## Abstract:

It was aimed to extend the postharvest conservation of 'Tommy Atkins' mango fruits harvested in break maturity stage. Fruits were submitted at the following treatments: hot water treatment (55°C for 5 minutes) and benomyl 1,000 mg.L-1; irradiation with 0,8 or 1,0 kGy; irradiation associated at carnaúba wax; and control. The fruits were stored at 10°C and 85 - 90%RH during 21 days, and then removed to ambient temperature (25,7±0,70C and 87,1±2,2%RH). Through the storage time, the evolution of fresh weight, color, rottenness, total soluble solids (TSS), total titratable acidity (TTA), and TSS/TTA ratio were measured. 'Tommy Atkins' mango fruits can have shelf life notably increased, when they were submitted to hot water treatment (55°C for 5 minutes) or radiation (0,8 and 1,0 kGy), associated with carnaúba wax application, before cold storage. These treatments increased the fruit resistance at refrigerated storage, and improved shelf-life after transferring to ambient temperature.