

## **SOURDOUGH AIR FERMENTASI SALAK (*Salacca zalacca*) DAN PENGARUHNYA PADA KARAKTERISTIK TEKSTURE ROTI TEPUNG BERAS**

### **ABSTRAK**

Penggunaan buah dalam pembuatan sourdough untuk memberikan nutrisi dan substrat yang dapat meningkatkan mikrobiota sourdough dan mempengaruhi karakteristik roti sourdough. Tujuan penelitian ini untuk mengetahui perbedaan karakteristik mikrobiota sourdough salak terhadap pengaruh tekstur roti tawar tepung beras. Air fermentasi salak digunakan sebagai starter pada penyiapan sourdough untuk membuat roti tawar tepung beras. Tujuan dari penelitian ini adalah mengevaluasi pertumbuhan bakteri asam laktat dan yeast pada air fermentasi salak dan sourdough dan karakteristik tekstur roti tawar tepung beras yang dihasilkan. Salak dikupas dan dipotong untuk difermentasi selama beberapa hari, kemudian air hasil fermentasi salak dicampur dengan tepung untuk difermentasi menjadi adonan asam. Selanjutnya diaplikasikan untuk membuat roti tawar tepung beras sebagai agen pengembang. Hasil penelitian menunjukkan starter salak memiliki jumlah BAL 8,77 Log CFU/g dan yeast 7.72 Log CFU/g dengan pH 3.62. Sourdough salak memiliki waktu fermentasi lebih pendek 3 hari untuk mencapai sourdough matang dan pH 3.25. Jumlah BAL dan yeast lebih tinggi daripada Sourdough air sebagai berikut BAL SDS 9,19 log cfu/g dan Yeast sourdough salak 9,42 log cfu/g sedangkan BAL sourdough air 9.03 Log CFU/g dan Yeast SDF 9.07 Log CFU/g. Volume spesifik sourdough salak mirip dengan sourdough air dan roti ragi komersial. Sourdough salak memiliki ukuran pori yang kecil yaitu 16,29 mm<sup>2</sup> sehingga kepadatan selnya lebih tinggi yaitu 6,31 sel/cm<sup>2</sup>. Penggunaan sourdough salak menghasilkan roti dengan hadnes, gumminess, dan chewiness yang lebih tinggi tetapi springiness, cohesiviness, dan resilience mirip dengan roti sourdough kontrol dan roti ragi komersial. Pada penelitian ini penggunaan sourdough salak lebih cepat karena pada hari ke 3 sourdough salak sudah mencapai optimal dibandingkan dengan sourdough air.

**Kata Kunci:** Air fermentasi salak; Bakteri asam laktat; Roti tawar tepung beras; Sourdough salak

**WATER FERMENTATION OF SNAKE FRUIT (*Salacca zalacca*)  
SOURDOUGH AND EFFECT ON RICE FLOUR BREAD TEXTURE  
CHARACTERISTICS**

**ABSTRACT**

*The use of fruit in sourdough production is to provide nutrients and substrates that can enhance the sourdough microbiota and affect the characteristics of sourdough bread. The purpose of this aim was to investigated the differences in the characteristics of the snake fruit sourdough microbiota on the effect of the texture of rice flour white bread. Snake fruit fermented water is used as a starter in sourdough preparation for making rice flour bread. The purpose of this study was to evaluate the growth of lactic acid bacteria and yeast in snake fruit and sourdough fermented water and the texture characteristics of the resulting rice flour white bread. The snake fruit is peeled and cuted to be fermented for several days, then the water from the snake fruit fermentation is mixed with flour to be fermented into sourdough. Furthermore, it is applied to make rice flour plain bread as a leavening agent. The results showed that the snake fruit starter had a LAB of 8.77 Log CFU/g and yeast 7.72 Log CFU/g with a pH of 3.62. Snake fruit sourdough has a shorter fermentation time of 3 days to reach ripe sourdough and a pH of 3.25. The amount of LAB and yeast was higher than Sourdough water as follows Lactic acid bacteri a snake fruit sourdough 9.19 log cfu/g and Yeast snake fruit sourdough 9.42 log cfu/g while Lactic acid bacteri sourdough water 9.03 Log CFU/g and Yeast water sourdough 9.07 Log CFU/g. The specific volume of snake fruit sourdough is similar to water sourdough and commercial yeast bread. Snake fruit sourdough has a small pore size of 16.29 mm<sup>2</sup> so the cell count is higher, namely 6.31 cells/cm<sup>2</sup>. The use of snake fruit sourdough produced bread with higher hardness, gumminess, and chewiness but the springiness, cohesivity, and resilience were similar to water sourdough bread and commercial yeast bread. The use of snake fruit sourdough was faster because, on the 3rd day, the snake fruit sourdough had reached its optimum compared to water sourdough.*

**Keywords:** *Snake fruit fermented water; snake fruit Sourdough; Lactic acid bacteria; rice flour bread;*