

CHAPTER 10

FAMILY LECIDEACEAE

Characteristics of the Family Lecideaceae

Thallus: saxicolous, whitish or pale brown, warted, areolate; epruina; Soralia and Isidia absent; Prothallus not visible; Photobiont chlorococcoid; **Apothecia:** scattered and entire, immersed; disc plane to convex, brown-red and black at margin; epruina; with lecideine (proper exciple); Parathecium: indistinct; Epihymenium: brown; Hymenium: hyaline; Subhymenium: indistinct; Hypothecium pale; Paraphyses: anastomosing or branched, apical not conspicuously swollen; Asci: clavate, *Porpidia*-type; **Ascospores:** 8 per ascus, hyaline, broadly ellipsoid, simple, $(7.3)7.4-8.9-16.0-17.8(20.0) \times (8.8)9.4-11.6-14.3(15.4) \mu\text{m}$; **Pycnidia** and **Conidia** not observed.

Description of the Genus *Bellemeria*

Bellemeria Hafellner & Cl.Roux, Bull. Soc. bot. Centre-Ouest, Nouv. sér. 15: 129 (1984). (Larsson & Ryan, 2007, pp.110-111).

Thallus: saxicolous, whitish or pale brown, warted, areolate, 129.5-219.7 mm thick; epruina; Soralia and Isidia absent; Prothallus not

visible; Photobiont chlorococcoid; **Apothecia**: scattered and entire, immersed; disc plane to convex, brown-red and black at margin; epruina, 0.5-1.5 mm diam. with lecideine (proper exciple); Parathecium: indistinct; Epihymenium: brown, 10.0-15.0 μm thick; Hymenium: hyaline, 60.0-120.0 μm high; Subhymenium: indistinct; Hypothecium pale, 39.5-50.5 μm high; Paraphyses: anastomosing or branched, apical not conspicuously swollen, 35.5-53.7 μm high; Asci: clavate, *Porpidia*-type, 5.0-10.5 μm high; **Ascospores**: 8 per ascus, hyaline, broadly ellipsoid, simple, (7.3)7.4-8.9-16.0-17.8(20.0) $\times$ (8.8)9.4-11.6-14.3(15.4) μm ; **Pycnidia** and **Conidia** not observed.

Chemistry: Norstictic acid, atranorin and fumarprotocetraric acid.

Habitats: on rocks.

Distribution: Eurasia, North America, Australia, New Zealand, and Antarctica.

Description of the Species

***Bellemerea* PL.1**

(see Figure 44)

Thallus: saxicolous, whitish or pale brown, warted, areolate, 129.5-219.7 mm thick; epruina; Soralia and Isidia absent; Prothallus not visible; Photobiont chlorococcoid; **Apothecia**: scattered and entire, immersed; disc plane to convex, brown-red and black at margin; epruina, 0.5-1.5 mm diam.; with lecideine (proper exciple); Parathecium: indistinct; Epihymenium: brown, 10.0-15.0 μm thick; Hymenium: hyaline, 60.0-120.0 μm high;

Subhymenium: indistinct; Hypothecium pale, 39.5-50.5 μm high; Paraphyses: anastomosing or branched, apical not conspicuously swollen, 35.5-53.7 μm high; Asci: clavate, *Porpidia*-type, 5.0-10.5 μm high; **Ascospores**: 8 per ascus, hyaline, broadly ellipsoid, simple, (7.3)7.4-8.9-16.0-17.8(20.0) $\times$ (8.8)9.4-11.6-14.3(15.4) μm ; **Pycnidia** and **Conidia** not observed.

Chemistry: thallus and medulla P-, K-, C-, KC-; containing atranorin and fumarprotocetraric acid.

Habitats: occurring on rocks in lower montane scrub at 1,485 m.

Distribution: Thailand.

Specimens examined: Phu Luang Wildlife Sanctuary, Loei Province.

Around the Khok Nok Grabra Forest Protection Unit, on rocks, 29 August 2005, Chutamat Phraphuchamnong—CP33(RAMK).

Observation: *Bellemerea* PL.1 is characterized by thallus saxicolous, areolate-cracked, whitish or pale brown, which containing atranorin and fumarprotocetraric acid.

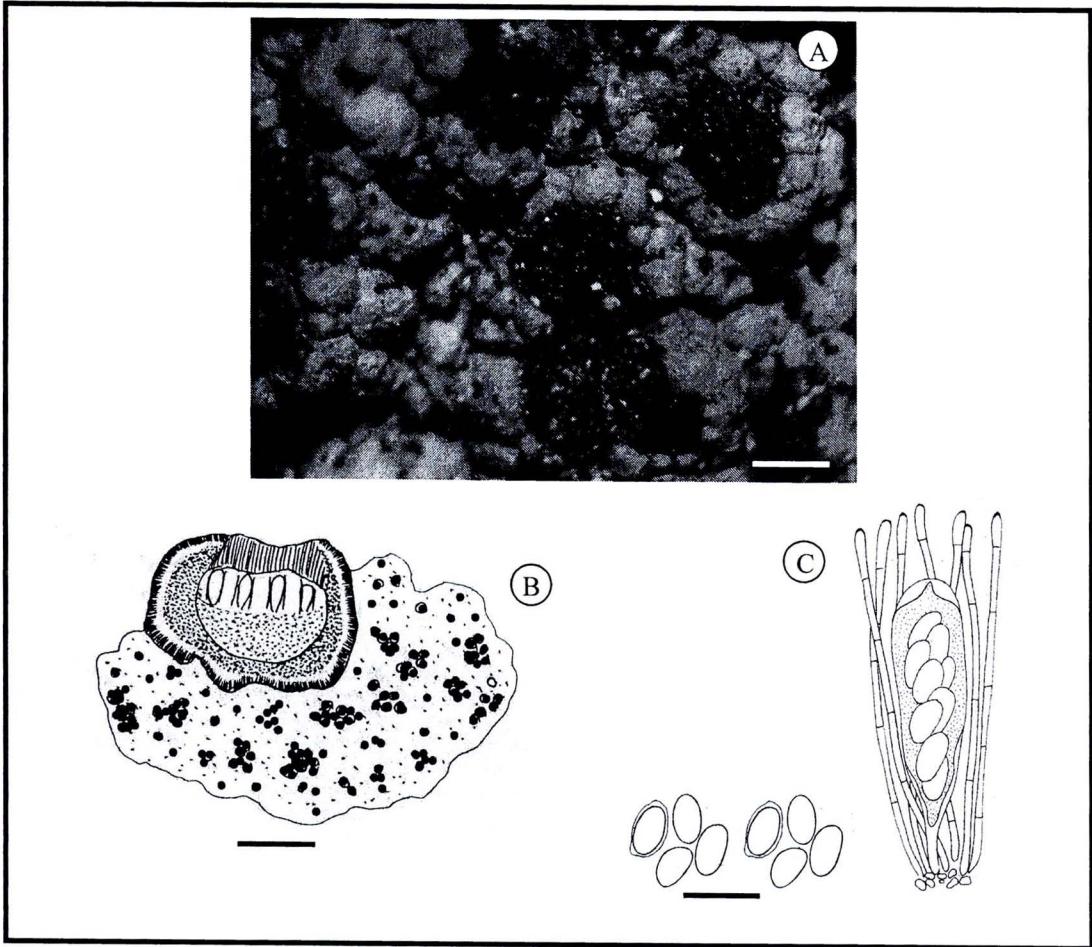


Figure 44 *Bellemerea* PL.1

Note. A = Apothecia lecideine, immersed, brown-red [CP33(RAMK)]
(scale = 0.88 mm)

B = Illustration of vertical section of apothecia [CP33(RAMK)]
(scale = 15.62 μm)

C = Illustration of ascus with paraphyses and ascospores
[CP33(RAMK)] (scale = 5.88 μm)