

Influence of wax coating and indigenous potassium permanganate based ethylene absorbents on shelf life of banana cv. DWARF CAVENDISH

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SUMMARY : The present investigation was carried out to study the influence of wax coating and indigenous potassium permanganate based ethylene absorbents on self life of banana cv. DWARF CAVENDISH at farmer's field in Ashrawal village, Allahabad, U.P. India. Locally available indigenous materials like thermocol, filter paper, blotting paper, clay, coir pith, saw dust, chalk were used as base materials as ethylene absorbents. It was observed that an indigenous ethylene scrubber made out of filter paper delayed ripening of fruits (35.20) days meanwhile the control fruits ripened within (19.80) days and the peel colour was green with traces of yellow in all the treated fruits. The control fruits were yellow with green tips. Wax coating in combination with hot water and ethylene absorbent had effectively extended green life than when wax alone used at different concentration. Maximum green life was observed in 6 per cent wax coated fruits in combination with hot water and ethylene absorbent. Meanwhile green life for control was only (21.80) days. Wax coating also reduced PLW to the minimum (3.2 to 4.84 %) as against (7.27%) in the control.

Key Words : Banana (*Musa* sp.), cv. DWARF CAVENDISH, Wax, Potassium permanganate, Shelf life

How to cite this paper : Saravanan, S., Suchitra, V., Kumar, Rakesh and Bandral, Julie (2012). Influence of wax coating and indigenous potassium permanganate based ethylene absorbents on shelf life of banana cv. DWARF CAVENDISH, *Internat. J. Proc. & Post Harvest Technol.*, 3 (1) : 129-133.

Research chronicle : Received : 07.05.2012; Sent for revision : 22.05.2012; Accepted : 03.06.2012

Banana is one of the most popular fruits in India and it is the only fruit available throughout the years, relatively inexpensive and within the reach of all classes of buyers. Banana is rich in calories, but very low in fats. The fruit contains a good amount of health benefiting anti-oxidants, minerals and vitamins. India is the second largest producer of

fruits in the World and is known as fruit basket of the World. Banana ranks third in area with 7.09 lakh ha next to mango and citrus. However, it stands first in total fruit production (26.21 MT), being nearly one third of the total fruit production (38.3%, NHB data base 2009). India is exporting fresh banana to nearly fifty countries of the World and earning good foreign exchange from the world market. Indian bananas are the favorites in many countries of the World, but large portion of export consignment is routed to UAE (44.6%), Saudi Arabia, Bahrain, Kuwait and Nepal. In spite of the leading role played by India in the production of banana, its share in the International trade is only meager *i.e.* 1 per cent (NHB data base 2009). Banana being highly perishable fruit suffers from heavy post harvest losses often to the extent up to 20- 30 per cent. (Chadha, 1996 and Liu and Jia, 2008). When it is harvested at the pre climacteric matured green stage, the fruit undergoes various physio-chemical changes while some of the changes are desirable,

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