Eggplant fruits have a positive effect on metabolic processes in the human body, prevent obesity, play an important role in the prevention and treatment of cardiovascular system and are a valuable raw material for canning industry. Unfortunately, during storage a significant portion of vegetables is affected by phyto genetic microflora and physiological disorders. The successful solution of this problem can be achieved by post-harvest processing of fruits with solutions of antimicrobial action substances that boost the immune system and stability during storage. As pathogens of spoiling eggplant fruits are bacteria, fungi, yeast, it is appropriate to use antiseptics which by chemical composition are mainly acids.

Citric acid belongs to the group of carboxylic acids that slow the growth of microorganisms in normal conditions. Lowering pH of cell sap they limit the possibility of bacterial growth primarily.

The antimicrobial action of sorbic acid is various. It shows antimicrobial activity by inhibiting enzymes in the cells of microorganisms, acting on mold fungi, yeast and bacteria less.

Effects of sodium benzoate are directed primarily against mold fungi and yeast. The bacteria are inhibited only partially. Against lactic acid bacteria and clostridia it is ineffective.

Impact of processing with antimicrobial effect substances on microbial spoilage of eggplant fruits – with 0.5% solution of citric acid, 0,1% solution of sorbic acid, 0,1% solution of sodium benzoate and 0,1% solution of a new drug Polidez – is studied on losses caused by microbial spoilage during storage without refrigeration and under cold conditions.

Keywords: eggplants, spoilage, losses, storage, refrigeration, Polidez.