

INTISARI

Salak merupakan buah asli Indonesia yang banyak diekspor. Permasalahan ekspor salak adalah terbatasnya daya simpan buah meskipun dalam penyimpanan suhu dingin. Penelitian ini bertujuan mengetahui pengaruh pemberian pupuk kandang kambing dan frekuensi bakteri *Bacillus velezensis* B-27 terhadap hasil, kualitas hasil dan daya simpan salak pondoh pada penyimpanan suhu dingin serta menentukan frekuensi tepat pemberian bakteri *Bacillus velezensis* B-27. Penelitian dilaksanakan di ladang salak pondoh organik “Si Cantik” Desa Ledoknongko, Kecamatan Turi, Kabupaten Sleman serta Laboratorium Hama dan Penyakit dan Laboratorium Hortikultura, Fakultas Pertanian, Universitas Gadjah Mada. Penelitian dilaksanakan dari Agustus hingga Desember 2020. Penelitian menggunakan Rancangan Acak Kelompok Lengkap dua faktor yaitu pemberian pupuk kandang kambing (P) dan pemberian *Bacillus velezensis* B-27 (B) dengan 3 blok sebagai ulangan. Perlakuan meliputi tanpa pemupukan dengan tanpa aplikasi bakteri (P0B0), tanpa pemupukan dengan aplikasi satu kali 10 msp (P0B1), tanpa pemupukan dengan aplikasi dua kali 10 msp + 14 msp (P0B2), pemupukan 5kg/pohon dengan tanpa aplikasi bakteri (P5B0), pemupukan 5kg/pohon dengan aplikasi satu kali 10 msp (P5B1), dan pemupukan 5kg/pohon dengan aplikasi dua kali 10 msp + 14 msp (P5B2). Hasil menunjukkan pemberian pupuk kandang kambing meningkatkan jumlah buah per tandan, bobot, diameter, panjang, skor bentuk, padatan total terlarut, total asam tertitrasi, vitamin C, laju respirasi, perubahan susut bobot VQR dan panjang buah salak. Pemberian *Bacillus velezensis* B-27 meningkatkan skor bentuk buah, padatan total terlarut, total asam tertitrasi, vitamin C, laju respirasi, penyusutan bobot dan diameter serta panjang buah lebih stabil. Frekuensi pemberian *Bacillus velezensis* B-27 dua kali saat 10 msp + 14 msp baik tanpa maupun dengan pemberian pupuk kandang kambing optimal meningkatkan skor bentuk buah, padatan total terlarut, vitamin C, laju respirasi, serta lebih menstabilkan perubahan susut bobot dan panjang buah salak selama penyimpanan dingin.

Kata kunci : Salak pondoh, *Bacillus velezensis*, pupuk kandang, daya simpan, hasil

ABSTRACT

Snakefruit is a native Indonesian fruit that is widely exported. The export problem is the limited shelf life of the fruit even in cold storage. This study aims to determine the effect of goat manure and the frequency of *Bacillus velezensis* B-27 on the yield, yield quality and shelf life of snakefruit in cold storage and to know the frequency of *Bacillus velezensis* B-27 application. Research was conducted in the organic snakefruit "Si Cantik" Ledoknongko Village, Turi District, Sleman Regency and the Pest and Disease Laboratory and Horticulture Laboratory, Faculty of Agriculture, Gadjah Mada University. Research was carried out from August to December 2020. Research used Randomized Complete Block Design with two factors, goat manure (P) and *Bacillus velezensis* B-27 (B) with 3 blocks as replication. The treatments included without fertilization with and bacterial application (P0B0), without fertilization with 1 time bacterial application (P0B1), without fertilization with 2 time applications of bacterial (P0B2), fertilization 5kg/tree without bacterial application (P5B0), fertilizing 5kg/tree with 1 time application of bacterial (P5B1), and fertilizing 5kg/tree with 2 times of bacterial (P5B2). The results showed that the application of goat manure increased the number of fruits per bunch, weight, diameter, length, shape score, total dissolved solids, total titrated acid, vitamin C, respiration rate, changes in VQR weight loss and fruit length. Application of *Bacillus velezensis* B-27 increased the score of fruit shape, total dissolved solids, total titrated acid, vitamin C, respiration rate, weight loss and diameter and fruit length were more stable. The frequency of application *Bacillus velezensis* B-27 2 times without and with goat manure increased the fruit shape score, total dissolved solids, vitamin C, respiration rate, and more stable changes in weight loss and length of snakefruit during cold storage.

Keywords : Salak pondoh, *Bacillus velezensis*, goat manure, shelf life, yield