Macroscopic and Microscopic Findings of *Pseudallescheria boydii*

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**Fig. 1.** (A) The colony on Sabouraud’s dextrose agar after incubation at 25°C for 2 weeks. The color of the colony is white in the center, but the color becomes darker as it grows outward. The texture of the colony ranges from wooly to cottony. (B) Image of colony shown in (A) taken from below. The colony had a black-gray colored crater-like structure. (C) The conidia of *P. boydii* were unicellular and ovoid with a truncated base (red arrow) at the ends of the conidiophores. Numerous septated hyphae are seen (green arrow). Lactophenol cotton blue preparation ×1,000. (D) In the mature state, numerous lemon-shaped ascospores are seen (lactophenol cotton blue preparation ×400).
*Pseudallescheria boydii* (*P. boydii*) is a species of fungus classified in the Ascomycota. Formerly known as *Monosporium apiospermum*, *Scedosporium apiospermum* is the anamorph of *P. boydii*. Typically found in stagnant and polluted water, *P. boydii* has been implicated in the infection of immunocompromised and near-drowned pneumonia patients. Diagnosis of *P. boydii* is possible through isolation of the fungus in culture or through cytology and histopathology in the tissues of diseased individuals. The treatment of *P. boydii* infections is complicated by its resistance to many standard antifungal agents used to treat infections by filamentous fungi.

On Saboraud Dextrose Agar, *P. boydii* colonies mature rapidly and are flat, white colored, and texture ranges from woolly to cottony. The colonies become grayish or smoky-brown colored with age (Fig. 1A); some laboratorians refer to a “house mouse gray” color. The color of the colony is white initially but darkens to gray to black with maturity on the reverse side (Fig. 1B). Microscopically, the conidia of *P. boydii* are unicellular, pale brown, and ovoid with truncated bases formed singly, in small clusters at the ends of the conidiophores, or from short annelid necks arising directly from the hyphae. Conidiophores bearing annelids are of varying length and exhibit little differentiation from the vegetative hyphae. Fascicles of conidiophores bound together in synemata are sometimes present and are a variation of the asexual state referred to as the *Graphium* synanamorph. Large (50–250 μm) brown cleistothecia of the sexual *P. boydii* may develop after 2–3 weeks of incubation and are likely to be found at the center of a colony. Ascospores are yellow-brown and ellipsoidal in shape.

**Key Words:** Conidiophore, *Pseudallescheria boydii*, *Scedosporium apiospermum*

**CONFLICT OF INTEREST**

In relation to this article, we declare that there is no conflict of interest.

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