Occurrence of *Dumontinia tuberosa* in Korea

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Thirty-seven single spore isolates were obtained from specimens of ascomycetous fruiting bodies collected from Mt. Suri, Anyang in Korea. The fungal specimens and isolates were identified as *Dumontinia tuberosa* based on their morphological and cultural characteristics. This is the first record of this fungus occurring in Korea.

**KEYWORDS:** Ascomycetes, *Dumontinia tuberosa*, Fruiting body, Identification

Unusual ascomycetous fruiting bodies were observed near *Anemone raddeana* Regel plants grown in Mt. Suri, Anyang in Korea during a survey of mushrooms performed in April of 2009 (Fig. 1A and 1B). The fruiting bodies appeared as apothecia that were stipitate, cupulate, and borne on sclerotia. Therefore, the fruiting bodies were collected and their morphological characteristics were examined. Specially, 37 single spore isolates were obtained from the specimens and cultured on potato dextrose agar (PDA), after which their cultural characteristics were examined. The fungal specimens and isolates were identified as *Dumontinia tuberosa* (Bull.: Fr.) Kohn based on their morphological and cultural characteristics, which were consistent with those described by Kohn (1979).

Fig. 1. Occurrence of *Dumontinia tuberosa* in Mt. Suri. A and B, apothecia produced near *Anemone raddeana* plants; C-E, apothecia produced from sclerotia (each scale bar = 20 mm).

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fungal specimens were deposited in the HCCN (Herbarium Conservation Center of NAAS, RDA, Suwon, Korea).

Apothecia are produced in groups of one to eight from a yellowish brown to dark brown, goblet-shaped sclerotium (Fig. 1C–1E). Disks are 9–30 mm broad and deeply cupulate. Stipes are 10–100 mm long and 1–3 mm thick. The sclerotia that produce the apothecia are black, globose to irregularly shaped, 6–35 × 3–22 mm, with a black outer rind and white inner context (Fig. 2A). Cross sections through the flanks of the apothecium showed that the ectal excipulum consists of globose cells, asci and paraphyses (Fig. 2B and 2C). Asci are cylindrical, contain eight spores and measure 127.5–162.5 × 7.5–11.0 μm (Fig. 2D). Ascospores are hyaline, ellipsoid and measure 11.0–20.0 × 5.5–8.0 μm. Colonies of the fungal isolates grown on PDA consist of whitish to grayish mycelia and black, oblate to elongated oblate sclerotia that measure 3–19 × 3–12 mm (Fig. 3). The optimum temperature for mycelial growth of the fungus on PDA was 20–24°C.

Kohn (1979) named Dumontinia tuberosa (Bull. ex Mérat) Kohn and recorded Sclerotinia tuberosa (Hedw.) Fuckel as a synonym of the fungus. The fungal name was corrected later to Dumontinia tuberosa (Bull.: Fr.) Kohn as a sanctioned name for the authors of the fungus (Korf and Kohn, 1980). In the present study, D. tuberosa was found for the first time in Korea. It has been reported that D. tuberosa is pathogenic on the rhizomes of some Anemone spp. (Cannon et al., 1985; Kohn, 1979). The authors also found that the fungus occurs commonly near A. rad-
decan plants during a survey of Mt. Suri. However, further study is needed to confirm the pathogenicity of *D. tuberosa* on *A. raddeana* plants.

**References**


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**Fig. 3.** A 20-day-old colony of *Dumontinia tuberosa* grown on PDA at 22°C.