A black mildew fungus, Schiffnerula azadirachtae sp. nov. (Ascomycota: Englerulaceae) from Kerala, India

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The backyard medicinal plant of Deccan region, Azadiracta indica A. Juss., extensively planted in Kerala State harbours several fungal parasites. During our study on foliicolous fungi of the region, we collected black mildew fungus on this plant. Critical microscopic examination of the fungus revealed that it is hitherto unrecorded species of the genus Schiffnerula.

Schiffnerula azadirachtae sp. nov.  
(Fig. 1)

Material examined: 10.viii.2010, on leaves of Azadiracta indica A. Juss. (Meliaceae), Kallara, Thiruvananthapuram, Kerala, India, coll. A. Sabeena, TBGT 4323 (holotype), part of the collection has been deposited in HClO (Mycobank # 561024).


Colonies amphigenae, tenues, ad 2mm diam., confluentes. Hyphae brunneae, flexuosaes, opposite, alternate vel unilateralis acuteque vel laxe ramosae, laxe reticulatae, cellulae 12–35 x 4–6 µm. Appressoria alternata vel unilateralis, globosa, integra, 7–10 x 7–10 µm. Conidia Questieriella dispersa in coloniis, curvula, 3-septata, leniter constrictus ad septata, attenuata ad ambi apicem, 27–40 x 7–10 µm. Sarcinella conidiophora producentes hyphis lateralis, solitaria, recta, flexuosa, mononematula; cellulae conidiogenae terminalis, monoblasticae, integratae, cylindraceae. Conidia Sarcinella blastica, terminalis, plerumque sessilis, solitaria, ovata vel globosa, sarciniformes, 2–7 cellulae, constrictia ad septata, 27–42 µm diam., periplas glabrius. Thyriothecia dispersa, ovata, orbicularis, cellulae peridiales radiatia ad initio, dissolutus ad centre ad maturitas et asci visa, ad 70µm diam., cellulae marginales radiatae; asci 2–4 per thyriotheciis, globosi, octospori, 12–20 µm diam.; ascosporae oblongae, conglobatae, unisepalatae, constricta ad septatae, 15–20 x 7–10 µm, periplas glabrius.

Colonies amphigenous, thin, up to 2mm in diameter, confluent. Hyphae brown, flexuose, branching opposite, alternate to unilateral at acute to wide angles, loosely reticulate, cells 12–35 x 4–6 µm. Appressoria alternate to unilateral, globose, entire, 7–10 x 7–10 µm. Conidia of Questieriella scattered in the colonies, curved, 3-septate, slightly constricted at the septa, taper towards both ends, 27–40 x 7–10 µm. Sarcinella conidiophores produced lateral to the hyphae, single, straight, flexuose, mononematous; conidiogenous cells terminal, monoblastic, integrated, cylindric. Sarcinella conidia blastica, terminal, mostly sessile, solitary, ovate to globose, sarciniform, 2–7 celled, constricted at the septa, 27–42 µm in diameter, wall smooth. Thyriothecia scattered, globose, ovate, orbicular, peridial cells initially radiating, later the central portion dissolved by exposing asci, up to 70µm in diameter, marginal cells radiating; asci 2–4 per thyriothecia, octosporous, 12–20 µm in diameter; ascosporae oblongae, conglobatae, unisepalatae, constricted at the septum, 15–20 x 7–10 µm, wall smooth.

Meenu et al. (1994) have described Sarcinella azadirachtae on Azadiracta indica from Nepal.
However, the teleomorph supersedes anamorph. Hence, it has been accommodated in a new species.

**REFERENCE**