

## Follicolous Fungi of West Bengal

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Four species of *Pestalotia* : *P. gracilis* Kleb., *P. stictica* Berk. & Curt., *P. zonata* Ellis & Everh., *P. curta* Sacc., were collected from West Bengal and described. They are reported for the first time from India.

**Key words :** *Pestalotia* spp., West Bengal.

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Four species of the genus *Pestalotia* are described and illustrated below.

*Pestalotia gracilis* Kleb.

Myc. Centralbl. 4 : 10-11, 1914 ; Syll. Fung. 25 : 609, 1931, Guba, (1961)  
Monograph of *Monochaltia* & *Pestalotia* pp-179, Harvard University  
Press Cambridge.

( Fig. 1 )

Infection follicolous, the whole leaf becomes greyish brown with acervuli ; acervuli irregularly scattered, punctiform, amphigenous, sub-epidermal, erumpent at maturity rupturing the epidermis in irregular manner, 90-170  $\mu\text{m}$  in diameter ; conidia-5-celled, straight, a few are curved, elliptic-fusiform, slightly constricted at the septa, 17-24x6-8  $\mu\text{m}$  intermediate coloured cells versicoloured, upper two umber, the lowest olivaceous, 10.25-13.6  $\mu\text{m}$  long, apical cell hyaline, conic-cylindric bearing a crest of 2-3 setulae, rarely 4, basal cell hyaline conic with a pedicel ; pedicel hyaline, simple 3-6  $\mu\text{m}$  long ; setulae hyaline, simple, divergent, 17-24  $\mu\text{m}$  long.

Materials studied : on *Phoenix sylvestris* Roxb., Tamluk, Midnapore, West Bengal, MCC No. 86 Leg. H. S. Mahapatra, August 14, 1989 ; *Bridelia retusa* Spreng.,

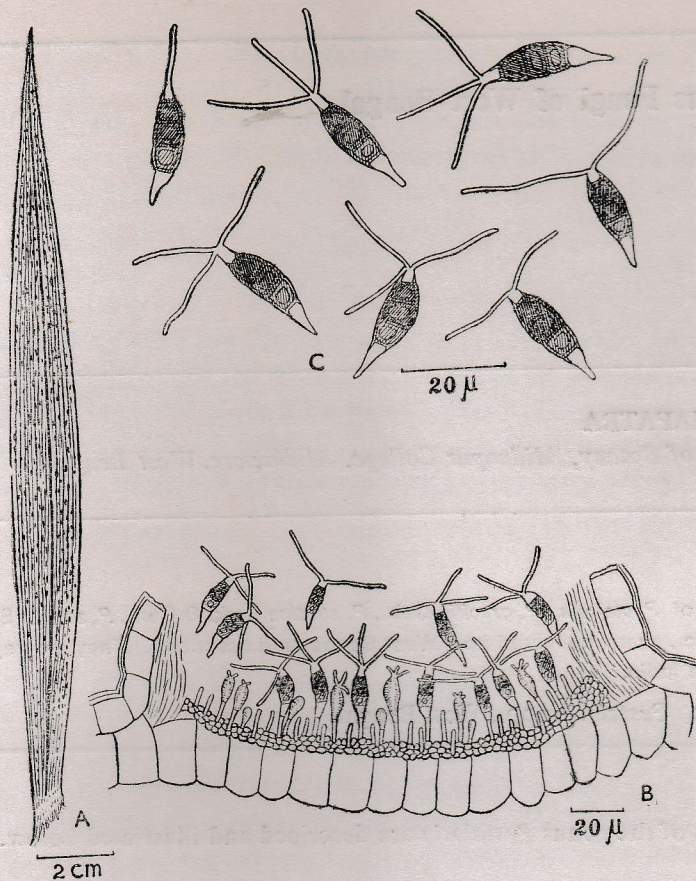


Fig. 1. *P. gracilis* A. Infected leaf : B. Vertical section of acervulus ;  
C. Conidia.

Rohini, Midnapore, West Bengal, MCC No.94 Leg H.S. Mahapatra, November 18, 1989.

*Pestalotia stictica* Berk. & Curt.

Curtis, Geol. & Nat. Hist. Survey, North Carolina Pt. III ( Bot ), p. 118, nom. nud. Grevillea 2 : 155, 1874 ; Syll. Fung. 3 : 793, 1885. Guba, ( 1961 ), Monograph of *Monochaetia* & *Pestalotia*, pp-208 Harvard University Press, Cambridge.

( Fig. 2 )

Incidence in the rainy season, infection follicolous, inciting brownish spot with a reddish border line and with acervuli; acervuli-numerous, punctiform, amphigenous, more on lower surface, scattered, sub-epidermal, erumpent at maturity rupturing the epidermis, 60-150  $\mu$ m in diameter; conidia 5-celled, blackish,

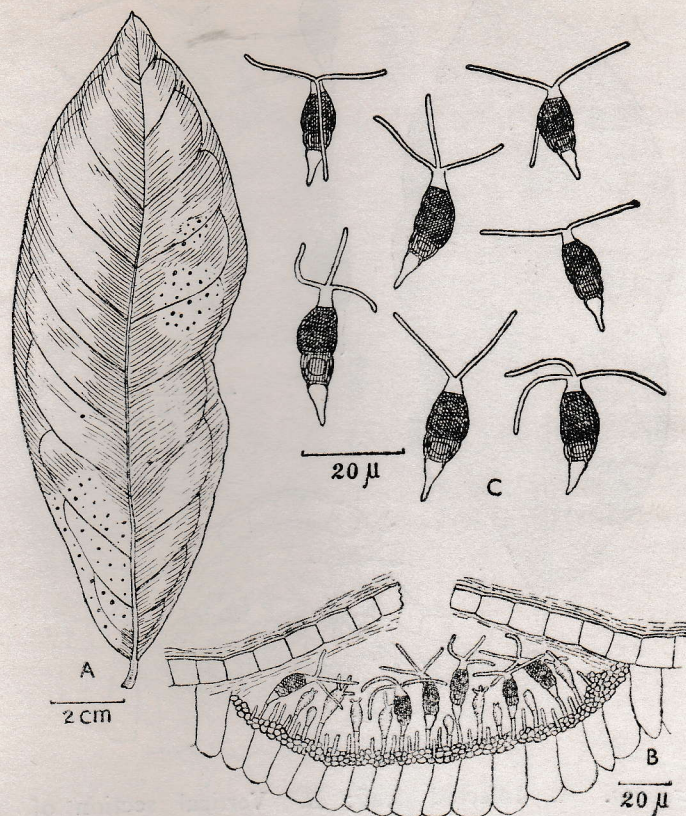


Fig. 2. *P. stictica* A. Infected leaf; B. Vertical section of acervulus; C. Conidia.

elliptic-fusiform, unequalateral in a few cases,  $17.05-24 \times 6.5-8.5 \mu\text{m}$ , intermediate coloured cells versicoloured, upper two fuliginous, lowest olivaceous, constricted at septa dividing the lowest coloured cell from the other two, apical cell long conic-cylindric with a crest of 3 setulae, in a few cases 2; basal cell hyaline, conic; pedicel simple, hyaline upto  $6 \mu\text{m}$  in length; setulae simple, hyaline, divergent,  $12-23 \mu\text{m}$  long.

Material studied: On *Ixora* sp. Sankrail, Howrah, West Bengal, MCC No. 84 Leg H. S. Mahapatra, August 2, 1989.

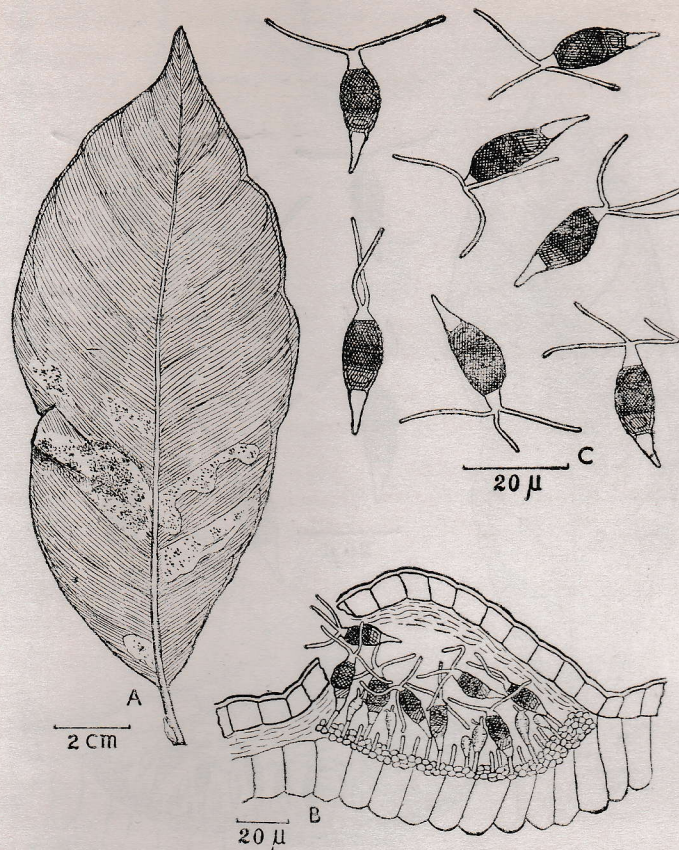


Fig. 3. *P. zonata*. A. Infected leaf; B. Vertical section of acervulus; C. Conidia.

*Pestalotia zonata* Ell. & Ev.

Proc. Acad. Nat. Sci. Phila. 374, 1894; Syll. Fung. 11: 578, 1895. Guba (1961). Monograph of *Monochaetia* & *Pestalotia* pp-215, Harvard University Press, Cambridge.

( Fig. 3 )

Infection follicolous inciting irregular, reddish brown spot with acervuli; acervuli blackish, punctiform, scattered, globose to sub-globose, sub-epidermal, erumpent at maturity rupturing the epidermis, sooty at maturity from the discharged contents, 90-160  $\mu$ m in diameter; conidia 5-celled, elliptic-fusiform, to clavate-fusiform, rarely constricted at septa, sometimes unequilateral, 17-24 x 6.5-9.5  $\mu$ m intermediate coloured cells versicoloured, upper two deep umber or fuliginous, the lowest coloured cell olivaceous, 13-17  $\mu$ m long, apical cell hyaline, short conic-cylindric, bearing a crest of 3 setulae sometimes 2 or 4, basal cell hyaline, conic, pedicel hyaline, simple 3-6  $\mu$ m long; setulae hyaline, simple divergent, 10-20  $\mu$ m.

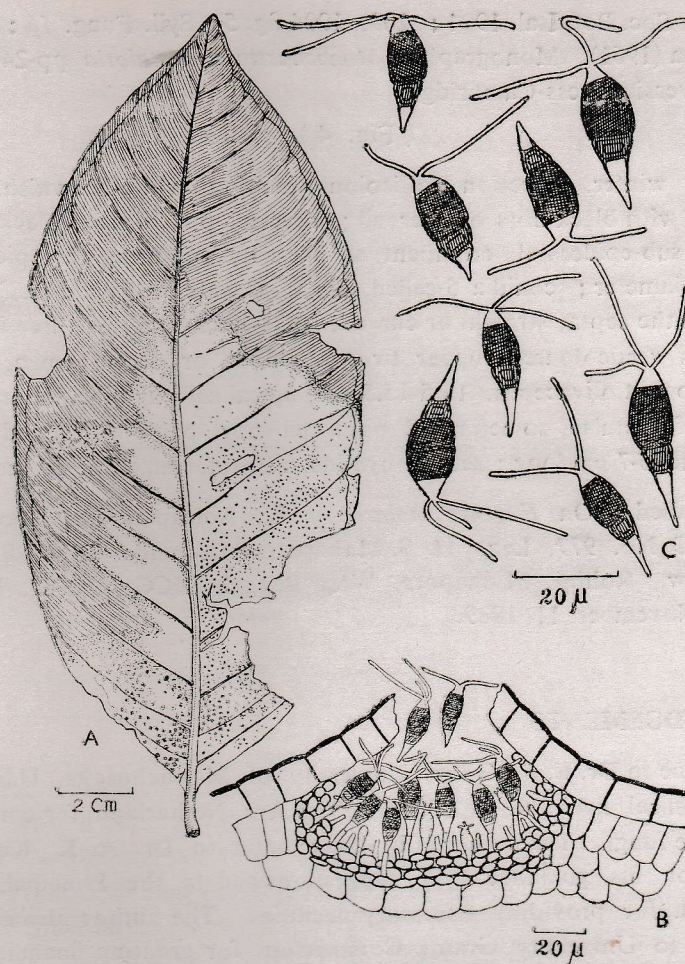


Fig. 4. *P. curta*. A. Infected leaf; B. Vertical section of acervulus; C. Conidia.

Materials studied : On *Baaaia latifolia* Roxb., Rohini, Midnapore, West Bengal, MCC No. 79, Leg. H. S. Mahapatra, November, 11, 1989 ; *Combretum decandrum* Roxb., Rohini, Midnapore, West Bengal, MCC No. 82 Leg. H. S. Mahapatra, November 11, 1989 ; *Eucalyptus globosus* Labil, Rohini, Midnapore, West Bengal, MCC No. 85, Leg. H. S. Mahapatra, November 11, 1989.

*Pestalotia curla* Sacc.

Bull. Soc. Bot. Ital. 1904 : 209, 1904 fig. 5 ; Syll. Fung. 18 : 480, 1960, Guba (1961). Monograph of *Monochaetia* & *Pestalotia* pp-240 ; Harvard University Press-Cambridge.

( Fig. 4 )

Incidence in winter, infection follicolous inciting white-brownish, necrotic, irregular spot with black dots of acervuli ; acervuli punctiform, black, scattered, epiphyllous, sub-epidermal, erumpent at maturity rupturing the epidermis, 100-200  $\mu\text{m}$  in diameter ; conidia 5-celled, black, clavate or clavate-fusiform, rarely constricted at the septa, straight or curved, 20-24 x 8.5-10.5  $\mu\text{m}$ , three intermediate coloured cells versicoloured, upper two fuliginous or deep brown, sometimes opaque, the lowest olivaceous, 13.5-15.5  $\mu\text{m}$ , apical cell hyaline, short, cylindrical with a crest of 3 setulae, sometimes 2, basal cell short, conic with a pedicel ; pedicel simple, hyaline, 5-7  $\mu\text{m}$  long ; setulae hyaline, filiform, simple, 17-30  $\mu\text{m}$ .

Materials studied : On *Eugenia malaccense* L., Adisaptagram, Hooghly, West Bengal, MCC No. 977, Leg. H. S. Mahapatra, December 15, 1989 ; *Alangium lamareckii* Thw. Rohini, Midnapore, West Bengal, MCC No. 89, Leg. H. S. Mahapatra, November, 11, 1989.

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