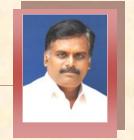
#### Dr. M. SRINIVAS PRASAD

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#### 1. Personal bio-data:

a) Position/Designation : Principal Scientist

b) Joining date in ICAR : 20<sup>th</sup> Feb, 1995, (DOB: 05/10/1965)

c) Discipline and specialization: Plant Pathology

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

- 51<sup>st</sup> Foundation course for Agricultural Research Service,20<sup>th</sup> Feb, 1995- 20<sup>th</sup> July, 1995,(150days)',NAARM -Hyderabad
- Work shop on some advanced techniques in Electron microscopy by Regional Sophisticated Instrumentation Centre,21<sup>st</sup> -23<sup>rd</sup> Nov. 1996 (3 days),North Eastern Hill University, Shillong
- Biological control in Plant Disease Management,3<sup>rd</sup> March 1<sup>st</sup> April 1997 (28 days)Centre for Advanced Studies Division of Plant Pathology, IARI- New Delhi,1997
- ICAR Training cum work shop on IPR and Technology Management,29<sup>th</sup> -31<sup>st</sup> May, 2008 (3 days),NAARM, Hyderabad
- work shop on "Status, Strategies and road maps for Agriculture Development in, Andhra Pradesh to work out the strategies for enhancing rice productivity",29<sup>th</sup> Oct, 2009 (1 day),**ANGRAU**, Hyderabad
- Training programme on "Data analysis using SAS", 19<sup>th</sup> -25<sup>th</sup> Jan, 2011 (7days), NAARM, Hyderabad.

#### e) Contribution to the scientific advancement:

• Contributed for the development of four popular rice varieties at ICAR Research Complex for NEH region Barapani. They are **Shah Sarang1** (RCPL 1-87-8, a variety released for rainfed low land in low and mid altitudes of Meghalaya), **Lum Pnah 1** (RCPL 1-87-4 variety released for rainfed low land ecology in mid altitude areas of Meghalaya), **Bhalum1** (RCPL 1-29, variety released for the rainfed up land including jhum lands up to an altitude of 800m msl. Of Meghalaya) **Bhalum 2** (RCPL 1-27, variety released for upland including Jhum lands up to an altitude of 1000m msl Meghalaya)

- Developed the IDM practices for the management of rice blast in NEH region and also worked on the variability of the blast pathogen.
- Identified 423 resistant lines against rice blast out of 5641advanced lines evaluated in AICRIP and INGER trials at DRR and also identified multiple resistant donors.
- The primers for blast resistant genes like RM 224, RM 527, and RM 206 for Pi1, Pi2 and Pikh genes respectively were validated in the introgressed populations of Samba Mahsuri and Swarna
- The blast resistant genes like Pi1, Pi2, Pikh individually and also in combination of Pi1+ Pi2 and Pi1+Pi2+ Pikh were introgressed in elite rice cultivars like Swarna and Samba Mahsuri through MAS. The Population is in the advanced stage of BC2F5and F9. The introgressed lines not only possessed high level of resistance against blast but also agronmically superior to the respective recurrent parents.

### 2. Future Planning of research:

- Pathological and molecular characterization of rice blast pathogen collected from diverse geographical regions
- Identification of novel blast resistance sources from germplasm and their characterization
- Pyramiding of different blast resistance genes in popular rice varieties with an aim to develop durable blast resistant varieties
- Management of the blast disease through IDM.

## 3. Publications:

- Srinivas Prasad, M., Aruna Kanthi, B., Balachandran, S.M., Seshumadhav, M., Madhan Mohan, K. and Viraktamath, B.C., 2009, Molecular mapping of rice blast resistance gene Pi-1(t) in the elite indica variety Samba mahsuri, World Journal of Microbiology and Biotechnology: 25 (10): 1765-1769. (DOI-10-1007/s 1274-009-0074-7)
- M.Srinivas Prasad, M S Madhav, G S Laha, D Ladha lakshmi, D Krishnaveni, M Satendra Kumar, S M Balachandran, R M Sundaram, B Aruna Knthi, K Madhan Mohan, K Ratna Madhavi, V Kumar and B C Viraktamath,2011,"Rice blast disease and its management",DRR technical bulletin no 57/2011 56 pp.
- C.S. Reddy, G.S. Laha, **M.S. Prasad**, D. Krishnaveni, N.P. Castilla b, A. Nelsonc, S. Savarb 2011, Characterizing multiple linkages between individual diseases, crop health syndromes, germplasm deployment, and rice production situations in India, Field Crops Rsearch120: (2)241-253.
- Ramkumar G, Srinivasa Rao K, MadanMohan K, Sundaram I, Sivaranjani AKP, Gopalakrishna K, Neeraja CN, Balachandran SM, Sundaram, RM, Prasad MS, Sobharani N, Rama Prasad AM, Viraktamath BC and MAdhav,2011,Development and validation of functional marker targeting an InDel in the major rice blast disease resistance gene Pi54 (Pikh),Molecular Breeding 27:129-135
- V.Channamallikarjuna, H. Sonah, M. Prasad, G. J. N. Rao, S. Chand, H. C. Upreti, N. K. Singh, T. R. Sharma, 2010, Identification of major quantitative trait loci qSBR11-1 for

sheath blight resistance in rice, Mol breeding (2010) **25**:155–166, DOI10.1007/s11032-009-9316-5)

# 4. Other relevant activities of Scientist:

- Involved in All Indian Coordinated Plant Pathology trials and Production Oriented survey (POS), monitoring of Plant Pathology trials at various centers in India, analysis of data and preparation of reports.
- Member of different committees constituted by DRR
- Resource person in different training programs conducted at DRR.