

Effect of difference pollen sources on fruit quality of Atemoya

Shu- Wen Chiang¹, Po-Song Lu²

Abstract

Characteristic changes of Atemoya (*Annona squamosa* x *A. cherimola* or *A. cherimola* x *A. squamosa* hybrids) during fruit growth and maturation were studied. Four pollen sources including 'Taitung No1.', 'Taitung No2.', and Soft-Branch Sugar Apple, and Atemoya were artificially pollinated to Atemoya. The metaxenia effect of fruit quality after pollination of different pollen sources was investigated. The results showed fruit weight of Atemoya pollinated with 'Taitung No1.' pollen had the least fruit weight, 510.1 grams. Fruit maturity of Atemoya pollinated with pollen of Soft-Branch was the faster compared to other treatments. Total soluble solids were reached highest at 19~21 weeks after pollination. In summary, the pollen source of Atemoya, Soft-Branch, and 'Taitung No2.' is capable of increasing fruit quality of Atemoya fruits.

Key words: Atemoya, Pollen, Fruit growth, Fruit quality.