

Dr. G. S. LAHA

Email id: lahags@yahoo.co.in

Phone: 040-24591(O) 94907-83401(M)



1. Personal bio-data:

- a) **Position/Designation** : **Principal Scientist**
b) **Joining date in ICAR** : **3rd June, 1993, (DOB: 02/07/1966)**
c) **Discipline and specialization** : **Plant Pathology (Plant Bacteriology)**
d) **Training/advance exposure in the area of work:**

- Improving Personality Profile and Human Communication in Organizations, 1-5 August, 2006, NAARM, Rajendranagar, Hyderabad, AP.
- Sanitary and Phytosanitary (SPS) measures and rice analysis to promote agricultural trade in India, 27-30 July, 2009.
- Acharya N. G. Ranga Agricultural University in association with Tuskegee University, Alabama, USA.
- Data Analysis using SAS under NAIP, 13-18 December, 2010, NAARM, Rajendranagar, Hyderabad, AP.

e) Contribution to the scientific advancement :

- A strain of *Pseudomonas fluorescens* (PF-9) and *Bacillus subtilis* (B-44) were found to reduce the intensity of sheath blight both under glass house and field condition. Soil amendment with rice husk ash significantly reduced the intensity of sheath blight of rice
- Fifteen accessions of *Oryza rufipogon* were found to be highly resistant to four different strains of bacterial blight pathogen. Some of the accessions are being used for BB resistance breeding

- Identification of novel bacterial blight resistance gene (Xa33) in *Oryza nivara* accession IRGC105710
- Identification of a novel BB resistance gene (Xa34t) in *Oryza brachyantha* derived lines DSB 6 ((IR 65483-118-25-31-7-1-5-B) and DSB 7 (IR 65483-141-2-4-4-2-5-B)
- Associated with the development of BB resistant rice variety 'Improved Samba Mahsuri' through marker assisted backcross breeding

2. Future Planning of research :

- Pathological and molecular characterization of BB pathogens collected from diverse geographical regions
- Identification of novel BB resistance sources from diverse germplasm and their characterization
- Pyramiding of different BB resistance genes in popular rice varieties with an aim to develop durable BB resistant varieties
- Novel methods of management of bacterial blight of rice

3. Publications :

- Laha GS, Krishnaveni D and Muralidharan K. 2008. Population dynamics of *Xanthomonas oryzae* pv. *oryzae* in rice leaves. *J Mycol Pl Pathol* 38(1):112-115.
- Laha GS, Singh R, Krishnaveni D, Sunder S and Dodan DS. 2008. Evaluation of elite cultures for resistance to bacterial leaf blight of rice. *J Mycol Pl Pathol* 38(2):378-380.
- Ram, T., Laha, G. S., Ram Deen, Ramos, J. M., Vera Cruz, C. M. and Brar, D. S. (2011). *O. rufipogon*, a valuable source for resistance to bacterial blight of rice. *Plant Breeding*. Doi: 10.1111/j.1439-0523.2011.01857.x
- Reddy, C. S., Laha, G. S., Prasad, M. S., Krishnaveni, D., Castilla, N. P., Nelson, A. and Savary, A. S. (2011). Characterizing multiple linkages between individual diseases, crop health syndromes, germplasm deployment, and rice production situations in India. *Field Crops Research* 120 : 241–253
- Laha, G. S., Reddy, C. S., Krishnaveni, D., Sundaram, R. M., Srinivas Prasad, M, Ram, T., Muralidharan, K. and Viraktamath, B. C. (2009). Bacterial blight of rice and its management. Technical Bulletin No.41. Directorate of Rice Research (ICAR), Rajendranagar, Hyderabad-500 030, A.P., India. 37 pp.

4. Other relevant activities of Scientist :

- One of my major activity is to conduct All Indian Coordinated Plant Pathology trials at DRR, monitoring of Plant Pathology trials at various centres in India, analysis of data and preparation of reports and preparation and presentation of reports of Production Oriented Survey (POS).
- Editor, Indian Journal of Plant Protection.
- Member of different committees: Institute biosafety committee, ITMU, Publication committee and others.
- Resource person in different training programs conducted at DRR.