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Karakteristik Dried Sourdough Tom-tomi (Flacourtia Inermis Roxb) dan Pengaruhnya Terhadap Karakteristik Fisik Roti Tawar
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KARAKTERISTIK *DRIED SOURDOUGH* TOMI-TOMI (*Flacourtia Inermis Roxb*) DAN PENGARUHNYA TERHADAP KARAKTER FISIK ROTI

INTISARI

Penggunaan air fermentasi buah sebagai *starter* dalam pembuatan *sourdough* dapat mempercepat pertumbuhan mikrobiota (Bakteri Asam Laktat dan *yeast*), dan mempengaruhi karkateristik fisik roti yang dihasilkan. Tujuan dari penelitian ini adalah untuk mengevaluasi karakteristik jumlah mikrobiota air fermentasi buah Tomi-tomi, *sourdough* Tomi-tomi, dan *sourdough* Tomi-tomi yang dikeringkan dengan menggunakan dua metode pengeringan (*freeze drying* dan *cabinet drying*) dan pengaruh dari *sourdough* Tomi-tomi terhadap karakteristik fisik roti yang menggunakan metode *freeze drying* dan *cabinet drying.* Air fermentasi buah Tomi-tomi dibuat dengan dua perlakuan yaitu di rendam dan di jus kemudian buah Tomi-tomi dan air dicampurkan dan difermentasikan selama 7 hari. Dari hasil fermentasi diperoleh jumlah bakteri asam laktat dan *yeast* yang terbaik adalah air fermentasi yang dijus sehingga digunakan dalam pembuatan *sourdough* Tomi-tomi. *Sourdough* Tomi-tomi difermentasikan selama tujuh hari. *Sourdough* Tomi-tomi mencapai puncak pada hari ke-4 dan digunakan dalam pembuatan *sourdough* kering dengan metode *freeze drying* dan *cabinet drying. Sourdough* kemudian digunakan untuk pembuatan roti tawar. Hasil menujukan *sourdough* yang dikeringkan dengan *freeze drying* dan *cabinet drying* tidak mengalami penurunan *viability* bakteri asam laktat dan *yeast* secara signifikan. Sehingga, volume spesifik roti yang dihasilkan lebih baik dibandingkan dengan kontrol serta roti *sourdough* Tomi-tomi memiliki nilai *hardness, chewiness, gumminess, cohesiveness, springiness* dan *resilience* yang tidak berbeda nyata dengan roti *sourdough* kontrol.

Kata Kunci: *Sourdough*, Bakteri Asam Laktat, *Yeast*, *Cabinet-drying*, *Freeze-drying,* Tomi-tomi.

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CHARACTERISTICS OF DRIED SOURDOUGH TOMI-TOMI (Flacourtia Inermis Roxb) AND ITS EFFECT ON PHYSICAL CHARACTERISTICS OF BREAD

ABSTRACT

The application of fruit fermentation water as a starter in sourdough production has been observed to speed up the growth of microbiota, such as lactic acid bacteria and yeast, and also affect the physical qualities of the resulting bread. This research aimed to assess the microbiota count features of Tomi-tomi fruit fermented water, Tomi-tomi sourdough, and Tomi-tomi sourdough dried using two drying methods (freeze-drying and cabinet drying), and to examine the impact of Tomi-tomi sourdough on the physical properties of bread using freeze drying and cabinet drying methods. Tomi-tomi fruit fermented water was made with two different treatment: soaking and juicing. The resulting mixture of Tomi-tomi fruit and water was then fermented for seven days. The fermentation results showed that the best ratio of lactic acid bacteria to yeast was achieved with the juice fermentation water, which was then used in making Tomi-tomi sourdough. Tomi-tomi sourdough underwent a seven-day fermentation period. The optimal development of the Tomi-tomi sourdough was observed on the fourth day, after which it was subjected to freeze-drying and cabinet-drying methods to produce the dried sourdough. The sourdough was then used to make fresh bread. The results showed that sourdough subjected to freeze drying and cabinet drying did not show a significant decrease in the viability of lactic acid bacteria and yeast. As a result, the specific volume of the produced bread was better than that of the control. Furthermore, the Tomi-tomi sourdough bread displayed values for hardness, chewiness, gumminess, cohesiveness, springiness, and resilience that were not significantly different from those of the control sourdough bread.

Keywords: Sourdough, Lactic Acid Bacteria, Yeast, Cabinet-drying, Freeze-drying, Tomi-tomi.