

74. LASIOBOLIDIUM Malloch & Cain, Can. J. Bot. 49: 853. 1971.

Anamorph: Unknown.

Colonies growing quickly, reddish brown. Ascomata cleistothecial to gymnothecial, spherical to subspherical, or irregular in shape, non-ostiolate, yellow or reddish brown, with

distinct appendages. Asci unitunicate, 8-spored, irregularly disposed, arising from croziers, non-amyloid, evanescent. Ascospores one-celled, hyaline or slightly pigmented, ellipsoidal, smooth, without germ pores, gelatinous material lacking.

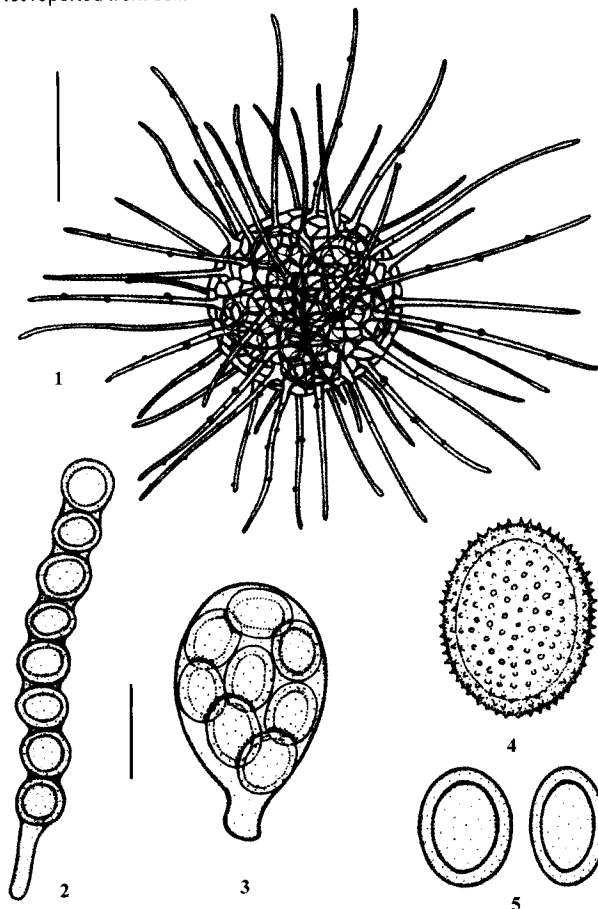
Type species: *Lasiobolidium spirale* Malloch & Cain.

REFERENCE: Malloch & Cain (1971).

KEY TO THE SPECIES OF *LASIOBOLIDIUM*

- 1. Asci cylindrical *L. orbiculoides*, *L. aegyptiacum*
 Asci clavate to ellipsoidal or subspherical 2
- 2. Ascomata with helically coiled appendages 3
 Ascomata with straight, wavy, irregularly coiled, or uncinuate appendages 4
- 3. Asci clavate, 35–62 x 12–21 µm; ascospores 12–17 x 9–12 µm *L. spirale**
 Asci subspherical to ellipsoidal or broadly clavate, 18–20 x 14–16 µm; ascospores 8–9 x 5–6(–7) µm *L. helicoideum**
- 4. Ascomatal appendages straight, 2.5–3 µm broad, septate; asci subglobose to broadly clavate, 45–65 x 25–45 µm; ascospores large (16–)18–24 x 12–18 µm *L. gracile*
 Ascomatal appendages wavy or irregularly coiled or uncinuate; ascospores small, mostly 9–10 x 5.5–7 µm 5
- 5. Ascomatal appendages wavy or irregularly coiled, up to 2 µm long and 5.5–9 µm broad, septate *L. fallax**
 Ascomatal appendages uncinuate, 400–500 x 4–8 µm, non-septate *L. recurvatum**

*Not reported from soil.



Lasiobolidium spp. 1. Ascoma (*L. orbiculoides*). 2, 3. Asci (2, *L. orbiculoides*; 3, *L. gracile*). 4, 5. Ascospores (4, *L. gracile*; 5, *L. orbiculoides*). Bars: 1= 200 µm; 2, 3= 20 µm; 4, 5= 10 µm.

Lasiobolidium gracile Yaguchi, Someya & Udagawa, Mycoscience 37: 255. 1996.

Colonies largely submerged, with limited aerial hyphae. Ascomata scattered, yellowish brown to reddish brown, 145–500 µm diam, soft; peridium translucent, indefinite in thickness, *textura intricata* to *textura angularis*, multilayered; outer layer consisting of hyaline, subglobose to angular, 5–16 µm diam cells; appendages hyaline to yellowish brown or orange brown, thick-walled, remotely septate, unbranched, at first smooth but later often nodulose by pigmented knots, straight or slightly sinuous, 100–600 x 2.5–3 µm, with a rounded end. Asci yellowish brown, subspherical to broadly clavate, 45–65 x 35–45 µm, without apical structures, radially arranged from the centrum. Ascospores hyaline to pale yellowish brown, broadly ellipsoidal, (16–)18–24 x 12–18 µm, thick-walled, slightly warty.

DISTRIBUTION: USA.

REFERENCE: Yaguchi *et al.* (1996c).

Lasiobolidium orbiculoides Malloch & Benny, Mycologia 65: 655. 1973.

Colonies reddish brown. Ascomata dark reddish brown, hairy; peridium 20–75 µm thick, peridial cells forming an irregular tuberculate tissue in surface view; appendages yellowish, flexuous to wavy or irregularly coiled, 2–3 µm long, 5–7 µm thick, remote septate, unbranched, broadly rounded at the tips or tapering out irregularly, thick- and smooth-walled.