

Research Article: KS Bilgrami Best Poster Award 2015 - Commendation**Status of Major Diseases of Jute in Eastern Region of Bihar and Correlation of Weather Parameters with Stem and Root Rot Diseases****Santosh Kumar^{1*}, Md. Nadeem Akhtar², Dayaram³, Mahesh Kumar⁴ and Tribhuwan Kumar⁴**

¹Department of Plant Pathology, Bihar Agricultural University, Sabour, Bhagalpur-813210, Bihar, ²Krishi Vigyan Kendra, Agwanpur, Saharsa, Bihar Agricultural University, Sabour, ³Department of Plant Pathology, Dr. Rajendra Prasad Central Agriculture University, Samastipur, Pusa, Bihar, ⁴Department of Molecular Biology and Genetic Engineering (Biotechnology), Bihar Agricultural University, Sabour, Bihar. * E-mail: santosh35433@gmail.com

Abstract

Survey of major diseases of jute from three tehsils of both districts *i.e.* Katihar (Katihar, Hasanganj & Korha) and Purnea (Kasba, Dhamdaha & Bhawanipur) conducted during 2013 revealed the occurrence and spread of diseases like stem and root rot, anthracnose and mosaic. Among all diseases, maximum incidence of stem and root followed by anthracnose and mosaic was recorded. Maximum incidence of stem and root rot was observed in Katihar tehsil, which was 13.4 per cent and minimum incidence *i.e.* only 7.46 per cent in the Bhawanipur tehsil of Purnea district. Stem and root rot, incited by *Macrophomina phaseolina* caused heavy reduction in fibre yield. Study on the influence of weather parameters, on stem and root rot disease development indicated that high temperature (31.95^o C), 80 per cent relative humidity coupled with humid thermal ratio of 3.4 favoured the outbreak and development of stem and root rot. A disease forecasting model has also been developed on the basis of studied weather parameters and disease development pattern.

Key words: Humid thermal ratio, stem and root rot, survey, weather parameters

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