

#### Abstract:

Experiments with cucumbers (Delta Star variety) were performed to outline the variation in rheological behavior and color characteristics of the fruits when stored under hypobaric conditions. Three levels of pressure were applied during the experiments. Experimental samples were stored under low pressure conditions while control samples were kept under normal conditions. All the samples were stored at a constant temperature and relative humidity conditions. Rheological tests (compression, cutting and penetration) as well as the color parameters (in L\*a\*b\* system) were carried out for every sample. The results received clearly showed that the experimental samples exhibit better color features and no worse mechanical properties than those observed for control samples.