

1.	Name	Dr. Parshant Bakshi
2.	Designation	Associate Professor, Fruit Science-cum-Head
3.	Contact address	Advanced Centre for Horticulture Research, Udheywalla, SKUAST-J, Talab Tillo, Jammu, J&K, India – 180 018
4.	Email	bakshi_parshant@rediffmail.com; parshantskuastj@gmail.com
5.	Mobile No.	09419101601
6.	Professional experience	12 years experience of teaching, research and extension
7.	Awards/honours/scholarships/fellowships	<ul style="list-style-type: none"> ❖ Awarded MASHAV fellowship by the Ministry of External Affairs, Israel, in 2012. ❖ Best Poster Presentation in “Studies on impact of climate and irrigation on peach cultivars under Jammu subtropics” in <i>1st J&K Agricultural Science Congress organized by SKUAST-Kashmir</i>. ❖ Best Poster Presentation in “Sundrying: An ideal method for wild pomegranate (<i>anardana</i>) drying” in <i>2nd J&K Agricultural Science Congress organized by SKUAST-Jammu</i>. ❖ Fellowship Award-2012 in International Conference on “Impact of Technological Tools on Food Security under Changing Global Scenario-2012” at Shobit University, Meerut. ❖ Best Poster Presentation in 2014 on “Influence and auxin and planting date on survival and rooting of semi-hard wood cuttings of phalsa” in <i>National Symposium on Natural Resource Management and Sustainable Hill farming System for Livelihood Security</i> ❖ Best Citizen of India Award-2014 by International Publishing House, New Delhi ❖ Best <i>Oral</i> Presentation in 2015 on “Scenario and future prospects of micro-irrigation in India” in <i>National Seminar on “Technology and Management of Micro-irrigation in Floriculture”</i> ❖ Best Poster Presentation in 2015 on “Biochemical changes in fruits of seven guava cultivars during different stages of ripening” in <i>National Seminar on “Technology and Management of Micro-irrigation in Floriculture”</i>
8.	Area of specialization	Fruit Production
9.	Research interests	Fruit Physiology and characterization of fruit germplasm
10.	Total no. of publications (referred journal)	Research papers: 65; Review papers: 06
11.	Selected publications	<ul style="list-style-type: none"> ❖ Bakshi, P.; Kumar, R; Wali, V.K. and Bhushan, B. 2015. Studies on influence of ethrel on ripening and quality of persimmon. <i>Indian Journal of Agricultural Sciences</i>. 85 (9): 1181-84. ❖ Bakshi, P.; Jasrotia, A.; Wali, V.K.; Sharma, A. and Bakshi, M. 2015. Evaluation of different aonla (<i>Emblica officinalis</i> Gaertn.) cultivars under rainfed conditions of lower shivalik foothills of Himalayas. <i>Indian Journal of Agricultural Sciences</i>. 85 (6): 1012-16. ❖ Bakshi, P.; Bhushan, B.; Sharma, A. and Wali, V.K. 2014. Studies on variability in physico-chemical traits and multiplication of different <i>Daru</i> collections. <i>Indian Journal of Horticulture</i>. 71(1): 11-15. ❖ Bakshi, P.; Jasrotia, A.; Wali, V.K.; Sharma, A. and Bakshi, M. 2013. Influence of pre-harvest application of calcium and micro-nutrients on growth, yield, quality and shelf-life of strawberry cv. Chandler. <i>Indian Journal of Agricultural Sciences</i>. 83(8): 831-835. ❖ Bakshi, P. and Masoodi, F.A. 2010. Effect of pre-storage heat treatment on enzymological changes in peach. <i>Journal of Food Science & Technology</i>. 47(4):461-464.

No. of books/Manuals/ Monographs/Bulletins	Books: 07; Manuals: 09; Popular articles: 30; Monographs: 05; Technical Bulletins: 08																															
Research projects as PI/ Nodal Officer	Title	Funding Agency	Period		Status (Ongoing/ Completed)																											
	Agro-technique refinement and suppression of anar butterfly in wild pomegranate (<i>Anardana</i>) under Jammu province Chatha (as PI)	ICAR	2005	2007	Completed																											
	Determination of quality and harvest maturity of commercially grown fruit crops in Jammu subtropics (as PI)	ICAR	2011	2013	Completed																											
	Introduction and evaluation of spur type and colour mutants of apple and pear in Doda district	SKUA ST-J	2005	2007	Completed																											
	Effect of various calcium and micro-nutrient treatments on shelf life of strawberry (<i>Fragaria x ananassa</i> Duch.) cv. Chandler (as PI)	SKUA ST-J	2009	2011	Completed																											
	Training and demonstration on rejuvenation of old/un-productive orchards of Jammu sub-tropics (as PI)	MIDH	2015	-	Ongoing																											
Other achievements, if any	<p>Students guided as Major advisor: M.Sc. = 04; Co-Advisor: B.Sc.= 06; M.Sc.= 04; Ph.D= 02</p> <p>Students under guidance as Major advisor: Ph.D.= 04; Co-Advisor: B.Sc.= 02; M.Sc.= 10; Ph.D = 07</p> <ul style="list-style-type: none"> ➤ No. of radio talks delivered: 03 ➤ No. of T.V talks delivered: 12 ➤ Life member of Professional Horticultural Societies: 08 <table border="1" data-bbox="574 1192 1437 1787"> <thead> <tr> <th>S.No</th> <th>Name of Society</th> <th>Period</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>The Horticultural Society of India, New Delhi</td> <td>Life-member (from 2001)</td> </tr> <tr> <td>2.</td> <td>The Horticultural Society of Haryana, Haryana</td> <td>Life-member (from 2005)</td> </tr> <tr> <td>3.</td> <td>Society for Promotion of Horticulture, Bangalore</td> <td>Life-member (from 2012)</td> </tr> <tr> <td>4.</td> <td>Indian Society for Dryland Horticulture, Bikaner</td> <td>Life-member (from 2012)</td> </tr> <tr> <td>5.</td> <td>Hi-Tech Horticultural Society, Meerut</td> <td>Life-member (from 2013)</td> </tr> <tr> <td>6.</td> <td>Indian Society of Hill Agriculture, Pantnagar</td> <td>Life-member (from 2013)</td> </tr> <tr> <td>7.</td> <td>Indian Society of Horticultural Research & development, Pantnagar</td> <td>Life-member (from 2013)</td> </tr> <tr> <td>8.</td> <td>The Society for Horticultural Research and Development, Ghaziabad</td> <td>Life-member (from 2013)</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ➤ Attended 10 no. Conferences/symposium/seminar ➤ Reviewer of <ul style="list-style-type: none"> ❖ <i>Journal of Food Science & Technology</i>, Mysore 					S.No	Name of Society	Period	1.	The Horticultural Society of India, New Delhi	Life-member (from 2001)	2.	The Horticultural Society of Haryana, Haryana	Life-member (from 2005)	3.	Society for Promotion of Horticulture, Bangalore	Life-member (from 2012)	4.	Indian Society for Dryland Horticulture, Bikaner	Life-member (from 2012)	5.	Hi-Tech Horticultural Society, Meerut	Life-member (from 2013)	6.	Indian Society of Hill Agriculture, Pantnagar	Life-member (from 2013)	7.	Indian Society of Horticultural Research & development, Pantnagar	Life-member (from 2013)	8.	The Society for Horticultural Research and Development, Ghaziabad	Life-member (from 2013)
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- ❖ *Journal of Food Quality* by Wiley Blackwell
- ❖ *Indian Journal of Agricultural Sciences*, New Delhi
- ❖ *Journal of Hill Agriculture*, Uttaranchal, U. P.
- ❖ *African Journal of Food Science*
- ❖ *International Journal of Biometeorology*
- ❖ *Australian Journal of Crop Sciences*

- Member of University Examination Cell, SKUAST-J from November, 2012
- Member Secretary of Equipments for Central Purchase Committee (CPC) for 2014-15 and 2015-16.
- Sector Magistrate in J&K Assembly Election of 2014 and got *Letter of Appreciation* from Returning Officer for smooth conduct of elections in the Border area of Suchetgarh.
- Incharge Control Room, for conducting of BOPEE entrance examination CET-2015 on 30th and 31st of May, 2015 at Directorate of Distance Education, University of Jammu.
- External examiner for paper setting and evaluation of answer sheets.
- Involved to promote agriculture through web portal www.krishisandesh.com one of the leading sites of India in agriculture from March 2010.
- Member of Joint Inspection Team (JIT) from Ministry of Agriculture, Govt. of India for monitoring of projects under MIDH and RKVY for J&K.

Research Achievements:

Rejuvenation of old/senile/unproductive mango orchards

❖ A rejuvenation technique has been standardized along with the complete calendar of operations to the extent of its commercialization as 30-40 per cent of the mango orchards in Jammu province are old/senile. This technology has been demonstrated successfully on the farmers field in Jammu and Kathua districts of Jammu province (Rejuvenation technology developed for old/senile mango orchards has been incorporated in the Package of practices for Horticulture crops 2015 of SKUAST-J pp 13-15.

Mulching and Foliar nutrition for qualitative improvement/enhancement in shelf-life of strawberry cv. Chandler

❖ Mulching of strawberry is a beneficial operation in minimizing winter freezing injury to plants, suppressing early spring growth, smothering of weeds, keeping berries clean, conserving soil moisture and reducing berry disease. Planting of strawberry cv. Chandler on 9th October alongwith black polythene mulch under subtropical conditions of Jammu has been recommended as it resulted in maximum growth, yield, quality and runners. This recommendation has been incorporated in the Package of practices for Horticulture crops 2015 of SKUAST-J pp 140.

❖ For improving the quality and the shelf-life of strawberry cv. Chandler, it has been recommended that foliar application of 0.6 % FeSO₄ sprayed 30 days and 80 days after planting results in maximum vegetative growth whereas 0.6 % ZnSO₄ application improve quality of

Chandler cv. Strawberry. For enhancing the shelf-life upto 60 hours of Chandler cv. of strawberry, it has been recommended to apply CaCl₂ 0.6 per cent twice i.e. 30 and 80 days after planting. This recommendation has been incorporated in the Package of practices for Horticulture crops 2015 of SKUAST-J pp 141.

Wedge grafting in guava

❖ Wedge grafting with polytubes in guava has been standardized for its commercialization *in vivo* and *in vitro* conditions in Sardar cultivar of guava. Under *in vitro* conditions (poly house) maximum graft intake success upto 94.88 % can be achieved when wedge grafting is carried out in the winter season by covering the grafts with polytubes and the recommendation has been incorporated in the Package of practices for Horticulture crops 2015 of SKUAST-J pp 35.

Standardization of planting density in guava

❖ Planting distance of 6.0 m x 3.0 m (row to row and plant to plant) accommodating 555 plants per hectare has been standardized and recommended for high density orcharding in guava. The demonstration of this planting density in guava has been successfully demonstrated in the district of Samba and Jammu for its commercialization. This recommendation has been incorporated in the Package of practices for Horticulture crops 2015 of SKUAST-J pp 35.

Standardization of planting density in mango

❖ Planting distance of 4.5 m x 4.5 m (row to row and plant to plant) accommodating 495 plants per hectare has been standardized and recommended for high density orcharding in mango. The demonstration of this planting density in mango has been successfully demonstrated in the district of Samba and Jammu for its commercialization and has been incorporated in SKUAST-J Package of practices 2015 pp. 12.

Standardization of polythene bags for planting of Litchi

❖ The litchi layers treated with IBA 500 ppm in the first week of August and planted in polythene bags of size 22 cm x 10 cm x 8 cm filled with the soil of litchi orchard resulted in 98.29 per cent rooting with survival of 91.45 per cent within 210 days of planting litchi layers. This recommendation has been incorporated in Package of practices of SKUAST-J 2015 pp. 30.

Technology for drying of wild pomegranate (*Anardana*)

❖ Sun drying for 38 hours is recommended for drying of wild pomegranate (*Anardana*). Use muslin cloth for hygienic drying instead of gunny bags for drying on rooftops. Small poly tent structures can be used for septic drying of *anardana*.

These recommendations are incorporated in package of practices for Horticulture Crops 2015 at pp. 58.

Standardization of production technology in olive

❖ The production technology for over-coming the problem of unfruitfulness in olive has been standardized upto the extent of its commercialization. Following recommendations have been made and

suitably added in the package of practices for making the olive culture viable/profitable in Jammu province.

❖ **Nutrition:**

i. Nitrogenous fertilizer should be applied in three split doses, viz., immediately after harvest, onset of spring season and in the beginning of rainy season.

ii. Apply 200 g borax per tree in alternate years.

iii. In drought prone areas, two foliar spray of urea (1.0%) and boric acid (0.4%) should be applied during pre bloom and post bloom, respectively.

❖ **Irrigation**

i. In autumn, apply two irrigations immediately after harvest, at an interval of 20 days.

ii. Apply two irrigation four weeks prior to expected time of flowering which ensures adequate development of flowers and lower down the flower bud abscission.

iii. The tree should be irrigated after two weeks of the peak bloom period as it improves fruit set.

iv. One irrigation should be given a month after fruit set to stimulate development of fruit and reduce fruit drop.

Integrated nutrient management in guava

❖ In Sardar cultivar of guava, 50 % nitrogen requirement could be replaced by poultry manure when used with urea augmented with *Azotobacter*, 25 % nitrogen in the form of FYM integrated with urea augmented with *Azotobacter* was also found equally effective in increasing the yield, quality and nutrient status of fruit, leaf and soil and the recommendation has been incorporated in the SKUAST-J package of practices for fruit crops.

Technology for postharvest management of peach

❖ The peaches stored in polythene bags of 1006 mm holes per m² improved the quality of fruit. However, intermittent warming coupled with modified atmospheric storage is effective in preventing chilling injury and prolonging storage life of peach cv. Flordasun. This recommendation is incorporated in package of practices for Horticulture Crops 2015 at pp. 107.

Standardization of planting time for phalsa cutting

❖ Phalsa cuttings treated with IBA 300 ppm and planted on 30th July showed highest survival percentage with least time taken for rooting.