

RESEARCH NOTES

(I)

A NEW SPECIES OF *MYCOSPHAERELLA* ON *POPULUS DELTOIDES* FROM INDIA

Poplars are subjected to attack by a number of foliage pathogens at various stages of growth. *Populus deltoides* raised at Forest Research Institute, Dehra Dun nursery was found attacked by *Phyllosticta adjuncta*, cause of serious leaf spot. During the course of study, perithecia were also observed appearing on the necrotic spots. The pathogen was studied and identified as *Mycosphaerella* sp. This is the first record of *Mycosphaerella* on Poplar from India (Bilgrami *et al.*, 1991).

The conidial stage of *Mycosphaerella* generally appears during the pathogenic position of their developmental cycle and at that time both the stages appears together. Hitherto, the ascigerous state of *P. adjuncta* has not been described. The species of *Mycosphaerella* appears to be the ascigerous state of *P. adjuncta* and is described here as a new species - *Mycosphaerella populina*. The symptoms and the pathogen are described here.

***Mycosphaerella populina* sp. nov.**

Leaf spot small, circular to irregular, dark brown, with greyish white centre, amphigenous, scattered, latter coalesce to form bigger spots. Black dot like perithecia

scattered on greyish centre of spot (Fig. 4).

Ascotomata innate, dark brown to black, subglobose, 72x46 µm (Figs. 1 and 2). Asci hyaline, cylindrical to clavate, paraphysate, 8 spored, 26-42.75 x 5.7-11.4 µm (Figs. 3 and 5). Ascospores hyaline, elliptical, two celled, one cell slightly large with constriction at the septum, 11.4-17 x 4.2-5.7 µm (Fig. 6).

On living leaves of *Populus deltoides*, Dehra Dun (India) Path. Herb. No. 8647.

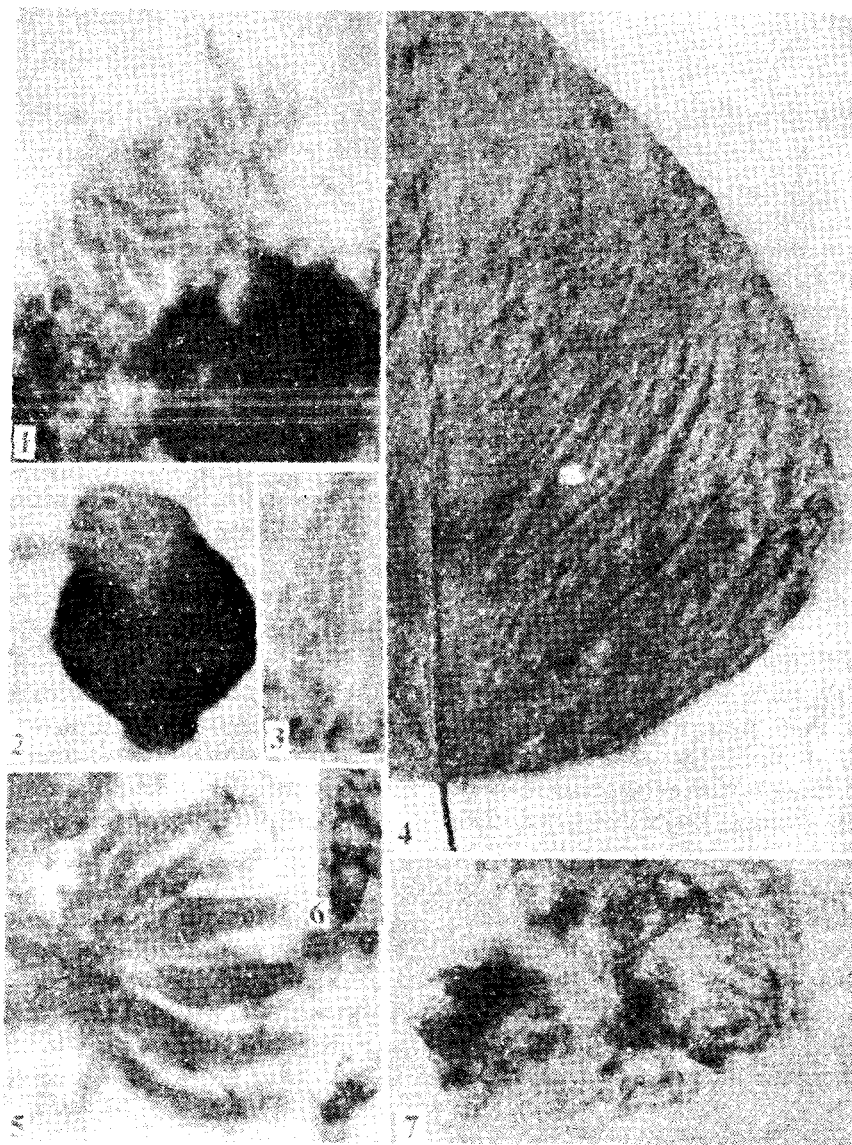
Foliorum maculae mynuta, circulares vel irregulares amphigenae, disperse, brunnei maculae griseo albae in centro coalescentes in maculas ampliores. Altra puncti similia, perithecia dispers, tortum griseo centro maculas (Fig. 4).

Ascotomata innata, fusce brunneae vel nigre, sub globularia, 72x46 µm (Fig. 1,2). Asci hyaline cylindrici vel clavate, paraphysati, octospori, 26-42.75 x 5.7-11.4 µm (Fig. 3, 5). Ascospores hyaline, elliptical, bicellutae, biseriater, constrictae ad septum, 11.4-17 x 4.2-5.7 µm (Fig. 6).

Typus lectus in foliis viventibus *Populus deltoides*, Dehra Dun (India). Path. Herb. No. 8647.

Reference

- Bilgrami, K.S., Jamaluddin and M.A. Rizvi (1991). *Fungi of India. List and references*, Rev. Edn., Today and Tomorrows Printers & Publishers. New Delhi. pp. 798.

Figs. 1-7

Figs. 1 and 2 - *Ascostomata* (x250). Figs. 3 and 5 - *Ascus* (x400). Fig. 4 - Spot on leaf.
Fig. 6 - *Ascospore* (x1000). Fig. 7 - *Phyllosticta* - *Pycnidia* and *Ascostomata* (x250).

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