# **Department of Agrometeorology**

# College of Agriculture G.B. Pant University of Agriculture & Technology Pantnagar-263145, Uttarakhand

# **Achievements**

## Faculty Awards / Honours

- > Dr. A. S. Nain received Dr BB Singh Award for Outstanding Research 2014. Prize carries Rs 1 lakh, citation and plaque.
- ➤ Department of Agrometeorology received **Best Department Award-2014**, instituted by BOFA, GBPUA&T, Pantnagar.
- > Dr. A. S. Nain received Young Scientist Award conferred by Society for Plant Research (SPR) has been received for the year 2012.
- > **Dr. A. S. Nain** received **Faculty Excellence Award** has been received on 1<sup>st</sup> January 2013, instituted by BOFA, GBPUA&T, Pantnagar
- ➤ **Dr. A. S. Nain** received **Young Scientist Award** by Association of Agrometeorologists has been received on 21<sup>st</sup> January 2013.
- ➤ Dr. A. S. Nain received Best paper presentation award in the National Seminar on "Agrometeorological Research and Services for combating climate change" at BCKV, Kalyani, West Bengal during 9-10 December, 2011.
- ➤ **Dr. A. S. Nain** received **Best poster award** for the joint publication at National Symposium on "Food Security in Context of Changing Climate" organized by the Society of Agricultural Professionals, Kanpur and CSA University of Agriculture and Technology, Kanpur during 30 October to 01 November 2011.
- ➤ **Dr. A. S. Nain** received **letter of appreciation** from the Organizer of "National workshop on Computational intelligence for Agri-informatics" held during November 22-23, 2013, 2013 for the invited talk on Problem area of Remote Sensing, GIS and Meteorology, where IT solutions are required"
- > **Dr. A. S. Nain** received Appreciation letter from Dr John Elgy, Senior Professor, ASTON University, Birmingham, United Kingdom.
- > **Dr. A. S. Nain** has been humored with responsibility of Associate Editor International Journal of Basic & Applied Research (IJBAAR)
- > **Dr. A. S. Nain** has been humored with responsibility of National Editor International Journal of Agriculture & Forest Meteorology.
- **Dr. A. S. Nain** has been humored with responsibility of Editor Annals of Plants & Soil.
- > **Dr. A. S. Nain** has been humored with responsibility of Editor International Journal of Environment & Agricultural.
- ➤ **Dr. A. S. Nain** has been humored with responsibility of Editor Journal of Advanced Research in Remote Sensing & Geosciences (JARSG)
- > Dr. A. S. Nain elected as Vice- President Association of Agro meteorologist, India.

## Variety released during last 5 years (if any): -

#### **Text Book:**

- "Balanced Fertilizer to sustainable Soil Health, Crop Production and Food Security", Abstracts cum Souvenir Book, Edited by Ramesh Chandra, KP Raverkar, Navneet Pareek, **AS. Nain**, D.K. Singh, K.P. Singh, SB Bharadwaj, Department of Soil Science, GBPUA&T, Pantnagar, 2011.
- "ENVIROMENTAL MANAGEMENT: Meeting the Challenges of Climate Change", Edited by Nanda Nautiyal, Akanksha Rastogi, Bipin Kumar, **Ajeet S Nain**, Vir Singh published by SSDN Publishers and Distributors, New Delhi, 2013.
- Abstracts cum Souvenir Book, on "Geospatial Technology for Natural Resource Management" edited by **A.S. Nain**, Ranjan Srivastava, Sumana Roy, Rajeev Ranjan, Shweta Gautam, Ankita Jha and published by Department of Agrometeorology, GBPUA&T, Pantnagar, 2013.
- Abstracts and Souvenir on "New-Dimensions in Agrometeorology for Sustainable Agriculture" edited by **Ajeet Singh Nain**, Ranjan Srivastava, Sunil Goria, Ankita Jha, Lata Vishnoi, Shweta Gautam, Asha Latwal, Shakuli Kashyap published by Pantnagar Chapter, Association of Agrormeteorologists, India, 2014.
- Abstracts cum Souvenir on "Retrospective and Perspective Analysis of Indian Agriculture: The Roadmap Ahead" edited by Anil K Sharma, Ramesh Chandra, **Ajeet Singh Nain** published by Directorate of Experiment Station, GBPUA&T, Pantnagar, India, 2014.

#### Lab Manual:

- i) Lab manual of Basics of Agrometeorology
- ii) e-lab manual of Application of GIS for Resources Management
- iii) e-lab manual of Applications of Remote Sensing in Agriculture
- iv) e-lab manual of Principles of Remote Sensing
- v) e-lab manual of GIS: Principles and Applications

**Annual Progress Report:** 06

**Technical bulletin: -**

# **Research Papers (number during last 5 years)**

Year	Number of Papers
2010-11	02
2011-12	24
2012-13	03
2013-14	14
2014-15	08

#### **Students awards/achievement**

- ➤ Best thesis Award-2010 was conferred to Mr Rajeev Ranjan by Association of Agrometeorologists, India for the year 2010 for his M.Sc thesis "Crop Discrimination using Remote Sensing and Development of Model for wheat yield forecast" submitted to GBPUA&T, Pantnagar.
- ➤ Best thesis Award-2012 was conferred to Ankita Jha by Association of Agrometeorologists, India for the year 2012 for her M.Sc thesis "Effect of Weather Parameters on Milk Productivity of Cattle" submitted to GBPUA&T, Pantnagar.
- ➤ **Best thesis Award-2014** was conferred to Ms Shraddha Rawat by Association of Agrometeorologists, India for the year 2014 for her M.Sc thesis "Milk Production of Livestock under changing climate" submitted to GBPUA&T, Pantnagar.
- ➤ **B.D. Mistry Best Doctoral Thesis** award conferred to Dr Rajkumar Pal by Association of Agrometeorologists, India for the year 2011 for his thesis "Simulation of wheat crop using CERES-Wheat model and assessment of climate change on Wheat Productivity" submitted to GBPUA&T, Pantnagar.
- ➤ Young Scientists Award-2012 was conferred to Ankita Jha by Uttarakhand Council of Science & Technology (UCOST), Dehradun, Uttarakhand for the year 2012 on the research conducted on Forecasting and Monitoring of Yellow Rust Disease of Wheat using Remote Sensing.
- ➤ Young Scientists Award-2013 was conferred to Rajeev Ranjan by Uttarakhand Council of Science & Technology (UCOST), Dehradun, Uttarakhand for the year 2013 on the research conducted on "Forecasting of yield of Rye using Remote Sensing Technique".
- ➤ Young Scientists Award-2014 was conferred to Lata Bisnoi by Uttarakhand Council of Science & Technology (UCOST), Dehradun, Uttarakhand for the year 2014 on the research conducted on "Estimation of Acreage of different Crops using Remote Sensing".
- ➤ Third Best paper award won by Ms Jaya Dhami in the National Symposium on "Balanced Fertilizer to Sustainable Soil Health, Crop Production and Food Security" held at GBPUA&T, Pantnagar during November 25-26, 2011
- ➤ Best Paper award won by Ms Himani Bisht in the National Seminar on "Agrometeorological Research and Services for combating climate change" at BCKV, Kalyani, West Bengal during 9-10 December, 2011 for her paper "Agroclimatic Zonation of Uttarakhand Using Remote Sensing and GIS".
- ➤ Best Poster award won by Ankita Jha in the National Seminar on "Agrometeorological Research and Services for combating climate change" at BCKV, Kalyani, West Bengal during 9-10 December, 2011 for her paper "Estimation of Wheat Acreage using Remote Sensing".
- ➤ Best paper award won by Ms Jaya Dhami in the National Seminar on "Sustainable Agriculture & Food Security: Challenges of Changing Climate" held at CCSU, Hissar, Haryana during 27 28 March, 2012.
- Asha Latwal received second best poster award in National Seminar on "Climate Change and Indian Agriculture: Slicing Down the Uncertainties" held at CRIDA during 22-23 January, 2013 Hyderabad.
- ➤ Sweta Gautam received first runner-up presentation award (Theme I) in National Workshop on Geospatial Technology for NRM, 21-22 May, 2013, GBPUA&T, Pantnagar
- Lata Vishnoi received second runner-up presentation award (Theme I) in National Workshop on Geospatial Technology for NRM, 21-22 May, 2013, GBPUA&T, Pantnagar
- Asha Latwal received first runner-up presentation award (Theme II) in National Workshop on Geospatial Technology for NRM, 21-22 May, 2013, GBPUA&T, Pantnagar.
- Asha Latwal received first runner-up presentation award (Theme II) in National Workshop on Geospatial Technology for NRM, 21-22 May, 2013, GBPUA&T, Pantnagar.

- ➤ Dr Prabhjeet Singh received best presentation award (Theme III) in National Workshop on Geospatial Technology for NRM, 21-22 May, 2013, GBPUA&T, Pantnagar
- Ankita Jha received best presentation award in two days National workshop on Computational Intelligence for Agri-Informatics under TEQUIP-II, organized by Department of Computer Science, College of Technology, GBPUA&T, Pantnagar.
- ➤ Himani Bisht received second best presentation award in two days National workshop on Computational Intelligence for Agri-Informatics under TEQUIP-II, organized by Department of Computer Science, College of Technology, GBPUA&T, Pantnagar.
- > Sweta Gautam received third best presentation award in two days National workshop on Computational Intelligence for Agri-Informatics under TEQUIP-II, organized by Department of Computer Science, College of Technology, GBPUA&T, Pantnagar.
- Ankita Jha received First runner Award in theme 8 (Pests and Disease Interaction with Environment" in three days International Symposium entitled "New-Dimensions in Agrometeorology for Sustainable Agriculture (NASA-2014), GBPUA&T, Pantnagar, 16-18 October, 2014.
- ➤ Prakash Bhatt received First runner Award in theme 4 (New Tools and Techniques in Geospatial Technology for Agromet Applications" in three days International Symposium entitled "New-Dimensions in Agrometeorology for Sustainable Agriculture (NASA-2014), GBPUA&T, Pantnagar, 16-18 October, 2014.
- Lata Vishnoi received Second runner Award in theme 9 (Meteorological Applications in Horticulture and Agroforestry" in three days International Symposium entitled "New-Dimensions in Agrometeorology for Sustainable Agriculture (NASA-2014), GBPUA&T, Pantnagar, 16-18 October, 2014.
- ➤ Jaya Dhami received Best Poster Award in theme 10 (Role of Meteorology in Disaster Risk Reduction" in three days International Symposium entitled "New-Dimensions in Agrometeorology for Sustainable Agriculture (NASA-2014), GBPUA&T, Pantnagar, 16-18 October, 2014.

### **Significant Contribution (National / state level)**

- i) Development of first web based Soil Information System for Uttarakhand (USIS)
- ii) Evolving innovative approach for yellow-rust monitoring in wheat by integrating Remote Sensing, GIS and Crop Simulation Model
- iii) Development of an innovative Diseases and Pests Management System (DiPMS)
- iv) Development of STCR and crop simulation model based Precision Farming Model
- v) Creation of Agro-climatic and Agro-ecological zones at high spatial resolutions for Uttarakhand state.
- vi) Suitability analysis of fast growing tree species, and horticultural crops.
- vii) Evolving multivariate model for generating weather outlook and drought monitoring for Uttarakhand state.
- viii)Creation of high resolution (1 second) geo-spatial database on different weather parameters.
- ix) Design and fabrication of movable microclimatic station.
- x) Establishment of Center of Excellence in Remote Sensing, GIS and GPS with special focus to agriculture.
- xi) Prepared State level Action Plan on Climate Change (SAPCC) with special focus to Agriculture and Horticulture.
- xii) Created geoinformatics (<u>www.geoinformatics.in</u>) with state of art features. Website is listed among top 10 websites related to geoinformatics by google search engine.