Abstract

Sh. Mohammadpour, M. Niakousari, M.R. Kassai, A. Farahnaki. Food science and technology department, Sari University of Natural Resources and Agriculture, Sari, Iran

Silver nanoparticles have recently got increasing interest due to their antimicrobial activities in food processing applications. The objectives of this study were to evaluate the effect of silver nanoparticles on weight loss, color, firmness, microbial qualities and sensory attributes of plum fruit stored at 6 and 20°C. Plum samples were first sorted based on homogeneous color and size and dipped into nano silver solution for 1 min. during 10 weeks storage at 6 and 20°C, silver nano particles coated plums slowed down the weight loss, reduced the color change in the skin of plum, inhabited the increasing of tissue firmness, the growth of microorganisms and increased the shelf-life of golden plum by about 8 weeks at 6°C.

Nano silver, Plum, Antimicrobial, Fruit quality parameters