

ABSTRAK
EFEKTIVITAS ASAP CAIR TONGKOL JAGUNG TERHADAP UMUR
SIMPAN BUAH PISANG MULI (*Musa acuminata* L.)

Oleh

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Panjang umur simpan buah pisang muli (*Musa acuminata* L.) menjadi aspek penting dalam mempertahankan kualitas dan nilai komersialnya. Asap cair dapat menjadi alternatif untuk menghambat pertumbuhan mikroba karena mengandung senyawa antimikroba dan antioksidan yang dapat menekan laju respirasi dan transpirasi. Penelitian ini bertujuan untuk mengetahui konsentrasi asap cair tongkol jagung yang efektif dalam mempertahankan umur simpan buah pisang. Penelitian ini dilaksanakan pada bulan Desember 2024 sampai April 2025 di Laboratorium Proteksi Tanaman Fakultas Pertanian Universitas Siliwangi. Penelitian dilakukan menggunakan Rancangan Acak Lengkap yang terdiri dari lima taraf perlakuan yakni konsentrasi 0%, 1%, 3%, 5%, 7% dan lima ulangan. Data pengamatan dianalisis menggunakan Uji F dan jika terdapat perbedaan antara perlakuan dilanjutkan dengan Uji Jarak Berganda Duncan pada taraf kesalahan 5%. Hasil penelitian menunjukkan bahwa asap cair tongkol jagung efektif terhadap intensitas kerusakan, total padatan terlarut dan umur simpan. Namun tidak efektif terhadap warna dan susut bobot buah pisang muli. Konsentrasi asap cair tongkol jagung yang paling efektif dalam mempertahankan umur simpan buah pisang yaitu konsentrasi asap cair 3%.

Kata kunci: Asap cair, buah pisang muli, tongkol jagung, umur simpan.

ABSTRACT
EFFECTIVENESS OF LIQUID SMOKE CORN COBS ON THE SHELF
LIFE OF MULI BANANA (*Musa acuminata* L.)

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The long shelf life of muli banana (*Musa acuminata* L.) is an important aspect in maintaining its quality and commercial value. Liquid smoke can serve as an alternative to inhibit microbial growth because it contains antimicrobial and antioxidant compounds that can suppress the rate of respiration and transpiration. This research aims to determine the effective concentration of liquid smoke from corn cobs in preserving the shelf life of the fruit. This research was conducted from December 2024 to April 2025 at the Plant Protection Laboratory, Faculty of Agriculture, Siliwangi University. The study was carried out using a Completely Randomized Design consisting of five treatment levels, namely concentrations of 0%, 1%, 3%, 5%, and 7%, with five replications. The observational data were analyzed using the F-test, and if differences between treatments were found, a Duncan's Multiple Range Test was performed at a 5% significance level. The results indicated that corn cob liquid smoke was effective in reducing damage intensity, total dissolved solids, and storage life. However, it was not effective in influencing the color and weight loss of muli banana. The most effective concentration of corn cob liquid smoke in preserving the shelf life of Muli bananas was found to be 3%.

Keywords: Corn cobs, liquid smoke, muli banana, shelf life.