

Resume of Dr. Swati Sharma



1. Personal Details

Name	:	Swati Sharma
Designation & Discipline	:	Scientist (Fruit Science- Horticulture)
Correspondence address (preferably official)	:	ICAR- National Research Centre on Litchi
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2. Qualifications

Degree	Year	Institute/ University	Subject (Specialization)
Ph.D.	2014	Indian Agricultural Research Institute, New Delhi	Post Harvest Technology of Horticultural Crops
M.Sc.	2011	Indian Agricultural Research Institute, New Delhi	Post Harvest Technology of Horticultural Crops
B.Sc. (Ag.)	2009	Institute of Agricultural Sciences, B.H.U. Varanasi	Agriculture

3. Publications (Important Research Publications)

1. **Sharma, S.** and Sharma, R.R. (2014). Nitric oxide inhibits activities of PAL and PME enzymes and reduces chilling injury in 'Santa Rosa' Japanese plum (*Prunus salicina* Lindell). *Journal of Plant Biochemistry and Biotechnology*, DOI 10.1007/s13562-014-0271-9.
2. Barman, K., Asrey, R., Pal, R.K., Jha, S.K. and **Sharma, S.** (2013). Influence of different desapping agents on the incidence of sapburn, ripening behaviour and quality of mango. *Journal of Food Science and Technology*, DOI 10.1007/s13197-013-0995-x.
3. **Sharma, S.**, Sharma, R.R., Pal, R.K., Jhalegar, J., Singh, J. and Srivastav, M. (2012). Ethylene absorbents influence fruit firmness and activity of enzymes involved in fruit

softening of Japanese plum (*Prunus salicina* Lindell.) cv. Santa Rosa. *Fruits*, 67(4): 257-266.

4. **Sharma, S.**, Sharma, R.R., Pal, R.K., Paul, V. and Dahuja, A. (2012). 1-Methylcyclopropene influences biochemical attributes and fruit softening enzymes of 'Santa Rosa' Japanese plum (*Prunus salicina* Lindl.). *Journal of Plant Biochemistry and Biotechnology*, 21(2): 295-299.
5. **Sharma, S.**, Sharma, R.R. and Pal, R.K. (2012). Effect of ethylene absorbents on compression injury and quality of Santa Rosa Japanese plum (*Prunus salicina*) during transportation. *Indian Journal of Agricultural Sciences*, 82(12): 223-226.
6. **Sharma, S.**, Sharma, R.R., Pal, R.K. and Singh, S.K. (2012). Influence of 1-MCP on compression injury of Japanese plums during transportation. *Indian Journal of Horticulture*. 69(4): 101-106.
7. Jhalegar, J., Sharma, R.R., Pal, R.K. and **Sharma, S.** (2012). Effect of 1-MCP on shelf-life and quality of kiwifruit stored under ambient conditions. *Indian Journal of Horticulture*, 69(2): 258-262.
8. Barman, K., **Sharma, S.** and Patel, V.B. (2015). Golden Berry: A Treasure Trove of Health. *Processed Food Industry*. 18(3): 20-24.
9. Barman, K., Patel, V.B. and **Sharma, S.** (2014). Reaping pericarp browning-free litchi. *Indian Horticulture*. 59(3): 26-27, 37.
10. Sharma, R.R., Reddy, V.R., **Sharma, S.** and Prasad, K. (2014). *Phalon avaum sabjiyon ko nimna tapman kshati se bachaye. Phal Phul*. 35(4): 16-19.
11. Barman, K., Koley, T.K., **Sharma, S.** and Patel, V.B. (2013). Pomegranate (*Punica granatum* L.): Nutraceutical compounds and medicinal properties. *Indian Food Industry* 32(2): 17-21.
12. Sharma, R.R., **Sharma, S.** and Jhalegar, M.J. (2011). *Nimbu bargiya phalon ke prasanskaran abseson se taiyar utpad. Unnat Krishi*. 49(4): 8-9.

4. Current area of Research

My current area of research is studying the physiology and biochemistry of shoot maturity in litchi fruit tree in relation to its flowering. In addition, the various shoot, flowering and fruit maturity stages will be studied in terms of various physiological and biochemical changes. Postharvest studies in relation to management of pericarp browning in litchi fruit will also be attempted.

5. Work experience & Interests

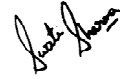
I have done research work on postharvest maintenance of quality and extension of shelf life of 'Santa Rosa' cultivar of Japanese plum (*Prunus salicina* Lindell) using different novel techniques like 1-Methylcyclopropene treatment and active modified atmosphere packaging to enhance its availability both in space and time. Also, I have worked on quality analysis of raisins and development and validation of an analytical method for determination of pesticide residues in black pepper matrix by LC-MS/MS to analyze the maximum number of pesticides with high accuracy percentage in minimum time.

I am desirous of contributing significantly to the understanding of physiology and biochemistry mechanisms involved in flowering, fruiting, postharvest decay and senescence of fruit crops in

orchards at pre-harvest as well as postharvest stages. Also, I am deeply interested to work for reduction of postharvest losses of horticultural crops which will contribute significantly for achieving nutritional security.

5. Membership of Professional Societies

Life Member of Horticultural Society of India, New Delhi since 2009.



Signature of the Scientist