Mycoflora of Muzaffarpur (India)-II.

By Nalini Goel, A. K. Mishra & Dr. Thakur, K. S. Singh
Dept. of Bot. L. S. College, Bihar University, Muzaffarpur, India

With 1 Fig. in the text.

In the course of his mycological survey for new fungi in this State of Bihar, the author made many collections of fungi during 1960—1962, some of which were found to be either new records for science or for the state. This paper deals with two new reports for the state which incite leaf-spot diseases in their respective hosts.

1. *Ormathodium fici* Tims & Olive on the leaves of *Ficus barbata.*

The infected leaves show characteristic concentric rings of disease tissue. There is an outer etiolated ring gradually followed by light grey and white rings. The center of the spot may fall off giving the shot-hole effect. The infected spot vary from 0.5—4.0 mm in diameter. In case of severe infection the spots show coalesing tendency and a large area of the foliage is destroyed.

Etiology: Conidiophores and conidia are confined to the lower surface of the leaf and produced in such abundance as to give the appearance of a mildew. Conidia measuring 16.8—22.4 μ, hyaline, 3—5 septate, smooth, elipsoidal or slightly curved with rounded ends. Conidiophores much branched, jointed, hyaline, geniculate with terminal or lateral conidia.

Though in certain respects it resembles *Cercospora,* it cannot be considered so due to the morphology of the conidiophore and conidia. The systematic position of this fungus is still uncertain and for the present it is put under Moniliales and Moniliaceae because of its close resemblences to *Cercospora.*

The material is deposited with Commonwealth Mycological Institute, Kew under IMI. 85167.

2. *Entyloma fuscum* Schroet on the leaves of *Papaver rhoeas* L.

The pathogen causes an unsightly spotting of the leaves. These soral spots are circular, first yellowish green to dark green and then brown as the leaf matures. Sometimes they merge resulting in a considerable loss of foliage. Each sorus is 2—8 mm in diameter with abundent white hyphal outgrouths on the ventral surface. The smut spores are formed as chlamydospores in the hyphae in the leaf tissues. They are globose-subglobose, yellow-yellowish brown in colour, with

10—16 μ diameter. Sometimes, these primary spores germinate in leaves and sent hyphal projections on the surface which bear sickle-shaped sporidia giving a white powdery appearence. These are supposed to be the means of further infection in the current season.

The genus *Entyloma* has a very wide range of hosts. It is reported from *Ranunculus, Menispermum, Agoseris, Dahlia* and *Calendula.* From Bihar state it was reported on *Fumaria* and this is the first account on *Papaver.*

From the available descriptions of the various species of *Entyloma,* the long or narrow sickle-shaped conidia or sporidia are the most commonly met with on the host plant. But there are some cases where sporidia are not formed. Certain taxonomists like Clinton and Plowrite have seggregated the species of *Entyloma* into two groups

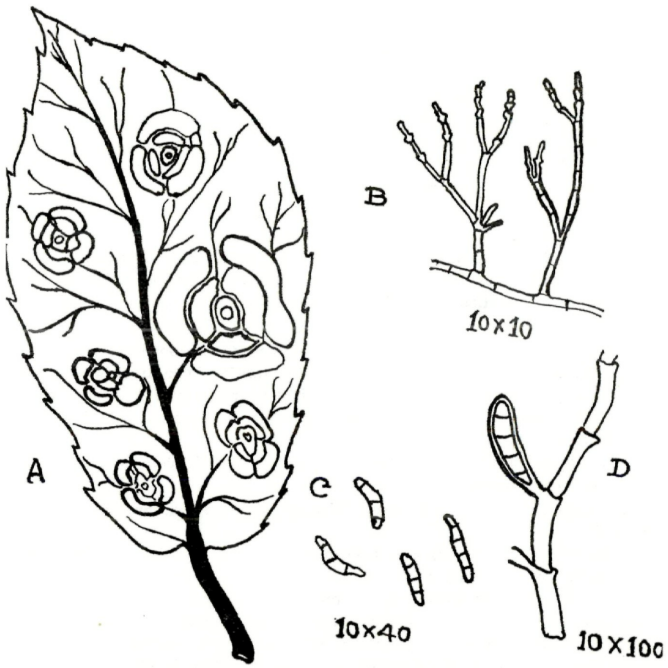

Fig. 1. *Ormathodium fici* Tims & Olive.

on the basis of presence or absence of sporidia. But now it is known that the presence or absence of either type of conidia may depend upon the age of the host and time of collection.

The material was deposited with the CMI, Kew, under No. IMI 92750.

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