

# Effects of Abscisic Acid and Fluridone on Postharvest Quality of Detached Capsicum (*Capsicum Annuum* L.) Fruits

Uma Prajapati<sup>1</sup> and Ram Asrey\*<sup>1</sup>

<sup>1</sup>Division of Food Science and Post Harvest Technology,  
Indian Agricultural Research Institute, New Delhi-110 012, India  
E-mail: \*uma252921@gmail.com

---

**Abstract**—*Capsicum* is highly prized vegetable world over due to its varied colour, rich nutritional value and overall consumer preference. Storage life of capsicum is very short around 3-4 days at ambient condition due to heavy loss of moisture (shriveling) and bioactive compound like ascorbic acid, carotenoid, phenols and antioxidant capacity. The aim of this study is extending shelf life and higher retention of bioactive compound during ambient storage. The capsicum variety Inspiration was harvested at commercial maturity stage and subjected to dipping treatment of abscisic acid (ABA) @ 300  $\mu\text{mol L}^{-1}$  and fluridone @ 100  $\mu\text{mol L}^{-1}$  for 3 min. abscisic acid treatment has shown an increasing trend of ascorbic acid, total phenols and carotenoid content during entire period of 8 days storage with a slight higher moisture loss compared to control and fluridone treated fruits. While exogenous application of fluridone (ABA antagonist) has shown to reduce various quality parameters like TSS, acidity and PLW, but it maintained the fruit firmness at acceptable level. This finding suggests that among abscisic acid and fluridone, abscisic acid at 300  $\mu\text{mol L}^{-1}$  concentration for 3 minutes can be gainfully utilised as a safe chemical elicitor for enhancing several health promoting component during fruit ripening and storage of capsicum.