

Intisari

Salak (*Salacca edulis* Reinw) merupakan salah satu komoditas unggulan Kabupaten Sleman yang dikonsumsi sebagai buah meja dengan limbah berupa biji salak sebesar 25-30% bobot total. Pada saat panen raya, kuantitas limbah biji salak yang dihasilkan juga tinggi. Pemanfaatan biji salak dalam bentuk bubuk sangrai sebagai alternatif substitusi kopi sudah dilakukan di Dusun Donoasih, Desa Donokerto, Kecamatan Turi. Pengeringan biji salak segar masih dilakukan dengan bantuan sinar matahari yang sangat tergantung cuaca sehingga terganggu selama musim hujan. Pada penelitian ini dibuat variabel pengeringan sinar matahari dan cabinet dryer pada tiga varietas biji salak yakni salak Gading, Manggala, dan Lumut. Penelitian ini bertujuan untuk mengetahui karakteristik kimia, fisik, sensoris, dan aktivitas antioksidan bubuk biji salak dari varietas Gading, Manggala, dan Lumut serta dua cara pengeringan yakni pengeringan sinar matahari dan cabinet dryer.

Pada penelitian ini, biji salak segar dibelah kemudian dikeringkan dengan sinar matahari selama 3 hari atau *cabinet dryer* suhu 60°C selama 18 jam, disangrai dengan wajan pada suhu 180°C selama 30 menit, digiling dan diayak. Analisis proksimat, analisis total fenolik, dan aktivitas antioksidan dilakukan terhadap biji salak segar dan bubuk biji salak sangrai. Pengujian sifat fisik meliputi kelarutan dan total padatan terlarut, sedangkan uji kesukaan dilakukan pada 20 panelis. Rancangan acak lengkap digunakan dengan dua variabel independen yakni cara pengeringan dan varietas salak serta dianalisis statistik dengan SPSS 20 dengan tingkat konfidensi 95%.

Hasil menunjukkan perbedaan nyata pada parameter komposisi kimia, aktivitas antioksidan, kelarutan, dan keseluruhan antar variabel sampel bubuk biji salak sangrai ($p < 0,05$). Namun total fenolik bubuk biji salak sangrai tidak berbeda. Aktivitas antioksidan bubuk biji salak yang dikeringkan dengan sinar matahari cenderung lebih tinggi daripada pengeringan cabinet dryer. Tetapi total padatan terlarut dari pengeringan cabinet cenderung lebih tinggi dari pengeringan matahari. Bubuk biji salak sangrai varietas Manggala, Lumut, Gading pengeringan sinar matahari serta varietas Lumut, Gading pengeringan kabinet cenderung disukai panelis.

Kata kunci : Biji Salak, Bubuk Biji Salak Sangrai, Pengeringan, Varietas Salak

Abstract

Snake fruits (*Salacca edulis Reinw*) is among specialty fruit commodity of Sleman District and surroundings. Consumed as table fruit, snake fruits generate seed waste around 25-30% of total fruit weight. Thus, during harvesting period, large number of snake fruit seed waste is inevitably produced. The seed has been utilized in very limited number in several villages in Sleman, such as in Donokerto and Turi, as snake fruit seed powder for coffee substitute. Sun drying is usually used during powder processing. However, powder productions become hampered during raining season due to its highly weather-depended. Cabinet drying can possibly be feasible alternative. This research was conducted to compare and describe the effect of sun drying and cabinet drying on proximate composition, physical and sensory properties, and antioxidant activity of snake fruit powder made from Gading, Manggala, and Lumut varieties.

Each of snake fruit seeds from pondoh Manggala, pondoh Lumut, and Gading were divided and dried under two conditions, 3 days sun drying and cabinet drying at 60°C for 18 hours. Dried seed then roasted at 180°C for 30 minutes, grinded, sifted using 40 mesh sieve to obtain seed powder. Samples then analyzed for their proximate composition, total phenolic content, antioxidant activity, solubility, total soluble solid, and panelists preference (color, aroma, taste, and overall). Completely randomized design was applied with two variables and each data was taken in triplicate.

Results showed that there was no significant difference among variables: chemical composition, total phenolic content, solubility, and preference (color, aroma, taste, and overall) but antioxidant activity and total soluble solid were significantly different. Antioxidant activity of roasted seed obtained using sun drying was higher than those of cabinet drying. Total soluble solid of cabinet-dried seed was higher than the sun-dried. Roasted snake fruit's seed powder from Gading, Manggala, and Lumut varieties from sun drying also Gading and Lumut varieties from cabinet drying are still preferred by panelist.

Keywords : snake fruit's seed, roasted snake fruit's seed powder, drying, snake fruit's variety