

**Title** Is compression damage the principal mechanical injured in pineapple postharvest?  
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#### **Abstract**

The pineapple, besides presenting numerous sensorial qualities, shows high dietary value. The purpose of this work was to evaluate some physicochemical changes of 'Perola' pineapple submitted the fruits to different types of mechanical injuries to the following treatments: T1: non-injured fruit (control); T2: one 60cm free fall; T3: four longitudinal cuts (70mm long and 2mm deep); T4: eight perforations (3 x 2 mm) in the fruit base; and T5: compression for 30 minutes (equivalent force of 160 Newton). After the application of the treatments, fruit were stored during 15 days at 11°C and 85% RH. Evaluation of the samples were conducted on every five days by evaluating the following parameters: firmness (N), pulp translucency (in scale from 0 to 4, where 0 = opaque pulp and 4 = 100% of translucent pulp), juice percentage (%), ratio (soluble solids/tritatable acidity), ascorbic acid (mg ascorbis acid I OOG-1) and pulp color (L \*, a\* and b\*). The compression treatment showed a significant firmness loss during storage, reaching loss of 48% after 15 days. Differences were not verified in the translucency of the fruit in function of the treatments. The juice percentage that initially was of 51.8% decreased for values between 41 and 45% after 15 days of storage. The ratio that initially was of 26.35 decreases to 18. The ascorbic acid contents increased in all treatments along the storage period. For the values of L \*, a\* and b\* were not verified differences among the treatments. It was considered compression as the most important mechanical injured for 'Perola' pineapple postharvest which usually, happen during transportation of the fruit.