

Some new and noteworthy Fungi from India — VII

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During recent mycological investigations of ascomyceteous fungi from western Maharashtra, the author has come across with dried and dead branches of *Caryota urens* L., *Clematis gouriana* Roxb., *Celastrus paniculata* Willd. and *Helicteres isora* L. infected with some black fungus. On detailed examination, these were found to be new to science on the basis of comparative morphology and host specificity besides being reported hitherto on unreported hosts. The same are presented as follow (1) *Coniochaeta caryotae* spec. nov. on dead stems of *Caryota urens* L. (2) *Cryptosphaeria clematidis* spec. nov. on dead stems of *Clematis gouriana* Roxb. (3) *Chaetosphaeria helicteridis* spec. nov. on dry and dead stems of *Helicteres isora* L., and *Sillia celastrina* spec. nov. on dead stems of *Celastrus paniculata* Willd.

1. *Coniochaeta caryotae* spec. nov.

Perithecia scattered, singly or gregarious, usually growing in clusters or rows forming black crusts on the substratum, superficial or somewhat immersed, black or darkbrown, spherical to conical or bottle shaped, broader at the base and tapering towards the apex measuring from 275—425 \times 250—350 μ , ostiolate, obtusely conical or papillate, surface provided with short black tapering pointed hairs. Asci cylindrical or slightly thicker in the middle, attenuated, round to truncate, almost without distinct apical ring, unitunicate, 8-spored, paraphysate, stipitate, measuring 90—110 \times 8—10 μ ; paraphyses filiform, numerous, longer than asci, arising from the base of the perithecium. Ascospores one celled, ellipsoid or fusiform, brown to dark, uniseriate, often situated oblique to transversely in the ascus with a distinct germ slit, with gelatinous covering 20—26 \times 7—10 μ .

Perithecia superficialia vel parum innata, dispersa, singularia vel gregaria, tunc in matricis superficie saepe fere crustas nigrescentes formantia, nigra vel obscure brunnea, globosa, ostiolo obtuse conoideo papilliformi praedita, setis brevibus, nigris, acuminatis subdense oblecta, 275—425 \times 250—350 μ ; asci clavato-cylindranei, antice rotundati, postice in stipitem brevem attenuati, tenuiter tunicati, 8-sporei, 90—110 \times 8—10 μ ; sporae oblique monostichae, ellipsoideae, rectae, utrinque

rotundatae et leniter sed distincte attenuatae, brunneae vel obscure brunneae, germinationis fissura longitudinali, distincta praeditae, $20-26 \times 7-10 \mu$; paraphyses numerosae, filiformes, ascos superantes.

Type species collected on dead stems ad rachis of leaves of *Caryota urens* L., June 1969, Galna, Leg. Ramchandra Rao and deposited in the herbarium of M. S. G. College under number (M. S. G. 105).

2. *Cryptosphaeria clematidis* spec. nov.

Stroma: Widely effuse distinct, with a faint greyish dorsal zone just beneath the lifted peridermis, ventral zone in the bark forming opaque black crust. Perithecia: Scattered, prominent, flask shaped, black, embedded in the bark, separately erumpent, penetrating the peridermis and slightly projecting, measuring $550-690 \times 500-600 \mu$. Asci long, stipitate of various shapes, cylindrical to clavate, unitunicate, 8-spored, $30-60 \times 4-8 \mu$, paraphysate; paraphyses filiform, hyaline to very light brown. Ascospores cylindrical to oblong, curved or allantoid, light yellowish, biseriatae, $60-10 \times 1.5-2 \mu$.

Stroma late effusum, cortici innatum, crustaceum, nigrum; perithecia dispersa, imata, nigrescentia, globosa, vix vel parum depressa, ostiolo conoideo punctiformiter erumpente et parum prominulo praedita, $550-690 \times 500-600 \mu$; asci numerosi, cylindraco-clavati, antice rotundati, postice in stipitem brevem attenuati, tenuiter tunicati, 8-sporei, $30-60 \times 4-8 \mu$; sporae plus minusve distichae, cylindraceae, utrinque obtusae, vix vel lenissime attenuatae, allantoidaeae, pallide luteolae, $6-10 \times 1.5-2 \mu$; paraphyses numerosae, filiformes, ascos vix vel parum superantes.

Type species collected on dead stems of *Clematis gouriana* Roxb., Aug. 1969. Leg. Ramchandra Rao, and deposited in the herbarium of M. S. G. College under number (M. S. G. 106).

Chaetosphaeria helicteridis spec. nov.

Pseudothecia solitary or often in small clusters, black, globose with a small papilla, partly immersed in the substratum, $350-475 \times 325-450 \mu$. It consists of black hyphal tomentum; hairs measure about $150-300 \mu$ long and $5-6 \mu$ thick, pointed or slightly rounded at the top, dark brown or black, covering the lower part of the pseudothecia. The wall consists of outer thick walled black or dark brown carbonaceous cells while the inner ones are thin and light coloured. Asci cylindrical to clavate, short, stipitate, bitunicate, $80-120 \times 15-20 \mu$, uniseriate in the beginning and later on become irregularly biseriatae after maturity. Sometimes spores are only six or seven or less than 8. Mostly ascospores are placed obliquely. Ascospores are cylindrical to fusoid, rounded or somewhat attenuated at the end, variable in size, 4 celled, the middle cell oblong, brown with 1-2 oil drops while the end cells are small, hyaline or almost so $15-25 \times 6-9 \mu$.

Perithecia solitaria vel plerumque greges minutos formantia, matrici parum innata, nigra, globosa, ostiolo papilliformi praedita, 350—475 × 325—450 μ, ad basin setis rectiusculis, 150—300 μ longis, 5—6 μ crassis, septatis, antice obtusis vel subacuminatis, obscure brunneis vel nigrescentibus oblecta, pariete pseudoparenchymatico, e cellulis exterioribus obscure brunneis, crassiuscule tunicatis, interioribus pallide coloratis et tenuiter tunicatis composito; asci cylindracei vel cylindraceo-clavati, antice rotundati, postice in stipitem brevem attenuati, crasse tunicati, 6—8-sporei, 80—120 × 15—20 μ; sporaе oblique monostichae, fusoideae, rectae, obtusiusculae et plus minusve attenuatae,

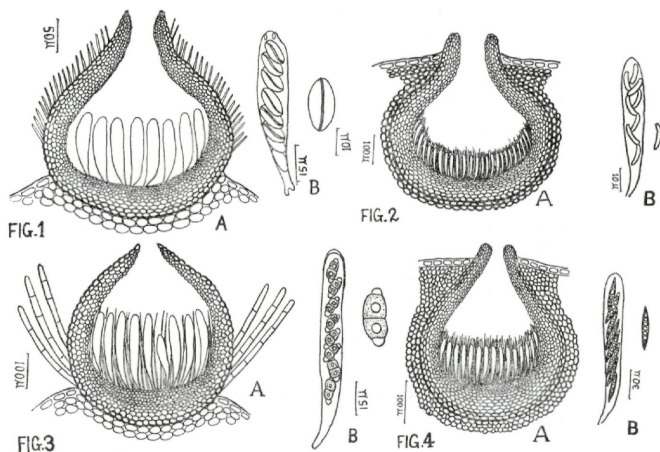


Fig. 1: *Coniochaeta caryotae* spec. nov. — Fig. 2: *Cryptosphaeria clematidis* spec. nov. — Fig. 3: *Chaetosphaeria helicteridis* spec. nov. — Fig. 4: *Sillia cellastrina* spec. nov. — A: Section through the ascocarp. B: Ascus and ascospore.

3-septatae, ad septa plus minusve constrictae, 15—25 × 6—9, loculis mediis majusculis, brunneis, guttulis oleosis 1—2 pranditis, loculis extremis multo minoribus, fere papilliformibus, hyalinis vel subhyalinis.

Type species collected on dead and dry stems of *Helicteres isora* L. Kannad, Aug. 1968, Leg. Ramchandra Rao and deposited in the herbarium of M. S. G. College under number (M. S. 107).

***Sillia cellastrina* spec. nov.**

Stroma: 2—3 mm long and broad, strongly projecting, breaking the peridermis with the whole surface, black and irregularly pulvinate on the surface. Perithecia: numerous, densely scattered in the middle

or basal part of the stroma, occasionally near the surface, completely embedded, flask shaped, ostiolate, beaked, strongly projecting, measuring $400-550 \times 300-450 \mu$. The wall of the perithecium is made up of the outer thick, sometimes strongly flattened, olive-brown cells while the inner ones are thin walled, $80-100 \mu$ wide, almost or totally filled with paraphyses. Ascus oblong or cylindrical, shortly stipitate, rounded at the top, 8-spored, $110-170 \times 10-15 \mu$, paraphysate, paraphyses long, filiform but soon disintegrate. Asci also get detached soon from the basal region of attachment. Ascospores fusoid, tapering towards the ends, narrowly rounded, slightly creved, hyaline, transversely septate, 5-9-septa, not constricted at septa, $36-40 \times 5-7 \mu$.

Stromata 2-3 mm diam., innata, irregulariter pulvinata, tota superficie peridermium disrumpentia; perithecia numerosa nunc in media parte vel prope basin, nunc sub stromatis superficie evoluta, ovoidea, ostiolis papilliformibus punctiformiter erumpentia, $400-550 \times 300-400 \mu$; pariete pseudoparenchymatico, e cellulis exterioribus olivaceis, crassiuscule, interioribus tenuiter tunicatis composito, $80-100 \mu$ crasso; asci numerosi, cylindracei vel clavato-cylindracei, antice rotundati, postice in stipitem brevem attenuati, 8-sporei, $110-170 \times 10-15 \mu$; sporee anguste fusoidae, utrinque paulatim attenuatae et acuminatae, rectae vel leniter curvulae, hyalinae, 5-9-septatae, ad septa non constrictae, $36-40 \times 5-7 \mu$; paraphyses numerosae, filiformes.

Type species collected on dead stems of *Celastrus paniculata* Willd., Laling, Sept. 1969, Leg. Ramchandra Rao and deposited in the herbarium of M. S. G. College under number (M. S. G. 108).

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