

Name : Dr. Sanjay Kumar Singh
Designation : Senior Scientist
ICAR e-mail : sanjay.singh3@icar.gov.in
Alternate e-mail : sanjayhor@rediffmail.com
Mobile No : 9546891510
Field of Specialization : Horticulture (Fruit Sciences)



Name of Institute from where obtained M.Sc. degree:

GBPUA&T, Pantnagar, Uttarakhand

Name of Institute from where obtained Ph.D. degree:

ICAR-Indian Agricultural Research Institute , New Delhi

Joining date in ICAR : 1/7/2008

Publications (Top 10 Publications with first or corresponding author only):

1. Singh, Sanjay Kumar., Singh, Sanjay Kumar and Sharma, Ram Roshan. (2010). Effects of pruning intensity on the biochemical status of shoot buds in three different mango (*Mangifera indica* L.) cultivars planted at high density. *J. Hort. Sci. Biotech.*, 85 (6): 483–490.
2. Singh, Sanjay Kumar, Singh. S.K., Sharma, R.R. and Srivastav, M. (2009). Effect of pruning on morpho-physiological parameters and microclimate under high density planting of mango (*Mangifera indica* L.) *Indian J. Agricultural Sciences*, 79(8):632-635.
3. Singh, Sanjay Kumar, Malhotra, S K., Bhargava, R., Singh, R, S. and Shukla, Anil .Kumar. (2017). Morphological and physiological characterization of guava (*Psidium guajava*) under hot-arid zone of Rajasthan. *Indian J. Agricultural Sciences*. 87(4):491-495.
4. Singh, Sanjay K., Singh, C.P. and Panwar, R. (2009). Response of fertigation and plastic mulch on growth characteristics of young ‘Dashehari’ mango. *Indian J. Hort.*, 66(3):390-392
5. Singh, Sanjay Kr., Singh. S.K., Srivastav, M., Sharma, R.R. and Patel, V.B. (2010). Influence of pruning intensities on leaf nutrient composition in some mango (*Mangifera indica* L.) cultivars planted under high density. *Indian J. Hort.*, 67(1):16-20.
6. Singh, Sanjay Kumar, Pandey, Ankit K., and Singh, Prabhakar (2019). Gaseous exchange, biochemical parameters and yield as affected by application techniques and doses of Paclobutrazol in litchi tree. *Indian J. Hort.* 76(2): 265-272.

7. Singh, Sanjay Kumar, Singh, Awtar, Nath Vishal, Parthasarathy, V A, Sthapit B, Rajan, S and Vinoth, S. (2015). Genetic Diversity in Seedling Populations of Mango. Indian J. Plant Genet. Resour. 28(1): 123-131.
8. Singh, Sanjay Kumar, Nath, Vishal, Rajan, S. and Pandey, S.D. (2019). Surveying mango diversity and its custodian farmers in the states of Bihar and Jharkhand, India. Indian J. Plant Genet. Resour. 32(2):200-206
9. Singh, Sanjay Kumar., Singh. S.K. and Sharma, R.R. (2009)). Endogenous phytohormones after pruning in three mango cultivars planted under high density. Indian J. Plant Physiology, 14(4):392-396.
10. Singh, Sanjay Kumar; Kumari, Pragya; Vyas, S. and Nath, Vishal (2021). Influence of chemicals and girdling on tree physiology and fruiting of litchi. Indian J. Hort. 78(3): 261-267.

Patent / Technologies / Varieties / Methodologies / System etc.:

1. Profile of 12 custodian farmers of mango and pummelo have been documented from Pusa Site, Bihar and 140 custodian farmers of mango have been identified from thirty four districts of Bihar and 8 districts of Jharkhand.
2. Three TKs (Traditional Knowledge) was documented as 'Conservation of pummelo in home stead through Chhat Puja', 'Multi fruits home stead garden' and 'Multi-variety mango orchard'.
3. Light thinning of branches after harvest, application of paclobutrazol through TSLP methods or spray of KNO₃ (2 %) or practicing girdling during September month, manual de-flushing during December month and withheld of irrigation during November to January month led to assured flowering in Litchi cv. China.
4. Low cost bamboo shelter for Japanese quail Farming for Landless Women farmers has been commercialized for two blocks of East Champaran district of Bihar.
5. For litchi, the rectangular system of planting with spacing of 8 m × 4 m under hedge row system is best for the farmers to harvest higher yield of 18-20 tonnes per ha against 8-10 tonnes per ha in normal square system of planting (i.e. 8 × 8 m or 10 × 10 m).

No. of Students Guided (M.Sc.) : 2

No. of Students Guided (Ph.D.) : 2

Awards / Recognitions / Fellowship:

1. JSIL Fellowship Award 2019 by Confederation of Horticulture Association of India (CHAI), New Delhi
2. Overall Young Agricultural Scientist Award 2021 during National Conference on India's Challenge-Contemporary Farming to Smart Farming (8-9th April, 2021)

(Virtual) at University Institute of Agricultural Sciences, Chandigarh University, Gharuan, Mohali (Punjab) 140 413, India

3. Best Poster Award' for paper entitled 'Flushing Pattern and Physiology of Flowering in Litchi' [theme area: Reducing cost of Production] by The Horticultural Society of India , New Delhi during 7th Indian Horticulture Congress-2016, (an International Meet), ICAR-IARI, New Delhi (15th -18th November, 2016)
4. Best Oral Presentation Award for paper entitled 'Environmental regulation and chemical induction of litchi (*Litchi chinensis* Sonn.) flowering' In: Progressive Horticulture Conclave (PHC)-2019 on Futuristic Technologies in Horticulture (8-10th December, 2019), ICAR-Indian Institute of Sugarcane Research, Lucknow, UP
5. Best Oral Presentation Award for paper entitled "The endogenous hormonal status of litchi shoots decide transition from vegetative to reproductive phases" In: National Seminar on "Fruit production in Eastern Tropical Region of India: Challenges and Opportunity" (24-26th March 2022) at CHES, (ICAR-IIHR, Bengaluru) , Bhubaneswar, Odisha.