

B-115: Effect of different preharvest treatments on some postharvest quality attributes of Embul (*Musa AAB*'Embul') bananas

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Five preharvest treatments; bunch bagging, spraying with Safer's natural insecticide (2%) and bagging, thinning by removing alternate fingers on a hand, spraying fruits until runoff, or injecting pseudostems with 25ml Gibberellic acid GA3 (10 ppm) were tested. Treatments were given a week after inflorescence emergence. GA3 treatments were given at the beginning and a month later. All bunches were harvested 80 days after flower emergence. Physicochemical parameters (weight, length, circumference, firmness, titratable acidity, pH, soluble solid content, and peel to pulp ratio), skin blemishes, ripening rates, susceptibility to anthracnose and taste were investigated.

Bagging alone, and pesticide spraying and bagging reduced skin blemishes and increased weight (by ca. 21 g and 14 g when unripe, 24 g and 14 g when ripe respectively), circumference (by 1.5 cm and 1 cm when unripe respectively) per fruit, ripening rate and anthracnose development. Thinning reduced the appearance, weight (by 28 g when unripe and 25 g when ripe), circumference (1.5 cm when unripe), delayed ripening and anthracnose development. GA3 spray and injecting improved appearance compared to controls, decreased fruit weight (by 23 g and 13 g when unripe, 20 g and 11 g when ripe respectively), circumference (by 1.2 cm and 0.8 cm when unripe respectively), and delayed disease development.

Susceptibility to anthracnose was determined by inoculation of fruits with conidial suspension (ca. 10^7 spores/ml) of *Colletotrichum musae*. Thinning gave an unappealing appearance. Freckling was controlled by bagging. In a taste panel, fruits from all treatments were preferred than controls.

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