

Name: Dr. H C Verma
Designation: Scientist (SG)
ICAR e-mail: Harish.Verma@icar.gov.in
Alternate e-mail: vermahc.cish@gmail.com



Field of Specialization: Computer Application, Information Technology and Geo-informatics

Name of Institute from where obtained M.C.A. degree: MNNIT, Allahabad

Name of Institute from where obtained Ph.D. degree: IUL, Lucknow

Joining date in ICAR: 10-12-1999

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

1. **Verma HC**; et al. (2022). Development of LR-PCA based Fusion Approach to Detect the Changes in Mango Fruit Crop by using Landsat 8 OLI images. *IEEE Access*, Vol. 10, pp. 85764-85776, DOI 10.1109/ACCESS.2022.3194000. (NAAS Score: 9.48).
2. **Verma HC**, T. Ahmed and S. Rajan (2022). Comparative evaluation of change detection techniques based on multispectral images for measuring land cover dynamics of mango (*Mangifera indica L.*) in Malihabad, Lucknow (UP). *Journal of Applied Horticulture*, 24(2): 254-260 (NAAS Score: 5.13).
3. **Verma HC** and N. Garg (2021). Mobile Apps: Potential ICT tools to disseminate technologies on value addition of mango, guava and aonla fruits, *Journal of Agrisearch*, 8(1): 67-71 (NAAS Score: 4.71).
4. **Verma HC**, T. Ahmed and S. Rajan (2020). Mapping and Area Estimation of Mango Orchards of Lucknow Region by Applying Knowledge Based Decision Tree to Landsat 8 OLI Satellite Images, *International Journal of Innovative Technology and Exploring Engineering*, 9(3): pp. 3627-3635.
5. **Verma HC**, T. Adak and K. Kumar (2018). An expert system for identification of nutrients deficiency/disorder and their management advisories in Mango (*Mangifera indica, L.*), *Indian Journal of Agricultural Physics*, Vol 18(1):pp74-81 (NAAS Score: 5.10).
6. **Verma, HC**; P K Shukla,; B K Pandey,; AK Misra, (2015). An expert system for mango disease diagnosis and management. *Progressive Horticulture*, Vol. 47(3), p.401-406. (NAAS Score: 3.21).
7. Mishra, A., **H.C. Verma**, and K. Kannan (2012). Improving existing practices of water delivery in a run-of-the-river based canal system for better water use efficiency.

Irrigation and Drainage (ICID). (61(3):330-340, *Wiley InterScience*).
(NAAS Score: 7.42)

8. Mishra, A., **H.C. Verma**, and R. Singh. (2008). Alternative rotational delivery scheduling for better water regime in canal command. *Journal of Irrigation and Drainage Engineering (American Society of Civil Engineers)*, 134(2):175-184. (NAAS Score: 7.98)
9. Srivastava, R.C., **H.C. Verma**, B.K. Nanda , S Mohanty,.(2007). ‘SODEPT’ A software for design of percolation tank. *Water Resources Management. (The Springer)*, 21(11):1955-1972. (NAAS Score: 10.43).
10. Srivastava, R.C.; **H. C. Verma**, S. Mohanty, and S. K Pattnaik (2003). Investment Decision Model for Drip Irrigation System. *Irrigation Science. (The Springer)*, 22: 79-85. (NAAS Score : 9.52)

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

1. **Copyright conferred: 01** (Android app on Bael processed products).
2. **Technology: 01** (Developed a novel Technology ‘LR-PCA fusion based approach for detection of change’ in mango crop area using multispectral satellite images).
3. **Methodologies: 01** (Developed methodology for design of percolation tank).
4. **Systems: 02** (‘SODEPT’ Software for design of percolation tank;

IDEMDIS-Invest Decision Model for Drip Irrigation) and **09** ANDROID APPS on processed fruit products

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

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

Awards / Recognitions / Fellowship:

Best paper awards: **03**