

**PENGARUH PENAMBAHAN AIR PERASAN JERUK NIPIS
(*Citrus aurantifolia*) TERHADAP KARAKTERISTIK NATA DE
JACKFRUIT (*Artocarpus heterophyllus*)**

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Pengaruh Penambahan Air Perasan Jeruk Nipis (*Citrus aurantifolia*) terhadap Karakteristik *Nata de Jackfruit* (*Artocarpus heterophyllus*)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh dari penambahan air perasan jeruk nipis yang berbeda terhadap karakteristik *nata de jackfruit* dan untuk mengetahui konsentrasi air perasan jeruk nipis yang paling optimal dalam pembuatan *nata de jackfruit*. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan pada penelitian ini adalah A (penambahan asam asetat), penambahan air perasan jeruk nipis B (1%), C (2%), D (3%), dan E (4%). Hasil penelitian menunjukkan bahwa penambahan air perasan jeruk nipis memberikan pengaruh nyata terhadap nilai pH media sebelum fermentasi, total gula pada media sisa fermentasi, serat kasar, yield, ketebalan, kekerasan, dan organoleptik (aroma, rasa, dan kekenyalan). Namun, tidak berpengaruh nyata terhadap hasil pH media sisa fermentasi, total gula pada media sebelum fermentasi, dan organoleptik warna *Nata de Jackfruit*. Konsentrasi penambahan air perasan jeruk nipis yang paling optimal terhadap karakteristik *Nata de jackfruit* yang dihasilkan adalah perlakuan D (3%) dengan pH media sebelum fermentasi 3,65, pH media sisa fermentasi 2,96, total mikroba media sisa fermentasi $1,5 \times 10^5$ CFU/ml, total gula media sebelum fermentasi 11,84%, total gula media sisa fermentasi 2,08%, serat kasar 2,80%, yield 67,19%, ketebalan 1,63 cm, dan kekerasan 36,33 N/cm², sensori warna 3,45 (biasa), aroma 3,85 (suka), rasa 4,10 (suka), dan kekenyalan 4,05 (suka).

Kata Kunci: Biji Nangka, Fermentasi, Jeruk nipis, Nata

The Effect of Adding Lime Juice (*Citrus aurantifolia*) to The Characteristics of *Nata de Jackfruit* (*Artocarpus heterophyllus*)

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ABSTRACT

This study aims to determine the effect of adding different concentration of lime juice on the characteristics of nata de jackfruit and to determine the most optimal concentration of lime juice for making *nata de jackfruit*. This study used a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The treatments in this study were A (addition of acetic acid), addition of lime juice B (1%), C (2%), D (3%), and E (4%). The results showed that the addition of lime juice had a significant effect on the pH value of the media before fermentation, total sugar in the remaining fermentation media, crude fiber, *yield*, thickness, hardness, and organoleptic (aroma, taste, and chewiness). However, it did not significantly affect the pH results of the remaining fermentation media, total sugar in the media before fermentation, and organoleptic color of *Nata de Jackfruit*. The most optimal concentration of lime juice addition on the characteristics of the *Nata de jackfruit* produced was treatment D (3%) with pH of the media before fermentation of 3.65, pH of the remaining fermentation media of 2.96, total of microbes in the remaining fermentation media of 1.5×10^5 CFU/ml, total sugar in the media before fermentation of 11.84%, total sugar in the remaining fermentation media of 2.08%, crude fiber of 2.80%, *yield* of 67.19%, thickness of 1.63 cm, and hardness of 36.33 N/cm², organoleptic color 3.45 (normal), aroma 3.85 (like), taste 4.10 (like), and chewiness 4.05 (like).

Keywords: Fermentation, Jackfruit seed, Lime juice, Nata