BRIEF BIODATA

Name: Dr. Harish Chandra Verma

Designation: Senior Scientist

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Field of Specialization: AI and Machine Learning, 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: 9.90**).

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: 5.43**).

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**: **4.95**).

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**: **5.02**).

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: 3.34*).

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: 7.90)**

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:** 8**.60)**

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: 10.30**).

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** : **9.0**)

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**