabkan peningkatan viskositas yang ditandai dengan bertambahnya waktu alir (47,6 - 56,6 detik) pada viskometer Ostwald. Nilai pH sirup nanas mengalami peningkatan secara bertahap dari 5,43 (0%) menjadi 5,52 (1,25%). Hasil uji sensori menunjukkan bahwa tingkat kesukaan tertinggi diperoleh pada konsentrasi gum arab 1%, dengan skor aroma 3,9 (suka), warna 3,7 (suka) dan rasa 4,1 (suka).

Kata kunci: sirup nanas, gum arab, penstabil, viskositas, sensori.