## Abstract:

Natural and postharvest ripening processes of Hungarian type sweet peppers in different stages of maturity were investigated by measuring the fresh and stored samples' colour and membrane permeability-related electrolyte or ion leakage using a conductivity measuring method. The saturation equation effectively characterized the ion leakage of fresh and stored samples in different stages of maturity. Significant differences in ion leakage and in ion leakage rate were confirmed only between mature-white and mature-red samples, but not in the case of fresh and postharvest-ripened peppers of intermediate maturity. The dominant ions taking part in membrane diffusion and ion mobility were potassium and phosphorus.