RELATIONSHIP OF FRUIT GROWTH PARAMETERS OF MANGO cv. HADEN

Manoel T de. Castro Neto

Embrapa Semi-Árido, C.P. 23, 56300-000, Petrolina, PE, Brazil, castro@cnpmf.embrapa.br

A study carried out in a commercial orchard in a production area of the northeast of Brazil showed a typical sigmoid curve for fruit growth of mango cv. Haden. Also, a non-destructive method for measuring fruit growth was studied based on the relationship between fresh and dry matter, fruit volume, and the result of the multiplication of the fruit diameters. The results showed the fresh and dry matter can be estimated from the volume of the fruit based on the multiplication of the diameters. Correlation studies showed coefficients ($r^2$) higher than 0.91 for all growth stage during fruit development up to fruit harvest. It was also observed that water stress during fruit growth reduces the accumulation of fruit dry matter. This indicates that the check of irrigation with the objective of increasing fruit sugar content may not be of any advantage.