RESEARCH ARTICLE

SURVEY FOR THE INCIDENCE OF RICE BLAST DISEASE IN DIFFERENT AGRO CLIMATIC ZONE OF CHHATTISGARH

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Received-13.02.2018, Revised-27.02.2018

Abstract: Rice blast disease caused by *Pyriculariaoryzae*Cavara has become the one of major fungal disease covering in major rice growing area and the first time a survey was conductedduring *Kharif* -2016-17in different rice growing districts of Chhattisgarh State, to determine thedisease incidence, occurrence, disease severity and spread of rice blast disease in three agro climatic zone *viz*., Bastar Plateau Zone (Zone-I), Chhattisgarh Plains Zone (Zone-II) and Northern Hills Zone (Zone-III). Theassessment of rice blast was carried out in thirteen major rice growing districts viz., Jagdalpur (Bastar), Dantewada, Narayanpur, Bilaspur, Janjgir-Champa, Kanker, Bemetara, Raipur, Dhamtari, Gariyaband, Balrampur, Surajpurand Surguja from August last week to October 2016 and September first week to October 2017. Among the thirteen districts, percent disease index was varied from 20 to 87.78%. The highest percent disease index (PDI) was recorded (87.78%) in Jagdalpur(Bastar)district with Swarna cultivar which is followed by Surguja (85.56%) and Balrampur (84.44%)and lowest PDI was recorded (20%) in Surajpur (Maheshwari) and Bastar (Safari). The more severity of rice blast disease might be due to the highly favorable factors like application of excessive doses of nitrogenous fertilizers, intermittent drizzles, cloudy weather, highy relative humidity (>90%), low night temperature (<26 C), more number of rainy days, longer duration of dew, slow wind movement and availability of collateral hosts. Thus, their serve as basic to evaluate location specific integrated disease management strategy against rice blast disease.

Keywords: Rice blast, Severity, Incidence, Disease

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