



Environmental sustainability improved by application of Organic product, Plant activator for the management of Rice Sheath Blight disease

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Abstract:

The present studies were undertaken to develop an integrated strategy involving the use of Plant activator Salicylic acid and Organic Product Panchakavya for the successful sustainable management of rice Sheath blight disease. The susceptible Indian variety ADT 36 was used for the study. The experiments were conducted in a randomized block design with three replications for each treatment and a suitable control. A plot size of 5X4 m was maintained for each treatment and the crop was raised with the spacing of 12.5 X 10 cm and all the standard agronomic practices as recommended by the Tamil Nadu State Agricultural Department were followed. The fungicide Hexaconazole 5 SC @ 0.1 per cent was used for comparison. Among the various treatments, the combination treatment consisting of foliar application of Plant activator Salicylic acid @ 75 ppm on 15 days after transplanting and foliar application of Panchakavya @ 5 per cent on 30 days after transplanting reduces the disease incidence of Sheath blight incidence and increased the Biometrics of rice. In field level experiments also, the same results were exploited during Navarai season, 2018. The Host defense enzymes also shown positive response due to the application of Plant activator and Organic Product application. The cost benefit ratio improved the worthiness of the new treatment combination developed in the study. Agricultural wastages/ Cow's products were used for managing the pests and disease of rice and improve the sustainability level in this study.

Biography:

Dr. Jaiganesh, V. is an Assistant Professor (Selection Grade) of Plant Pathology in Faculty of Agriculture, Annamalai University (A-Grade Accredited by NAAC), Tamil Nadu, India. He has over 13 years of teaching ex-



perience and more than 15 years of research experience. He changed the revision of syllabi and curriculum for Under-Graduate and Post-Graduate studies, towards the overall improvement of academic standards in Agricultural faculty. His major research interests include the Integrated Rice Disease Management and role of resistance inducing chemicals for plant disease management. He has published more than 55 research papers in National and International journals. He has been awarded the Best Young Teacher Award and Excellence in Teaching Award for his teaching activities.

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