A NEW SPECIES OF PESTALOTIA ON THE LEAVES OF PHOENIX RUPICOLA ANDER.

In August 1967 the leaflets of Phoenix rupicola growing in various gardens of Allahabad started turning pearl gray. The infection started from the tip portion and proceeded towards the base (Fig. 1). Within few days it spread to a major portion of the lamina and assumed pallid mouse gray or pale olive gray colour. Diseased part was clearly separated from the healthy region by a prominent hair brown or fuscous brown narrow band. Longitudinal tearing of the diseased leaflets started from the tip portion after the infection covered nearly half of the leaflet. Finally the infected portion dried up and occasionally it got separated from the healthy part. Isolations from the diseased regions consistently resulted in a species of Pestalotia.

Detailed morphological studies carried out on the present species of Pestalotia revealed it to be distinct from other known species of the genus. Agarwal et al. (1959) reported P. palmarum occurring on Phoenix sylvestris at Jabalpur. The morphological characters of the present species differed from the above species also and thus it is being designated as Pestalotia phenicicola sp. nov.

MORPHOLOGICAL CHARACTERS OF THE FUNGUS

Pestalotia Phenicicola sp. nov.—Acervuli scattered, subepidermal, small, black, subglobose or lenticular, 80-2-128-5 μ (Fig. 2); conidia clavate-fusiform, 5-celled, generally erect, slightly constricted at septa, 20-4-24-6 × 6-2-8-2 μ; 3 intermediate cells yellow brown, 2 exterior cells hyaline or dilute yellow (Fig. 3), apical cell conic bearing 3 rarely 2 or 4 setulae (Fig. 4); setulae unbranched.

FIGS. 1-4. Fig. 1. Photograph of diseased leaf. Fig. 2. Microphotograph of section of an acervulus, × 625. Fig. 3. Microphotograph of conidia, × 400. Fig. 4. Microphotograph of a conidium showing setulae, × 625.
(very rarely branched), 8·2–22·4 μ; basal cell tapering into a pedicel, up to 5·2 μ long.

Hyphae hyaline, branched, 2·1–4·2 μ in diameter.

Latin Translation

Pestalotia phœniccola sp. nov.—Acervuli dispersi, subepidermales, nigri, subglobosi vel lenticulares; 80·2–128·5 μ; conidia clavato-fusiformia, vulgo erecta, 5-cellularia, paulum ad septa constricta, 20·4–24·6 × 6·2–8·2 μ; cellulae intermediae luteo-brunnea, quorum duae, exteriores hyalinae vel dilute luteae; cellula apicalis conica, ornata 3, rarius 2 vel 4, setulis simplicibus (rarius ramosis), 8·2–22·4 μ; cellula basalis fastigata in pedicellum, ad 5·2 μ longit. Hyphae hyalinae, ramosae, 2·1–4·2 μ diam.

Parasitice insidet follis Phœnix rupicola in Alfred Park, ad Allahabad, mense August 1967, leg S.C. Typus positus in CMI ad Hortum Kewensem subnumero IMI 110651.

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