

Macroscopic and Microscopic Findings of *Cladosporium sphaerospermum*

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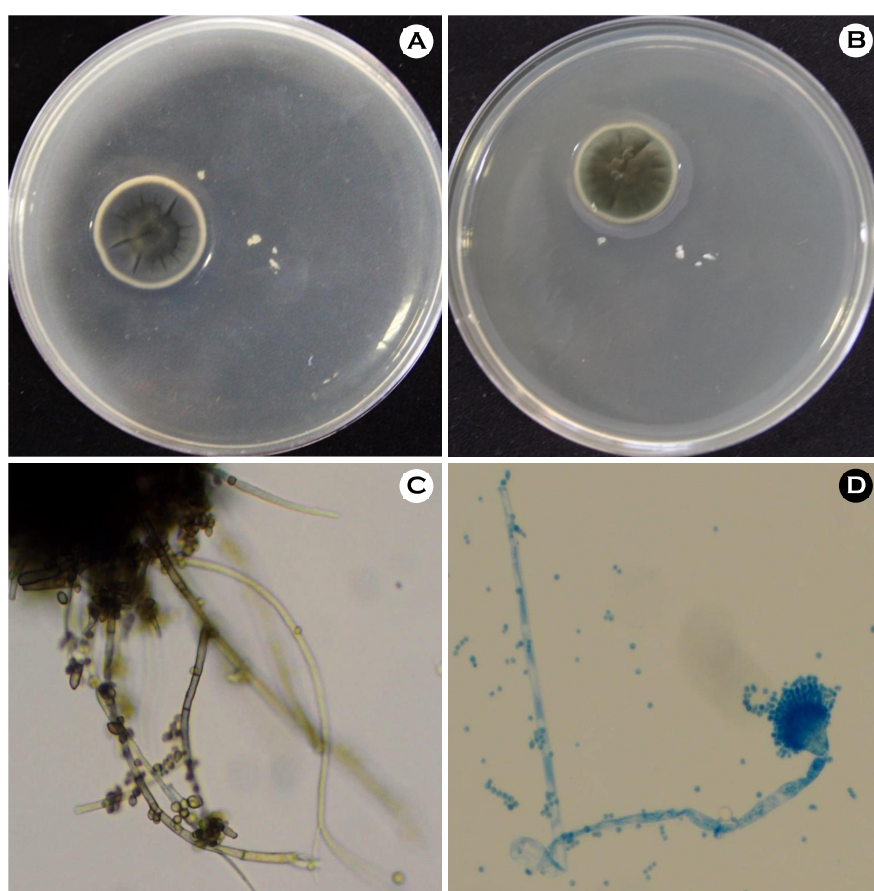


Fig. 1. (A) An olivaceous green, flat, radially furrowed colony with a crater-like structure on Sabouraud dextrose agar after 5 days at 25°C (B) The characteristic blackish green, crater-like structure of the colony is visible. (C) The conidia of *C. sphaerospermum* are brown to dark brown in color and globose to subglobose in shape at their ends. (D) The conidia of *C. sphaerospermum* display bluish branching septated hyphae with chains (Lactophenol cotton blue, $\times 100$).

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The genus *Cladosporium* forms a large part of dematiaceous hyphomycetes¹. The saprophyte *Cladosporium sphaerospermum* can be found in diverse environments such as indoor and outdoor air, soil, hypersaline water, paint, silicone, decaying vegetation, and textile¹. *C. sphaerospermum* also frequently exists as an airborne contaminant¹. This fungus causes subcutaneous phaeohyphomycosis, intrabronchial lesions, human corneal ulcers, and onychomycoses². Most *Cladosporium* species do not grow at temperatures exceeding 35°C. In this analysis, we sampled the right eyebrow of a 51-year-old woman who was tattooed a month ago.

After streaking on Sabouraud dextrose agar, a flat, radially furrowed, crater-like colony was observed (Fig. 1A). The colony was olivaceous green at the top and blackish green at the bottom (Fig. 1B). Microscopically, the conidia of *C. sphaerospermum* were brown to dark brown in color and globose to subglobose in shape at their ends. The presence of ramoconidia is one of the characteristics of *Cladosporium* species³. The hyphae of *C. sphaerospermum* were septated with thick and darkened septa (Fig. 1C). Lactophenol cotton blue staining of *C. sphaerospermum* revealed bluish branching septated hyphae with conidia chains (Fig. 1D).

Conidia are formed via budding, with the youngest conidia at the tip and older conidia at the base. The youngest conidia are round in shape, whereas older conidia are elongated and septated. Because *C. elatum*, *C. herbarum*, and *C. cladosporioides* have similar appearances, sequence analysis is needed for their differentiation. When differentiating various species

of dermatophytes, such as *C. fusiforme*, consideration should be given to the characteristic macroscopic and microscopic findings of *C. sphaerospermum*. Furthermore, because *C. sphaerospermum* is the most common contaminant, its presence should be confirmed by several cultures.

Key Words: *Cladosporium sphaerospermum*

CONFLICTS OF INTEREST

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

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