

### Abstract:

Different heat treatment procedures were evaluated to compare their efficacy in controlling diseases of mango fruits. Mature green 'Carabao' mangoes were subjected to the following heat treatments within 30 h after harvest: hot water treatment (HWT; 53°C, 10 min), hot water brush (HWB; 60°C, 20-35 sec) and a brief exposure to hot water dip (HWD; 60°C, 20-35 sec). Fruits were then subjected to vapor heat treatment (VHT) and ripened at 25°C. All heat treatment procedures resulted in a reduction in anthracnose and stem end rot incidence. The usual HWT and the brief exposure to HWD at 60°C for 35 sec controlled the development of anthracnose. Hot water brush for 35 sec also effected a considerable reduction in disease incidence. Variable degree of disease control was obtained when the different heat treatments were combined with VHT. Vapor heat treatment alone did not control anthracnose and stem end rot since incidence was comparable with the control. Hot water treatment in combination with VHT resulted in faster peel color change compared with the rest of the treatments. At the ripe stage, lenticel spotting was more prominent in fruits subjected to HWB compared with HWT and least in HWD. Physico-chemical characteristics of the fruits were not influenced by any of the heat treatments employed.