

## STORABILITY OF 'GOLDEN' PINEAPPLE TREATED WITH 1-MCP AND WAX

Francisca Lígia de Castro Machado<sup>1</sup>; Rafaela Maria Temóteo Lima<sup>2</sup>; Kellina Oliveira de Souza<sup>2</sup>; Raimundo Wilane de Figueirêdo<sup>1</sup>; Adunias dos Santos Teixeira<sup>1</sup>; Ricardo Elesbão Alves<sup>2</sup>; Ebenézer de Oliveira Silva<sup>2\*</sup>.

<sup>1</sup>CCA/UFC, Av. Mister Hull, 2977 – Pici, 60021-970, Fortaleza, CE - Brazil, figueira@ufc.br;

<sup>2</sup>Embrapa Agroindústria Tropical, Rua Dra. Sara Mesquita, 2270, Pici, 60511-110, Fortaleza, CE - Brazil, elesbao@pq.cnpq.br.

The greatest hurdle for the export of locally produced 'Golden' pineapple to overseas markets is the poor visual quality of the fruit, usually affected by shipping time and/or marketing conditions. Storability of 'Golden' pineapple harvested at ½ yellow surface maturity stage at the Baixo Acaraú region, Ceara State, Brazil, was evaluated before or after coating with Carnauba based wax and/or exposition to 1-MCP (500 nL L<sup>-1</sup>). The storage environment and the experimental period studied simulated shipping (8±1°C and 90±5% RH) and marketing conditions (22±1°C and 90±5% RH), unless otherwise specified, considering Ceara State, as the production site and the Europe as the market place. The evaluation were performed upon harvest and transferring from cold storage, and every three days after the storage simulating shipping and included fruit visual quality, degree of shell yellowing, mass loss, firmness, flesh color (luminosity, hue angle and chromaticity), content of soluble solids (SS), titratable acidity (TA), pH, SS/TA ratio, contents of ascorbic acid, soluble sugars (SS), reducing sugar, carotenoids, phenolic compounds e yellow flavonoids. The assay was conducted using an entirely randomized design, with five replications. Wax application presented a very positive effect on conservation of pineapples external appearance, standing out comparison with the other treatments from the simulation of transport to the sailor period, showing also efficiency in relation to mass loss, when compared with 1-MCP treated and the control. This treatment also delayed yellow rind color development. The values of pH, TA, luminosity, chromaticity, and pulp Hue angle increased along the storage period, whereas firmness, vitamin C and reducing sugars decreased. The evaluation by tasters suggested a very good acceptance on the pineapples until nine days under specific commercialization conditions.