

Contribution to our Knowledge of Ascomycetes of India-XIX

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(With five figures)

In the earlier papers (1960—67) 65 ascomycetes have described from India. The present paper constitutes XIX in series, in which *Tubeufia* Penz & Sacc. on *Acacia catechu* W. & A., *Myriangium* Mont. & Berk. on *Grewia tiliaefolia* Vahl., *Allosoma* Syd. on *Menyesa laxiflora* Robyns., *Peltosphaeria* Berl. on *Capparis spinosa* L. and *Pleomassaria* Speg. on *Anona squamosa* L., have been described, of which *Tubeufia* Penz. & Sacc., *Allosoma* Syd., *Peltosphaeria* Berl. and *Pleomassaria* Speg. constitute new generic records for India.

66. *Tubeufia acaciae* sp. nov.

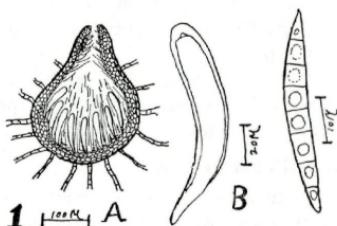


Fig. 1. *Tubeufia acaciae* sp. nov. — A. Vertical section of the perithecium. — B. Ascus and ascospores

Perithecia superficialia, singulalia vel greges minutos formantia, primum violacea vel rubra, postea nigrescentia, non collabascentia, setosa, globosa vel piriformia, ostiolata, $300-375 \times 225-255 \mu$, ostiolo minuto papilliformi, periphysato praedita; asci clavati vel cylindracei, stipitati, crasse tunicati 8-spori $95-144 \times 17-21 \mu$, paraphysati; sporae fusoideae, utrinque paulatim attenuatae et subacuminatae, rectae, inaequilaterae vel curvulae hyalinae, transverse 5-7 septatae, $48-56 \times 6-7 \mu$; paraphyses filiformes.

Perithecia bright coloured, violet to red, blackening with age, superficial, singly or in small groups, on the bark, never collapsing, hairy or setose, globose to pear-shaped, ostiolate, ostiole slightly papillate and

periphysate. Perithecia measuring from 300—375 \times 225—255 μ . Ascii clavate to cylindrical, stalked, bitunicate, thick-walled, 8-spored, measuring from 95—144 \times 17—21 μ , paraphysate; paraphyses filiform minute. Ascospores hyaline, cylindrical or worm-like, often curved, transversely septate, septa 5—7, pointed at both ends, irregularly biseriate, measuring from 48—56 \times 6—7 μ .

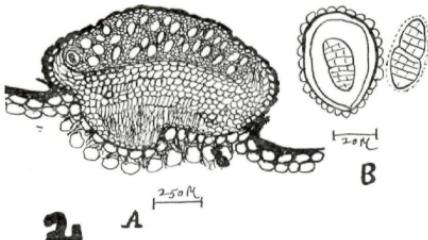


Fig. 2. *Myriangium parasiticum* sp. nov. — A. Vertical section of the fruit body. — B. Locule, ascus and ascospores

Collected on dead bark of *Acacia catechu* W. & A. at Ramling in the month of January 1968. Leg. S. B. Kale and deposited in the herbarium of Botany Department Marathawada University under sub No. MUH 223 (Tilak type).

The genus *Tubeufia* was originally established by Penzig & Saccardo (1897) with *T. javanica* as the type species. Besides being a new species the genus constitutes a new generic record for India.

67. *Myriangium parasiticum* sp. nov.

Stromata innata, mox erumpentia, postea quasi superficialia, pulvinata, superne appanata vel leniter concava, extus nigra, intus albida, loculis numerosis, irregulariter vel indistincte 2—4-stichis praedita, 750—1125 \times 1125—1500 μ ; loculi minuti, ovoidei vel ellipsoidei, interdum fere globosi, monasci, singulatim in parte stromatis superiore distributi; asci subglobosi vel late ellipsoidei, sessiles, crasse tunicati, 8-spori, 30—45 \times 34—42 μ ; sporae late ellipsoideae, hyalinæ, transverse 8—10-longitudinaliter 6—8-septatae, medio plus minusve constrictæ, utrinque obtusæ, antice vix vel parum, postice saepe distincte attenuatae, 30—38 \times 11—15 μ , muco tenui obvolutæ.

Stroma innate-erumpent, or superficial, parasitic on the bark, cushion-shaped or with a basal cushion bearing crowded, obconical, tubercles with flat or concave tops which contain the fertile tissue, externally black, internally whitish, measuring from 750—1125 \times 1125—1500 μ across, with basal foot — like attachment. Locules small, globular, monascos, irregularly distributed in the

fertile layer, separated by the stromatic tissue. Ascii globoid, small, 8-spored, distributed irregularly, sessile, bitunicate, measuring from $30-45 \times 34-42 \mu$, separated by the stromatic tissue. Ascospores hyaline, muriform, often forming parenchymatous — like structure, with 6—8 longitudinal and 8—10 transverse septa, measuring from $30-38 \times 11-15 \mu$, constricted in the middle, one end slightly tapering, with thin mucous sheath, broadly ellipsoid.

Collected on the living stem of *Grewia tiliaefolia* Vahl. at Ramaling in the month of January 1968. Leg. S. B. K.ale and deposited in the herbarium of Botany Department, Marathawada University, under sub No. MUH 224 (Tilak type).

The genus *Myriangium* was originally erected by Montague & Berkeley (1945) with *M. duriaeae* as type species. The genus, however, remained unrepresented in the Indian flora until Rehm (1908) firstly reported *M. cinchonae* on the bark of *Cinchona regia* from India. *Myriangium duriaeae* Mont. & Berk. has been reported by Sydow & Butler (1911), Petch (1917) as saprophyte on dead branches, while Chonna & Munjal (1950) reported it on insect scales. It may be mentioned that all earlier species reported are typically saprophytes, while the present species is distinct by its parasitic habit. With the addition of this species the number of species from India is now two.

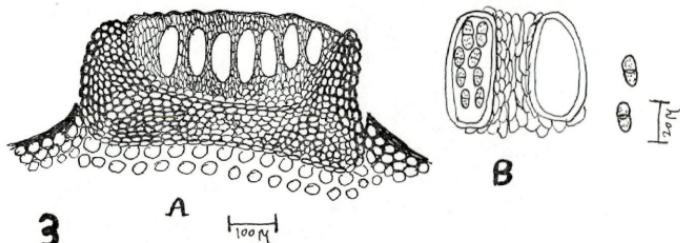


Fig. 3. *Allosoma indica* sp. nov. — A. Vertical section of fruit body. — B. Locule, ascus and ascospores

68. *Allosoma indica* sp. nov.

Stroma extus nigrum, intus obscure brunneum, pulvinatum, innatoerumpens, in superficie asperulum, centrum versus minutissime papillatum, contextu pseudoparenchymatico, $225-300 \times 600-750$; parte stromatis inferiore cupuliformi, sterili, parte superiore fertili, loculis numerosis, regulariter monostichae ordinatis praedita; ascii ellipsoidei vel subovoidei, crasse tunicati, sessiles, 8-spori, $49-61 \times 15-19 \mu$; sporae distichae, ellipsoideae, utrinque late rotundatae, vix vel parum attenuatae, tunc subfusoideae, medio septatae et constrictae, brunneae, $17-17 \times 6-10 \mu$.

Stroma externally black, internally dark brown, cushion-shaped, innae-erumpent, surface rough, with papillae-like outgrowth in the central region, surrounded by wall, measuring from $225-300 \times 600-750 \mu$, differentiated into lower cup-like sterile region which also encircles the fertile region by growing upright, fertile region above the sterile region, and includes the monascous locules; locules many, distributed regularly, in a single hymenium-like layer, separated by the stromatic tissue. Ascii short, sessile, separated by stromatic tissue, in a single hymenium-like layer, 8-spored, measuring from $49-61 \times 15-19 \mu$. Ascospores brown, -celled, ellipsoide to fusoid, biseriate, constricted in the middle, measuring from $13-17 \times 6-10 \mu$.

Collected on the dead stem of *Meyna laxiflora* Robyns. at Ramling in the month of January 1968. Leg. S. B. Kale and deposited in the herbarium of Botany Department, Marathawada University under sub No. MUH 225 (Tilak type).

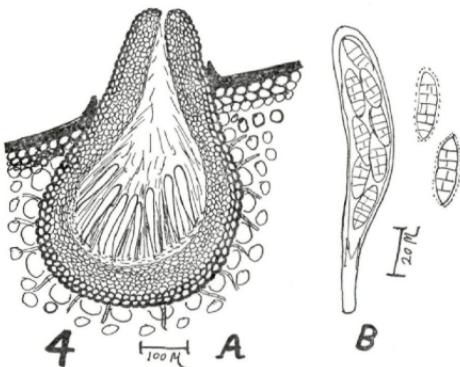


Fig. 4. *Peltosphaeria kamatii* sp. nov. — A. Vertical section of the peritheciium. — B. Ascus and ascospores.

The *Allosoma* was originally erected by Sydow (1926) with *A. cestri*, as the type species. The genus *Allosoma* Syd. remained monotypic up till now, it is now represented by 2 species from the world, besides it constitutes a new generic record for India.

69. *Peltosphaeria kamatii* sp. nov.

Perithecia singularia, innata, clypeo tecta, ostiolo conico, antice truncato-rotundato intus periphysato, poro rotundato aperto erumpentia, $525-675 \times 300-450 \mu$; pariete crassiusculo, pseudoparenchymatico, e cellulis extus atro-brunneis, crassiuscule tunicatis, intus pallidioribus, tenuiter tunicatis composito; ascii cylindracei vel cylindraceo-clavati, stipitati, crasse tunicati, 8-spori, $152-171 \times 21-25 \mu$; sporae distichae,

ellipsoidea vel subfusoideae, hyalinae, transversae 4—8-longitudinaliter 3—6 - septatae, medio leniter, ceterum vix vel lenissime constrictae, 27—34 × 11—13 μ , muco tenui obvolutae; paraphyses filiformes.

Perithecia innate-erumpent, singly, clypeate, black, ostiolate, ostiole projecting out of the host tissue, slightly papillate, periphysate, measuring from 525—675 × 300—450 μ . The wall of perithecium is made up of the outer dark, thick-walled calls, 2—3 cells in thickness, and inner thin-walled cells, many cells in thickness. Wall of the perithecium gives out the minute hyphae in all directions. Ascii cylindrical, stipitate, bitunicate, 8 spored, measuring from 152—171 × 21—25 μ , paraphysate; paraphyses filiform. Ascospores hyaline, typically muriform, biseriate, ellipsoid to fusoid, measuring from 27—34 × 11—13 μ , with 4—8 transverse and 3—6 vertical septa, forming a parenchymatous-like structure, with thin mucous sheath.

Collected on dead bark of *Capparis spinosa* L. at Ramling in the month of January 1968. Leg. S. B. Kale and deposited in the herbarium of Botany Department, Marathawada University under sub No. MUH 226 (Tilak type).

The species has been described after Prof. N. N. Kamat for his valued contribution to Indian Fungi.

70. *Pleomassaria anonae* sp. nov.

Perithecia singulata, cortici innata, ostiolo papilliformi punctiformiter erumpentia, extus hyphis brunneis, repentibus praedita,

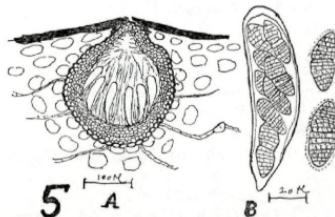


Fig. 5. *Pleomassaria anonae* sp. nov. — A. Vertical section of perithecium.
— B. Ascus and ascospores

274—266 × 228—247 μ ; ascii cylindraceo-clavati, breviter stipitati, crassiusculi tunicati, 103—114 × 23—27 μ ; sporae distichae, oblongo-fusoidae, utrinque plus minusve attenuatae, rectae vel inaequilaterae, aurantiaco-brunneae vel brunneae, transverse 10—20-longitudinaliter 15—25-septatae, 40—45 × 15—19 μ , muco hyalino obvolutae, paraphyses, filiformes, ascos superantes.

Perithecia singly, innate, immersed in bark, flattened, giving out the brown hyphae, ostiolate, slightly papillate, opening by a slit in the

bark and the later becoming white, measuring from 247—266 × 228—247 μ . Ascii cylindrical, bitunicate, 8-spored, stipitate, measuring from 103—114 × 23—27 μ , paraphysate; paraphyses filiform and longer than the ascii. Ascospores fusoid to clavate, muriform, golden brown to brown, biseriate, with 15—25 longitudinal and 10—20 transverse septa, measuring from 40—45 × 15—19 μ , with hyaline mucous sheath.

Collected on dead stem of *Anona squamosa* L. at Aspinga in the month of January 1968. Leg. S. B. K a l e and deposited in the herbarium of Botany Department Marathawada University, Aurangabad under sub No. MUH 227 (T i l a k type).

The genus *Pleomassaria* was originally erected by Spegazzini (1880) with *P. siparia* (B. & Br) Tul. as the type species.

Besides being a new species the genus constitutes a new generic record for India.

A c k n o w l e d g e m e n t s

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