

Cladonia peziziformis (Lichenized Ascomycota, Cladoniaceae) New to Korea

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Cladonia peziziformis (With.) J.R. Laundon was collected from Baega mountain, Jeonnam Province, Korea in 2008. It is characterized by short and slender podetia with verruculose surface, split along the sides. Apothecia large, pale brown, always growing on the top of the podetia. Primary squamules shell-like, thick, and convex. Fumarprotocetraric acid contained in thallus. This is the first record of this species in Korea.

KEYWORDS : Foliose lichen, Korea, Lichen-forming fungus, New record

The genus *Cladonia* P. Browne is the type genus of the lichenized ascomycete family *Cladoniaceae* Zenker and is composed of basal squamules and/or upright podetia. Apothecia are at podetia tips and brownish or red (Brodo *et al.*, 2001; Osyczka, 2006). According to the most recently published checklist of Korean lichens (Hur *et al.*, 2005), there are 63 species of *Cladonia* recorded on the Korean peninsula, and this the first record of this species in Korea.

The specimen for this study was collected from Baega Mountain, Jeonnam Province, Korea and was deposited in the Korean Lichen Research Institute (KoLRI) at Suncheon National University. The phenotypic characters were based on air-dried material. The morphological characters were described using a dissecting microscope (Nikon SMZ 1500). The lichen substances were detected by color reagents and thin-layer chromatography (Culberson, 1972; White and James, 1985).

Cladonia peziziformis (With.) J.R. Laundon (1984). (Fig. 1)

Morphology. Primary thallus small and shell-like, very thick and convex, sometimes forming a crust; upper surface yellow-green; lower surface white, esorediate. Podetia slender and short, 0.5–1.5 cm tall and 0.8–1 mm wide, seldom or once branched, gray to grayish green, surface verruculose, split along the sides, esorediate with no cups. Apothecia always on the tops of podetia, large and pale brown, several times the diameter of the podetia. **Chemistry.** Cortex and medulla P+ red, K-, KC-, C-; containing fumarprotocetraric acid.

Distribution. On soil in the open. It is usually found in

the temperate zone of the Northern Hemisphere. In Asia, it has been reported in North China (Wei, 1991).

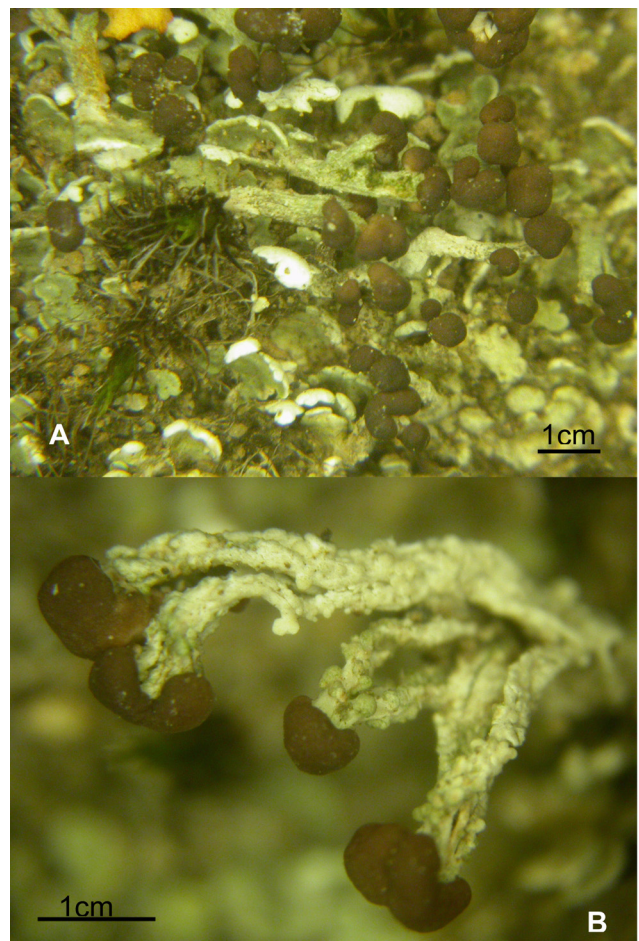


Fig. 1. *Cladonia peziziformis*. A, shell-like round squamules and the podetia; B, podetia with verruculose surface.

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Specimens examined. Baega Mountain, 35°09'08.28" N, 127°09'45.21" E, alt. 550m, on soil. Bae 080032, June 10, 2008.

Remarks. This species is very similar to *C. cariosa*, but the latter contains atranorin. It also resembles *C. polycarpoides*, but the diameter of its apothecia is much larger than the podetia.

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