

Some new and noteworthy Fungi from India — VI

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During recent investigations of ascomyceteous fungi from western Maharashtra, the author has come across with a number of dead and decayed branches and stems of *Meyna* sp, *Prosopis juliflora* DC, *Bauhinia variegata* L and *Anona squamosa* L being infected with some black fungi. On critical examination, these fungi were found to be new to science on the basis of comparative morphology and host specificity besides being described hitherto on unreported hosts.

I. *Dothiora meynae* spec. nov.

Stroma solitary or gregarious, dark brown to black, innate to widely erumpent through the bark, surrounded by vertically bent, more or less lobate edges of peridermis on lateral sides 1000—1500 μ long and 500—800 μ broad. The cells of stroma are quite thick walled and angular towards the periphery while moderately thin walled, smaller and isodiametric in the central portion. Asci oblong to cylindrical, thick-walled, bitunicate, stipitate, rounded at the apex, parallel, densely clustered in one or a few locules of indefinite shape in the stroma 80—140 \times 14—20 μ , situated on the thin walled hyaline tissue of isodiametric cells. Ascospores fusoid, muriform, 34—40 \times 6—9 μ , 6—7 transverse septa, 1 or 2 incomplete longitudinal septa through one or two or few of the thickest cells, distinctly constricted in the middle, thickest slightly above the middle septum, hyaline.

Stromata solitaria vel gregaria, obscure brunnea vel nigrescentia, innata, plus minusve erumpentia, 1000—1500 μ longa, 500—800 μ lata, contextu pseudoparenchymatico, extus e cellulis angulosis, crassiuscule tunicatis, intus isodiametricis, minoribus et tenuiter tunicatis composito; asci parallele et dense ordinati, cylindraceuti, antice rotundati, postice in stipitem brevem attenuati, crassiuscule tunicati, in contextu paraphysoides fibroso-celluloso hyalino evoluti 80—140 \times 14—20; sporae oblongo-fusoideae vel oblongo-clavatae, rectae, utrinque rotundatae et plus minusve attenuatae, septis 1—2 incompletis longitudinalibus et 6—7 transversis praeditae, medio distincte, ceterum non vel lenissime constrictae hyalinae, 34—40 \times 6—9 μ .

Found on dead branches of *Meyna* sp, August, 1969, Kannad and deposited in the herbarium of M. S. G. Collage, Malegaon under number (M. S. G. 101).

2. *Sydowia prosopidis* spec. nov.

Perithecia spherical, superficial or slightly embedded in the substratum, black, glabrous, 300—450 μ diam. The wall many celled in thickness, hard and tough parenchymatous cells. The wall is thicker at the apical portion or above than the basal portion or on lateral sides. At the bottom and the apex of inner side, there is a column of

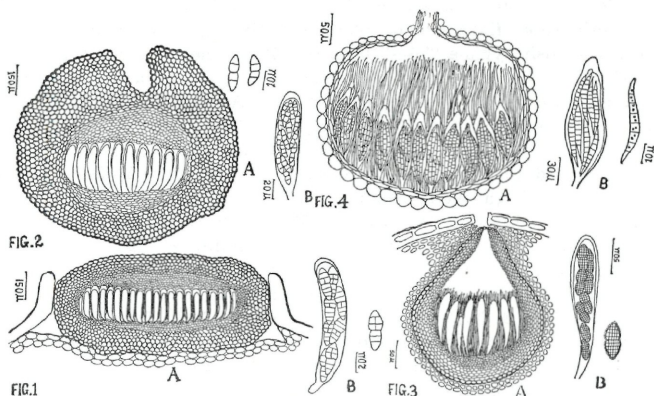


Fig. 1. *Dothiora meynae* spec. nov. — Fig. 2. *Sydowia prosopidis* spec. nov. — Fig. 3. *Pleomassaria bauhiniae* spec. nov. — Fig. 4. *Ophionectria anonae* spec. nov. — A: Section trough the ascocarp., B: Ascus and ascospore.

thin walled, light brown, small parenchymatous cells. Asci arise from the basal column. Asci clavate, short, stipitate, thick walled, bitunicate, parallel or somewhat diverging, rounded at the apex, interascicular is composed of paraphyses which later on disintegrate, 100—120 \times 25—29 μ . Ascospores fusoid to clavate, 2—4 celled, more constricted in the middle, the upper lobe is more broader than the lower one, thickest above the middle septum, 12—22 \times 9—12 μ .

Perithecia superficialia vel basi tantum parum innata, nigra, glabra, globosa, 300—450 μ diam.; pariete carbonaceo, pseudoparenchymatico, superne crassiore, e cellulis irregulariter angulosis obscure brumeis, crassiuscule tunicatis, intus paulatim minoribus, tenuiter tunicatis, pallide brunneolis composito; asci cylindraco-clavati, antice

late rotundati, postice in stipitem brevem abruptiuscule attenuatit, crassiuscule tunicati, parallele positi, polyspori, $100-120 \times 25-29 \mu$. spora di-vel incomplete tristichae, fusioideae vel fusioideo-clavatae, utrinque plus minusve attenuatae, 3-5-septatae, medio plus minusve, ceterum non vel vix constrictae, hyalinae, $12-22 \times 9-12 \mu$; paraphysoides fibroso-cellulosae, mox mucosae.

Found on dead branches of *Prosopis juliflora* DC., August, 1969, Kannad and deposited in the herbarium of M. S. G. College, Malegaon under number (M. S. G. 102).

3. *Pleomassaria bauhiniae* spec. nov.

Perithecia solitary, scattered or more or less gregarious beneath the peridermis, flattened, ostiolate, slightly papillate, black, covered with brownish hyphae $270-310 \times 250-270 \mu$. The wall few layered in which the outer cells are thick walled, dark greyish brown and inner cells are thin walled and lighter in colour. Asci cylindrical to clavate, short stipitate, 8 spored, bitunicate, $150-200 \times 20-30 \mu$, thickwalled, bitunicate, paraphysate, paraphyses filiform, longer than asci. Ascospores fusoid to clavate, with rounded conical ends, 5-8 longitudinal and 10-15 transverse septa, constricted at all of them, muriform, golden brown, biseriate, $45-60 \times 14-19 \mu$, with hyaline mucous sheath.

Perithecia solitaria, dispersa vel plus minusve gregaria, subepidermalia, subglobosa vel late ovoidea, superne abruptiuscule in ostiolum papilliformem punctiformiter erumpentem sed vix prominulum contracta, extus hyphis brunneolis abtecta, $270-310 \times 250-270 \mu$; pariete crassiusculo, pluristratoso, contextu pseudoparenchymatico, e cellulis extus griseo-brunneis, crassiuscule, intus tenuiter tunicatis et pallide coloratis composito; asci cylindraceo-clavati, antice late rotundati, postice in stipitem brevem attenuati, crassiuscule tunicati, 8-spori, $150-200 \times 20-20 \mu$; spora incomplete distichae, fusioideo-oblongae, utrinque abruptiuscule attenuatae, obtusae, septis 5-8 longiorum vix constrictae, aureo-brumeae, $45-60 \times 14-19 \mu$, muco hyalino obvolutae; paraphyses filiformes, ascos supersantes.

Found on dead branches of *Bauhinia variegata* L., Dhulia, July 1969, and deposited in the herbarium of M. S. G. College, Malegaon under number (M. S. G. 103).

4. *Ophionectria anona* spec. nov.

Perithecia solitary, scattered on the surface of the host, subspheric, dull ochraceous yellow in the beginning but later on becomes dark brown at maturity, innate erumpent, ostiolate, with subcylindric papilla, ostiole periphysate; perithecia measuring $275-400 \times 250-350 \mu$. The wall is soft and brittle, upto 35μ thick in the bottom and sides but much more towards subapical cushion, the outer cells are thick

walled dark cells while the inner ones are thin walled globose; papilla consists of vertical, parallel and subhyaline hyphae. Asci subcylindric or somewhat ventricose, rounded at the apex, parallel, spread all over the inner surface, 8 spored, bitunicate, stipitate, paraphysate, filiform, much longer than asci, $81-115 \times 10-15 \mu$. Ascospores subfusiform, elliptical, straight or curved to wavy, elongate, hyaline or very slightly yellowish, biseriata, transversely septate, septa 7-13, measuring $45-55 \times 4-7 \mu$, with small scattered oil drops in each cell.

Perithecia solitaria, innata, plus minusve erumpentia subglobosa, in inventute obscure ochraceo-luteae, in maturitate obscure brunneae, ostiolo periphysato, brevissime cylindraco, verticaliter et parallele fibroso praedita, $275-400 \times 250-350 \mu$; paricte molli, ad basin et ad latera 35μ crasso, apicem versus distincte crassiore, contextu pseudo-parenchymatico, e cellulis exterioribus crasse tunicatis, obscure coloratis, interioribus tennuitir tunicatis composito; asci crassiuscule fusoido-clavati, antice rotundati, postice in stipitem brevem attenuati, crasse tunicati, 8-spori, $81-115 \times 10-15 \mu$; sporae polystichae, anguste fusoidae, utrinque paulatim attenuatae et subacuminatae, 7-13 septatae ad septa non constrictae, plerumque leniter sigmoideo curvulae, raro rectae, hyalinae vel pallide luteae, locullis omnibus guttulis 1-2 minutis praeditis, $45-55 \times 4-7 \mu$; paraphyses numerosae, filiformes, ascos multo superantes.

Found on dead stems and branches of *Anona squamosa* L., Chandreshwari, Sept. 1969, and deposited in the herbarium of M. S. G. College, Malegaon under number (M. S. G. 104).

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R e f e r e n c e s

- Ainsworth, G. C., 1961: Dictionary of the Fungi.
 Clements, E. F. & C. L. Shear, 1931: Genera of Fungi.
 Dennis, R. W. G., 1968: British Ascomycetes.
 Munk, A., 1967: Danish Pyrenomyces.
 Petch, T., 1921: Studies in entomogenous fungi Trans. Brit. Mycol. Soc. 7: 89-167.
 Saccardo, P. A., 1888: Sylloge Fungorum.

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