Title Effect of polyethylene packaging and refrigeration on the internal darkening and activities of peroxidase

and polyphenoloxidase during maturation of pineapples cv. Smooth Cayenne.

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Abstract

Pineapple cv. Smooth Cayenne fruits of uniform size (1.5 kg average weight) supplied from Monte Alegre de Minas state were harvested in the intermediate stage of maturation, packed in polyethylene with or without perforations, and stored in a cold room maintained at 8 plus or minus 2 deg C and 90% RH or at an ambient temperature of approx equal to 25 deg C with a RH of approx equal to 75%. Quality evaluations were made initially and on the 2nd, 4th, 6th and 8th days of maturation after harvesting and after refrigeration. It was verified that packaging did influence the degree of internal darkening [blackheart] and the number of affected fruits. Polyethylene packaging without perforations presented reduced these parameters by 87.86% and 55%, respectively, while polyethylene packaging with perforations reduced them by 46.74% and 6.25%, respectively, compared with unpacked fruits. Data are also presented on peroxidase and polyphenol oxidase [catechol oxidase] activities in the different treatments.