

Effect of removal of field heat by hydro-cooling on shelf life of harvested 'embul' banana (*Musa acuminata*).

Postharvest losses of banana are very high due to its perishable and climacteric nature. High temperature during harvesting enhances physiological activities such as respiration and other metabolic processes that associated with rapid deterioration of banana. Hence rapid cooling just after harvesting is necessary to lower the initial temperature of the produce. Therefore, this study was carried out to select the best temperature for hydro-cooling of banana to remove field heat in order to extend the shelf life and to evaluate the physico-chemical and physiological changes of hydro-cooled banana during storage under ambient conditions. (T: 28-32 °C and RH: 58-69%).

Hydro-cooling of 'Embul' banana in water at ambient temperature (25.1 °C) for 40 minutes can extend the postharvest life of banana up to 12 days as compared to those not subjected to any pre cooling whose storage life was 10 days. Hydro-cooling of 'Embul' banana in cool water below ambient temperatures leads to faster deterioration when stored under ambient storage conditions (T: 28-32°C & RH: 58-68%) and hence cannot be recommended as a treatment to prolong shelf life of banana under ambient storage.