

Abstract:

Analytical studies were carried out in affected and non-affected fruits from cultivars with different sensitivities to the disorder. A histological study was carried out on the peduncle and on the mesocarp of fruits with different degrees of maturity. Internal breakdown of the mesocarp was not due to damage to the vascular elements of the peduncle but due to damage to cells and xylem elements in the mesocarp. A physical, physico-chemical, chemical and biochemical characterization of the fruit showed a reduction in firmness, total soluble solids, total pectins and pectinesterase activity in affected mesocarp tissue. A soilless system trial showed highly affected fruits with higher mesocarp N content and lower mesocarp Ca content than in slightly affected fruits, which showed lower mesocarp N content and higher mesocarp Ca content.