

Two New severe leaf spot diseases on forest trees of Seoni Forest (MP)**S. A. Firdousi* and V.M Kamle¹**¹DR.AG.Bendale Mahila College
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Received : 08.10.2019; **Accepted** : 04.11.2019**ABSTRACT**

During the survey of the forest fungal disease, of Seoni district,(M.P), two severe leaf spot diseases on *Chroloxylonswietenia* and of *Adina cordifolia* were observed in Seoni, forest Seoni(M.P) during July to September.2017-18. The casual organism was identified as *Psuedocercosporachloroxyliae* and *Mycovellosiellaadinae* Firdousi respectively which were identified with the help of literature and confirmed by the experts. This is first report from Seoni and Madhya Pradesh..

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KEY WORDS : Forest trees, Leaf spot disease

Introduction

The forest of Seoni is a tropical dry deciduous type forest. The vegetation varies with changes in altitudes, topography and rainfall. There are various sub types of forest in this area. The Seoni district is located in the southern part of Madhya Pradesh. The district extends over an area of 8758 km. It is bordered by Jabalpur. Narsingpur and Mandla districts to north , Balaghat to east and Chhindwara to the west and the boundary with Nagpur. It has about 37% forest cover. National highway-44 to Kanyakumari passes through the district. The north part of Seoni consists of a large trap hills and the crystalline roack.

The Fungi play important role in various disease and responsible for great loss. Many diseases are like leaf spot, leaf blight, leaf rust, shot hole and marginal infection. They cause yearly leaf fall. Most of The fungi are follicolous fungi belonging to *Cercospora* allied complex and coelomycetes. There are many parasitic fungi causing various types of foliage diseases. In the forest of this area are small to large trees found commonly in the mixed deciduous forest and used in the various ways. Its wood is used for agriculture and domestic implements. A severe leaf spot disease was found in the forest of Seoni. The causal organism was

identified as *Psuedocercosporachloroxyliae* and *Mycovellosiellaadinae*⁵.

It is a small to medium sized deciduous tree growing commonly in the forest. The plant has straight to crooked trunk and produces sucker in forest and regenerates. The tree is famous for hard wood which is used in cart and building material. It is also used for agriculture implements. The leaves are used for fodder.

Material and Method

A frequent, extensive and intensive survey was made to collect the phytopathogenic fungi infecting the leaves in the different forest sites of Seoni forest. The symptomology and other informations such as place of the collection, locality, local name of the plants their families, date of collection were noted in the field diary. The samples were kept in the polythene bags and carried to the laboratories for identification. The pathogens were identified with the help of various monographs, reviews, books and research papers^{2,3}.

Result and Discussion

Leaf spot of *Chroloxylonswietenia* is caused by *Psuedocercosporachloroxyliae*

The infection first appears as a small necrotic spot

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on the lower surface of the leaf in August and spot coalesce gradually. Spots are mostly irregular and colonies are hypophyllous.

Infection spot amphigenous, small to large brown, mostly with limited colonies, hypophyllous, punctiform, mycelium immersed, narrow, septate and branched, stoma well developed, partly erumpent, pseudoparenchymatous, mid olivaceous, 20-80 µm. conidiophore caespitose, densely packed, sporodochia, macronematous, short to stumpy, erect to sub erect straight to flexuous, mostly, septate, unbranched, smooth walled light olivaceous, cylindrical straight, light olivaceous, 3-60x2-8 µm. conidigenous, intergraded, terminal monoblastic, cylindrical, conidia, simple solitary, dry, acrogenous, light olivaceous, cylindrical, straight to curve, smooth walled, 15-88x2-6 µm. septate, acute, base truncate, hila unthickened. This is first record of leaf spot disease not only from Seoni but Madhya Pradesh.

Leaf spot of *Adinacordifoliarox*. Caused by *Mycovellosiella adinae* Firdousi.

Adina cordifolia is a large deciduous tree with a large crown belonging to family Rubiaceae. The tree is used for fuel and timber. The trees are found generally scattered in the forest. A highly severe leaf spot disease was found on this host and causal organism was identified as *Mycovellosiella adinae*⁶.

Symptoms

Infection spots are amphigenous. They are light brown to dull brown, small to large covering the whole leaf area. Colonies are hypophyllous. These spots appear in the month of October and remain up to February. Hyphae of the causal organism partly immersed and partly superficial. Narrow septate, stroma erumpent, conidiophore caespitose in loose fascicles, conidigenous cells intergraded. Terminal, conidia simple solitary to catenate light olivaceous, cylindrical. To fusiform, dry smooth walled 1-7 septate,

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