

SOURDOUGH AIR FERMENTASI BUAH NANAS DAN PENGARUHNYA TERHADAP KARAKTERISTIK TEKSTUR ROTI TAWAR TEPUNG BERAS

ABSTRAK

Penambahan air fermentasi buah sebagai *starter* dalam pembuatan *sourdough*, dapat mempengaruhi pertumbuhan mikrobiota, seperti bakteri asam laktat dan *yeast*, serta mempengaruhi karakteristik roti yang dihasilkan. Tujuan dari penelitian ini adalah untuk menentukan jumlah mikrobiota dari air fermentasi buah nanas, *sourdough* dengan penambahan air fermentasi buah nanas serta efeknya pada tekstur roti tepung beras. Air fermentasi buah nanas dibuat dengan mencampurkan buah nanas, air dan gula, lalu difermentasi selama 48 jam. Air fermentasi buah nanas kemudian digunakan dalam pembuatan *sourdough*, dengan waktu fermentasi 3-6 hari. *Sourdough* selanjutnya digunakan dalam pembuatan roti tawar tepung beras. *Sourdough* dengan penambahan air fermentasi buah nanas mencapai puncak pada hari ke-3, sedangkan *sourdough* tanpa penambahan buah nanas atau *sourdough* air mencapai puncak pada hari ke-6. *Sourdough* buah nanas menghasilkan pH yang lebih rendah dibandingkan *sourdough* air, dengan nilai 3.25. *Sourdough* buah nanas menghasilkan asam tertitrasi, total bakteri asam laktat dan total *yeast* yang lebih tinggi dibandingkan *sourdough* air, dengan 2.67 mL NaOH, 9.27 Log CFU/g, dan 9.30 Log CFU/g, berturut-turut. Roti *sourdough* buah nanas memiliki volume spesifik terendah, dan atribut tekstur tertinggi dibandingkan roti kontrol dan roti *sourdough* air, namun tidak berbeda signifikan. Penambahan air fermentasi buah nanas mempercepat waktu fermentasi *sourdough*, dan menghasilkan roti yang tidak mudah rapuh dibandingkan roti kontrol.

Kata kunci: Air fermentasi nanas; Bakteri Asam Laktat; Roti tepung beras; *Sourdough*; Tekstur roti

PINEAPPLE-FERMENTED WATER SOURDOUGH AND ITS EFFECT ON CHARACTERISTICS OF RICE FLOUR BREAD

ABSTRACT

The addition of pineapple-fermented water as a starter in the sourdough making can affect the growth of microbiota, such as lactic acid bacteria and yeast, and also affect the characteristics of the bread. The purpose of this study was to determine the amount of microbiota generated from pineapple-fermented water, sourdough with pineapple-fermented water and its effect on the texture of rice flour bread. The pineapple fermented water was made by mixing pineapple, water, and sugar, then fermented for 48 hours. Pineapple fermented water is then used to make sourdough and fermented for approximately 3-6 days. Sourdough is then used to make rice flour bread. Sourdough with the addition of pineapple fermented water reached its peak on day 3, while sourdough without the addition of pineapple or water sourdough reached its peak on day 6. Pineapple sourdough produces a lower pH than water sourdough, with a value of 3.25. Pineapple sourdough produced higher titrated acid, total lactic acid bacteria, and total yeast than water sourdough, with 2.67 mL of NaOH, 9.27 Log CFU/g, and 9.30 Log CFU/g, respectively. Pineapple sourdough bread had the lowest specific volume and highest texture attributes compared to control bread and water sourdough bread, but not significantly different. The addition of pineapple fermented water speeds up the sourdough fermentation time and produces bread that is less crumbly than the control bread.

Keyword: *Pineapple fermented water; Lactic Acid Bacteria; Rice flour bread; Water sourdough; Bread texture*