

Dr. V. JHANSI LAKSHMI Email-id: <u>jhansidrr@yahoo.co.in</u> Phone: 040-24591237 (O) 94924-26017 (M)

1. Personal bio-data:

- a) Position/Designation
- b) Joining date in ICAR
- c) Discipline and Specialization

Principal Scientist
12-04-1993, (DOB: 15/07/1962)
Crop Protection and Agricultural Entomology

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

- Participated in the training programme on BT- Technology for Developing Insect Resistant Crops organized by National Research Centre for Plant Biotechnology, IARI, New Delhi from 13-1-1997 to 1-2-97
- Attended the training programme Efficient Experimental Designs For Generation of Agricultural Technologies conducted by Indian Agricultural Statistics Research Institute, New Delhi from 16 -3-2000 to 30-3-2000
- Attended the Refresher course on Information Technology in Agriculture conducted by National Academy of Agricultural Management, Hyderabad. July 31 to August 20, 2002
- Participated in the Training Programme on "Advance course on statistical methods for Agriculture scientists" conducted by Academy of Agricultural Research and Education Management, Haryana Agricultural University, Hisar, Haryana from 1- 12-2004 to 21=12-2004
- Participated in the training Programme on "Chemoreception and behavioral changes in the insects: Olfactometry and electroantennography" conducted by Project Directorate of Biological Control, Bangalore, Karnataka. from 8-12 August 2005
- Attended training Programme on "Scientific Writing and presentation skills" conducted by International Rice Research Institute (IRRI) & Directorate of Rice Research (DRR) from 10 - 15 May 2004

e) Contribution to the scientific advancement :

- Monitored the development of insecticide resistance to neonicotinoids in rice planthoppers viz., BPH and WBPH in Godavari Delta of Andhra Pradesh
- Screened several insecticides, acaricides and botanicals for their safety to important natural enemies of rice planthoppers and identified the safe insecticides
- Screened 1000s of breeding material and germplasm for their resistance to BPH and WBPH and identified some of the important resistant entries and donors and identified mechanisms of resistance in some of the resistant sources identified
- Identified important sources of kairomones and synomones for the host location of mirid bugs which are important egg predators of planthoppers
- Worked on the tritrophic interaction among brown planthopper, its sources of plant resistance and its mirid predators and found that moderate levels of host plant resistance is compatible with biological control
- Studied the incidence of insect pests and natural enemies in organic versus inorganic rice cultivation

2. Future Planning of research:

- Identification of novel BPH and WBPH resistance sources from diverse germplasm and their characterization
- Molecular characterization of BPH and WBPH collected from diverse geographical regions
- Studies on effect of climate change on planthoppers
- Research into development of decision support systems for rice planthoppers
- Tritrophic interactions involving rice planthoppers, their resistant varieties and natural enemies to identify compatibility between resistant sources and biological control
- Studies on insecticide resistance management in rice planthoppers
- Identification of safe insecticides to planthopper natural enemies
- Novel methods of management of planthoppers in rice

3. Publications:

• V. Jhansilakshmi, N.V. Krishnaiah, G. Katti, I.C. Pasalu and K. Vasant Bhanu. 2010. Development of insecticide resistance in rice brown planthopper and whitebacked planthopper in Godavari delta of Andhra Pradesh. Indian Journal of Plant Protection, 38(1):35-40.

- V. Jhansi Lakshmi, I.C Pasalu, K.V. Rao and K. Krishnaiah, 2005. Role of rice hopper honeydew as a kairomone and nutrient to the predatory mirid bugs, Cyrtorhinus lividipennis Reuter and Tytthus parviceps (Reuter) (Hemiptera: Miridae), Journal of Biological Control, 19(2): 93-97.
- V. Jhansi Lakshmi, Pasalu, I.C and Krishnaiah, K. 2006. Role of rice plant and its extracts in attracting Predatory mirid bugs, Cyrtorhinus lividipennis Reuter and Tytthus parviceps (Reuter). Journal of Biological Control (Homoptera:Miridae) **20**(2): 174-181.
- V. Jhansi Lakshmi, Pasalu, I.C and Krishnaiah, K. 2005. Effect of Rice Brown Planthopper Resistant lines on the Predatory Mirid Bug, Cyrtorhinus. Lividipennis. Indian Journal of Plant Protection 33(1): 60-63.
- V. Jhansi Lakshmi, N.V. Krishnaiah and I.C. Pasalu. 2006. Relative safety of selected acaricides to three hemipteran natural enemies of planthoppers in rice ecosystem. Journal of Biological Control **20**(2): 141-146.

4. Other relevant activities of Scientist:

Acting as a member in various Institute committees.

- Acting as a resource person in training programmes organized by DRR and other outside organizations.
- Acting as a member of Advisory committee for M.Sc (Ag) and Ph.D students of Entomology discipline of ANGRAU and Zoology Department of Osmania University
- Involved in the consultancy and contract service with the insecticide and seed companies
- Assisting in Co-ordination of Entomology AICRIP trials.