Profile of Scientist

1. Name of the Scientist: Dr Lalan Sharma

2. Personal Biodata:

a) Position/Designation: Scientist

b) Contact Details:

i. ICAR Email ID: ..... @icar.gov.in

ii. Personal Email ID: drsharmanbaim@rediffmail.com

iii. Mobile No.: 8004081721

c) Joining date in:

i. ICAR: 27.04.2010

ii. IISR: 08.02.2016

d) Discipline and Specialization: Plant Pathology

e) Training/advance exposure in the area of work:

1. Attended 21 days ICAR sponsored summer school on "Advances in Molecular Diagnostics of emerging Plant Diseases for Biosecurity " held on during August 1st to 21st, 2014.
2. Attended 21 days International Training programme on "Plant Biosecurity and Incursion Management" at National Institute of Plant Health Management, Hyderabad held on April 8th to 28th, 2014.
3. Attended training programme on "6th practical summer training on chromatography, molecular biology, bioinformatics" at School of Biosciences and Technology, VIT, Vellore, during June 5 to 14, 2013.
4. Attended training programme on "93rd FOCARS (Foundation Courses on Agricultural Research Services)" at National Academy of Agricultural Research and Management, Hyderabad, April 27 to August 24, 2012.
5. Attended national training programme on "Microbial identification and gene mining; A bioinformatics approach" National Bureau of Agriculturally Important Microorganisms, Mau, September 1-10, 2010.
6. Attended national training programme on "Metagenomics; methods and applications in microbiology" National Bureau of Agriculturally Important Microorganisms, Mau, January 11-20, 2011.
7. Attended national training programme on "Bioinformatics and computational biology in microbiological research" National Bureau of Agriculturally Important Microorganisms, Mau, January 29 to February 04, 2011.
8. Attended national training programme on "Microarray technology to unzip up and down regulation gene/s governing seed related attributes" Directorate of Seed Research, Mau, August 5-7, 2010.

f) Contribution to the scientific advancement: I have published 10 research papers (International and National journals), 01 review article, 9 popular articles, 19 proceedings chapters/book chapters, 1 database, 4 technical bulletins and 13 abstracts in international and national conferences/symposia/national seminars. I have also organized 01 workshop for scientific community and 04 training programme and 01 technical programme for farming community. I have also guided B. Sc and M. Sc students of different disciplines for his/her dissertation training programme.

List of research projects (completed and was associated)-

1. **PI** - Isolation characterization of bacterial communities and their metabolites in rice rhizospheric ecosystem – ICAR-NBAIM **Institute project**
2. **PI** - Deciphering plant growth promoting attributes of *Azospirillum* strains and plant growth promotion in rice – ICAR-NBAIM **Institute project**.
3. **Co PI** - National Agricultural Bioinformatics Grid (NABG) – **NAIP funded project**
4. **Co PI** - Equipping farmers with microbial bioconversion technologies for rural livelihood security from low cost products - **RKVY funded project.**
5. **Co PI** - Exploring N_2-fixing cyanobacterial diversity in rice-soil ecosystem: Development of potential cyanobionts for improved crop productivity – Incentivizing Research in agriculture - **ICAR funded project.**
6. **Co PI** - Development of agro-ecological zone specific microbial blue prints for implications in sustainable agriculture – Agro-biodiversity Platform - **ICAR funded project.**

3. Future Planning of research (in bullets):

1. To study diversity and distribution of endophytic beneficial microbial population of sugarcane crop.
2. To manage sugarcane diseases especially smut and red rot diseases of sugarcane by application of beneficial endophytes.
3. To develop suitable techniques and protocol for the management of sugarcane diseases.

4. Publications (best five):

1. Lalan Sharma, D. T. Nagrale, S. K. Singh, K. K. Sharma and A. P. Sinha (2013). A study of fungicides potential and incidence of sheath rot of rice caused by *Sarocladium oryzae* (Sawada). Journal of Applied and Natural Sciences. Vol.-5, No.1, pages 24-29.
2. Lalan Sharma, Sanjay Goswami, and D. T. Nagrale (2013). Culture and physiological variability in *Rhizoctonia solani*, responsible for foliar and lesions on aerial part of soybean. Journal of Applied and Natural Sciences. Vol.-5, No.1, pages 41-46.
3. Lalan Sharma, K. K. Sharma and A. P. Sinha. 2013. Potential application of botanicals, essential oils and natural products against *Sarocladium oryzae*. *Annals of Plant Protection Sciences.* Vol 21(1), page 109-113.
4. K.K. Sharma, U.S. Singh, Pankaj Sharma, Ashish Kumar and Lalan Sharma, 2015 **"**Seed treatments for sustainable agriculture-A review" Journal of Applied and Natural Science 7 (1), 521–539.
5. D. P. Singh, R. Prabha, K.K. Meena, L. Sharma, A.K. Sharma, 2014. Induced Accumulation of Polyphenolics and Flavonoids in Cyanobacteria under Salt Stress Protects Organisms through Enhanced Antioxidant Activity. *American Journal of Plant Sciences* 5 (05), 726-735.

5. Other relevant activities of Scientist: I am also actively participating in number of institute level activities and interacting with scientific communities, research workers and farmers at various platforms/forums/programmes. I am also doing other assignments conferred by competent authority from time to time in institute development programme with my best possible efforts and capacity.