A new myrmecophilic Hyphomycete, *Aegeritella maroccana* sp. nov.

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*Aegeritella maroccana* is proposed as a new epizoic species on the ant *Aphaenogaster baronii* (Hymenoptera: Formicidae) from Middle Atlas, Morocco. The presence of single, thick, conical unbranched conidiophores composed of short thick-walled cells of toruloid shape differentiates it from related *Aegeritella* species. This is a first African record of the genus.

**Key words**: *Aegeritella maroccana*, Epizoic fungus, Ants.

Although epizoic fungi of the genus *Aegeritella* Balazy & Wiśniewski were discovered not long ago (Wiśniewski, 1967) they seem to be relatively common in populations of different ant species. The most widespread in Europe is *A. superficialis* Bal. & Wiś., whereas three further species have only been recorded from single localities in Europe (Balazy, Lenoir & Wiśniewski, 1986; Espadalet & Wiśniewski, 1987) and in South America (Balazy & Wiśniewski, 1977). Recently a new species of this genus of fungus was found on worker ants of *Aphaenogaster baronii* Cagniant (Formicidae, Myrmicinae) from Tazerkount Mt, near Beni-Mellal (Middle Atlas, Morocco) on 11 May 1987. The ants nested under big rocks in a dry sclerophyllous forest (*Quercus ilex, Juniperus oxycedrus, Pistacia lentiscus, Arbutus unedo, Cistus albidus, Phyllirea sp.*). Several myrmecophilous beetles (*Sternocoleus* sp., *Histeridae*) were recovered from the nest. Samples of ten other ant species present in the zone were not affected by the fungi. This is the first non-ormicine ant found with *Aegeritella* and a first African record for the genus.

The collections were examined and compared with previous material, using methods described by Balazy et al. (1986).

The fungal warts occurring singly on particular sclerites of the body of the ant *Aphaenogaster baronii* (Fig. 1) were circular, ca. 150 μm diam, flat, thickness not exceeding 40 μm, with radially protruding, relatively stout, setose, unbranched conidiophores (Figs 2–3), visible under higher magnification of the stereomicroscope.

Their colour when dry was conspicuously lighter than that of the ant’s exoskeleton, whereas when moistened with water or alcohol solution it became almost indistinguishable. The general microscopic view was analogous to other species belonging to this genus. The cells in the central part were subglobose or ellipsoid, 11–16 × 6–11 μm and in the peripheral layers were smaller, subspherical, obtuse multiangulate or elongate, 3.1–10.1 × 3.1–6.2 μm. They were arranged into conspicuous, catenulate series. Conidiophores grew from the cells of the superficial layer and their total length varied between 19–57 μm, with the thickness at the base 5.1–10.9 μm, and at tips 3.1–4.3 μm. They were unbranched, irregularly conical, consisting of thick-walled cells in linear, toruloid arrangement, except at their distal end which was thin-walled and almost hyaline. Conidia were formed apically and holoblastically, easily detached from the conidiophores. They were smooth, thin-walled, colourless, short-cylindrical or somewhat clavate, with both ends obtuse or sometimes with a truncate base, 6.2–10.1 × (3.1–) 3.5–4.3 (–4.7) μm.

Though the size of the conidia lies within the range of those of *A. superficialis*, they are, however, more uniform. Moreover,
the lack of hyphal elements in the warts as well as the lack of small, budding cells in their superficial layer and distinctly different, toruloid arrangement of the cells in the conidiophores differentiate this species both from *A. superficialis* and from other species hitherto described.

*Aegeritella marocca* Balazy, Espadaler & Wiśniewski, sp. nov.  
(Figs 1–3)


In relation to the key for identification of hitherto known species of *Aegeritella* (Balazy et al., 1986), the above described fungus represents a number of features intermediate between *A. roussillimensis* and other species. In particular it does not form conical, dome-like or granular bulbils and the catenulate arrangement of cells forming its thallus is rather indistinct. Its most important characteristic is the presence of single, unbranched, thick, conical conidiophores composed of short thick-walled cells of toruloid appearance.

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REFERENCES


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Paravalsa indica gen. et sp. nov. from India

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Paravalsa indica gen. et sp. nov., a member of Valvaceae is described and illustrated. Its relationships with Valsa, Gnomeniella and Xenotypha are discussed.

Key words: Paravalsa, Ascomycetes, New genera.

Paravalsa Ananthapadmanaban, gen. nov.


Sp. typ.: Paravalsa indica sp. nov.

Stroma absent. Perithecia solitary, immersed within the host tissue, with prominent necks, ostiolate. Peridium two-layered: an outer layer of thin-walled brown cells and an inner layer of thin-walled, hyaline cells. Ascii uncinate, thin-walled, clavate, becoming free in the perithelial cavity, non-amyloid, 8-spored. Ascospora allantoides, 1-celled.

Paravalsa indica Ananthapadmanaban, sp. nov. (Figs 1–7)

Stroma absens. Perithecia solitaria, imersa in cortice, globosa vel planate globosa, ostiolata, brunnea, 375–420 × 270–315 μ m. Peridium pseudoparenchymatosum, constans et duobus stratis; stratum externum 14–18 μ m crassum, compositum 4–5 seriebus cellularum pallide brunnearum, tangentialiter elongatatarum, confertae ordinararum; stratum internum 3–4 μ m crassum formatum 2–3 seriebus cellularum hyalinarum, laxe dispositarum, cum pariete tenui. Collum centrale, prominens, usque 1.0–1.5 mm longum et 90–105 μ m latum. Ascii uncinato-cylindrici, cum pariete tenui (paries evanescentes ad maturitatem), cylindrici vel clavati, non-amyloides, liberati in cavo peritheliali, 8-sporati, 19.0–25.0 × 5.0–9.0 μ m. Ascospora irregulariter biseriatae, cum pariete tenui, hyalinae, allantoides, 1-cellulatae, 5.0–6.5 × 1.5–2.0 μ m. Paraphyses absentes.

In cortice anonymo in Chengeltheri, Tirunelveli Dt, Tamil Nadu State, India, collecta a D. Ananthapadmanaban, 30 Aug. 1980: FSI no. 4722, holotypus.

Perithecium are immersed within the substratum, vertically orientated and with prominent free necks, solitary, non-stromatic, brown, globose to flattened globose, smooth, 375–420 × 270–315 μ m. The perithelial wall is 18–21 μ m thick, pseudoparenchymatous and consists of distinct outer and inner layers. The outer layer is 14–18 μ m thick and composed of 4–5 tiers of tangentially elongated, light brown cells. The inner layer is 3–4 μ m thick and composed of 2–3 tiers of thin-walled, hyaline cells. The perithelial neck is central, straight, stout, 1.0–1.5 mm long and 90–105 μ m in width, its wall is 20–26 μ m thick and is composed of compactly arranged, dark-brown cells 10–12 deep. The ostiole is simple and lined with short, slender and upwardly projecting paraphyses. Ascii are uncinate, thin-walled (the wall evanescent at maturity), cylindrical to nearly clavate, non-stalked, non-amyloid, becoming free in the perithelial cavity, 8-spored 19.0–25.0 × 5.0–9.0 μ m. Ascosporae are irregularly biseriate, thin-walled, hyaline, allantoid, with rounded ends, 1-celled, 5.0–6.5 × 1.5–2.0 μ m. Paraphyses absent.