

SCIENTIST PROFILE



1. Name & Designation : Dr. (Mrs.) Mayabini Jena
Principal Scientist
2. Date of Birth : 5th June, 1956
3. Date of joining ICAR : 31st January, 1985
4. Date of joining the present post : 31st January, 2006
5. Qualification (highest degree) : Ph.D
6. Post Doctoral Research Experience/Training: Nil
7. Area of Specialization/research interest : Agricultural Entomology
8. Significant Contribution including products and patents (Five bullets):
 - Chemical control methods are worked out for brown planthopper, *Nilaparvata lugens* Stal.(BPH), yellow stem borer, *Scirpophaga incertulus* Walker(YSB), leaf folder, *Cnaphalocrocis medinalis* Guenee, rice cutworm, *Mythimna venelba* Moore, rice hispid, *Dicladispa armigera* Oliver and rice gundhibug, *Leptocorisa oratorius* Fabricius in relation to field application as well as to the basic work of persistent toxicity and immediate knock-down effect.
 - Worked out the actual dose and method of use of neem and neem products specifically avoiding phytotoxicity caused by it.
 - Identified new botanicals for insect pest management in rice through different ITKs and validated them through on-station research as well as application in farmers' field. Extensive effort was made to popularize them as bio-intensive IPM package in tribal areas which is readily adapted by the tribal farmers (Santals) and in difficult rice ecology of rainfed lowland in Odisha through NATP and DST projects.
 - Location or ecology specific IPM packages were developed with proper monitoring of pest incidence and introducing Low cost control strategies such as seedling root dip with new insecticides or application of available botanicals and validated for irrigated, shallow rainfed low land ecology and for tribal farmers.
 - More than ten donors and 13 breeding lines in the background of two donors, CR.AC.35181 and 35184 have been identified against BPH as highly resistant out of which 4 donors are in the process of registration and 6 breeding lines are already reported to have high level of resistance against BPH,each consecutively for 2 years of testing in AICRP , DRR, Hyderabad.(Annual Progress Report, DRR, 2006,2010 and 2012)
9. Awards/Honours:
 - CRRI Best Worker Award (Principal Scientist Category) – 2012.
 - Best Poster Paper Award: Jena Mayabini, 2004. Indigenous technical knowledge (ITK): an eco-friendly insect pest management tool in rice-rice cropping system. Proc. Nat. Sym. On "Recent advances in rice-based farming system held at CRRI, Cuttack, 17-19 November, 2004. p62.
 - Best Poster paper award: Prakash, A, Rath, PC, Rao J, Dani RC, Padhi G, Sasmal S, Behera KS and Jena M, 2003. Insect pests of shallow rainfed lowland rice in eastern India and their management. Procd. National symposium on Frontier Areas of Entomological Research, IARI, New Delhi, 5-7 Nov. 2003, p4-5.
10. Publications (10 best):
 - i. **Jena M** and Behera KS (2008). Effectiveness of wild sugarcane (*Saccharum spontaneum*) against rice case worm (*Nymphula depunctalis*). **Indian Journal of Agricultural Sciences** 78(3): 272-274.

- ii. **Jena M**, Sahu RK and Marandi BC (2006). Screening of rice varieties for resistance against brown plant hopper (*Nilaparvata lugens* Stal.). **Oryza** 43(4): 334-335.
- iii. **Jena M**, Dani RC and Nayak SK (2006). Role of adjuvants in the efficacy of insecticides against insect pests of rice. **Oryza** 43(3): 224-227.
- iv. **Jena M** (2005). Integrated pest management with botanical pesticides in rice with emphasis on neem products. **Oryza** 42(2): 124-128.
- v. **Jena M** (2004). Efficacy of new insecticides as seedling root dip treatment against yellow stem borer in *rabi* rice. **Indian Journal of Plant Protection** 32(2): 37-39.
- vi. **Jena M** (2001). Chemical control of yellow stem borer, *Scirpophaga incertulas* Walker in *rabi* rice. **Indian Journal of Plant Protection** 29(1&2): 43-46.
- vii. **Jena M**, Dani RC and Rajamani S (2000). Efficacy of new insecticides against rice brown planthopper, *Nilaparvata lugens* Stal. **Oryza** 37(3): 262-264.
- viii. **Jena M** (2000). Efficacy of the plant, *Polygonum hydropiper* against rice brown planthopper, *Nilaparvata lugens* Stal. **Current Science** 78(8): 953-954.
- ix. **Jena M** (1997). Efficacy of some neem products against rice leaf folder, *Cnaphalocrocis medinalis* Guenee. **Indian Journal of Plant Protection** 25(2): 160-161.
- x. **Jena M** and Sahoo K (1995). Effect of insecticides on the rate of oviposition and larval hatching of yellow stem borer, *Scirpophaga incertulas* (Wlk.) in rice. **Indian Journal of Plant Protection** 23(2): 198-200.