

***Bombardia bombarda* (Batsch) J. Schröt. PDD 92350 (= AEB 1008)
– a good match to the species.**

Substrate: dead gorse (*Ulex europaeus*) wood

Collection site: Golden Bay, near Pakawau, Whanganui Inlet: gravel road, road edge drainage area NW of Collingwood and W of Pakawau – a right turn off the Collingwood Puponga Main Road on a road near Whanganui Inlet that led to several farm properties with access to a couple of small lakes (Kaihoka Lakes).

Collection date: 25 April 2007

Collector and Identifier: Ann Bell

Voucher material: Dried herbarium specimens (AEB 1008) accompanied by Ann's 3 Shear's mounting fluid (SMF) slides; Ann's detailed drawings and notes; Dan Mahoney's projection slides taken under a Zeiss dissecting microscope; Ann had good ascospore germination results but the Potato Carrot Agar (PCA) culture went bacterial. Unfortunately she was unable to separate the bacteria and the culture was lost. However, see Dan's photos of her SMF voucher slide that records the germinating ascospores (last page of this pdf).

Brief description: Ascomata superficial, clustered, large, tall and barrel-shaped; when young covered with a conspicuous fuzzy cream to creamy yellow colored tomentum except for a small, smooth, flattish black area around the ostiole (very striking!); with age the tomentum pale yellowish and finally yellowish brown before disappearing – the black area around the ostiole increasing in size and finally leaving the ascomata completely black (see Dan's photos of this sequence on the next 2 pages).

Ann's drawings and notes reasonably match those online for *Bombardia bombarda*. See those from 'Facesoffungi number: FoF 10016' after Dan's in-situ photos of AEB 1008 ascomata.

For descriptions and illustrations of Ann's 3 collections of *Bombardia bombarda* (AEB 754, 1008 & 1121) see pp. 62, 64 & 65 in her publication 'Bell A. 2005. An Illustrated Guide to the Coprophilous Ascomycetes of Australia. CBS Biodiversity Series No. 3, Centraalbureau voor Schimmelcultures, Utrecht, the Netherlands, 172 pages.



1. Young ascomata with cream-colored tomentum, bird's eye view. 2. Young doliform ascomata with cream-colored tomentum, side view.



3 & 4. Younger & older ascomata – with, disappearing & without tomentum. Partial side views. (Photo 4 is a closeup of 3.)

***Bombardia bombarda* – Facesoffungi number: FoF 10016**

Bombardia bombarda (Batsch) J. Schröt., in Cohn, Krypt.-Fl. Schlesien (Breslau) 3.2(1–2): 302 (1893)

Basionym: *Sphaeria bombarda* Batsch, Elench. fung. (Halle): 271 (1786)

Index Fungorum number: [IF 119710](#), *MycoBank number:* [MB 119710](#); *Facesoffungi number:* FoF 10016

Saprobic on wood. **Sexual morph:** *Ascomata* 1–1.5 × 0.4–0.8 mm ($\bar{x} = 1.2 \times 0.6$ mm, $n = 5$), perithecial, immersed to semi-immersed, gregarious, oval to subglobose, coriaceous, dark brown to black, glabrous, ostiolate papilla, with 2.5 μm wide periphyses. *Peridium* 75–120 μm ($\bar{x} = 95 \mu\text{m}$, $n = 30$) wide, coriaceous, comprising four layers, outer layer composed of amorphous brown to black material; middle layer composed of hyaline to brown cells of *textura intricata*, and dark brown, strongly tight cells of *textura angularis*; inner layer composed of pale brown to hyaline cells of *textura prismatica*. *Paraphyses* 2–3 μm wide, filiform, septate, evanescent. *Asci* (180–)200–260(–310) × 10–15 μm ($\bar{x} = 230 \times 12 \mu\text{m}$, $n = 30$), 8-spored, unitunicate, ellipsoidal to cylindrical, pedicellate, apex rounded, with apical globule, evanescent. *Ascospores* biserrate, hyaline and cylindrical when young, upper cell becoming swollen to fusiform, brown, (10–)12–15 × 5–10 μm ($\bar{x} = 13.5 \times 8 \mu\text{m}$, $n = 50$), with an apical germ pore, sometimes with a tiny, hyaline, inconspicuous decoration on the apex; lower cell cylindrical, hyaline, (20–)24–30 × 3.5–6 μm ($\bar{x} = 26 \times 4.5 \mu\text{m}$, $n = 50$), smooth-walled, guttulate, with a terminal conical appendage at the base, evanescent. **Asexual morph:** Undetermined.

Material examined: Italy, Veneto, Treviso, Cansiglio, on dead trunks of *Fagus*, October 1874, P.A. Saccardo (S-F750); Ukraine, Lvivska oblast, Stryi, riverbank near Wierzany, on stems of *Alnus*, 28 October 1916, F. Petrak (S-F753).

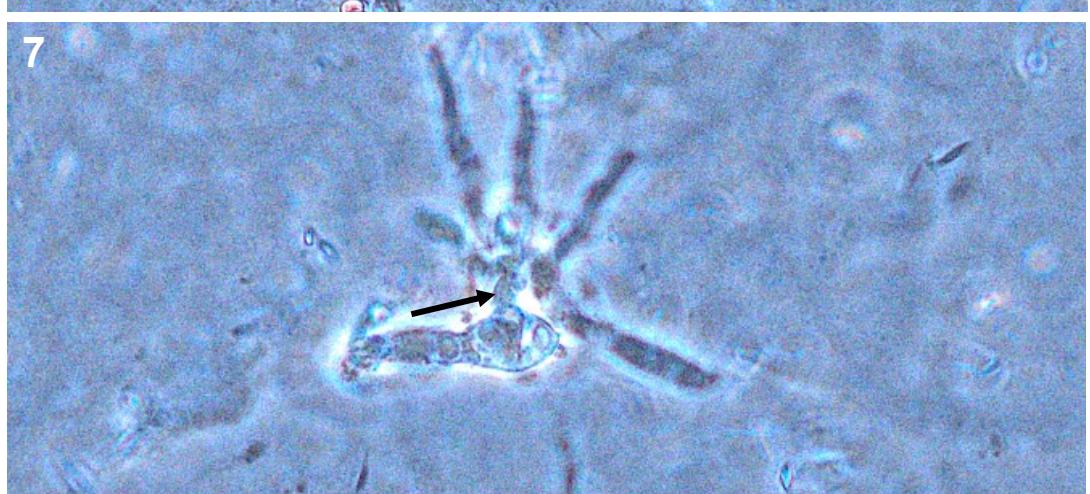
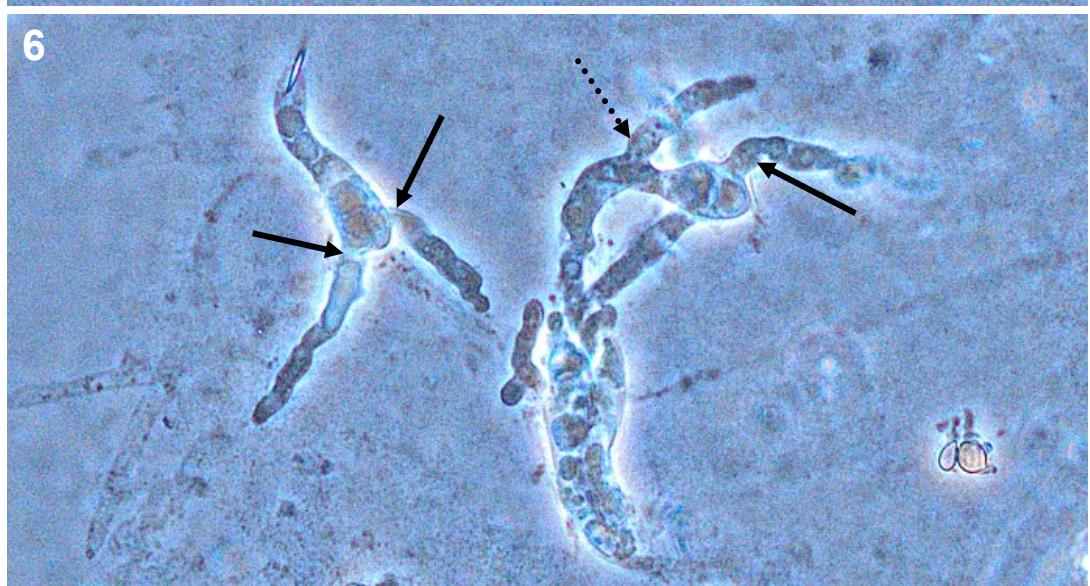
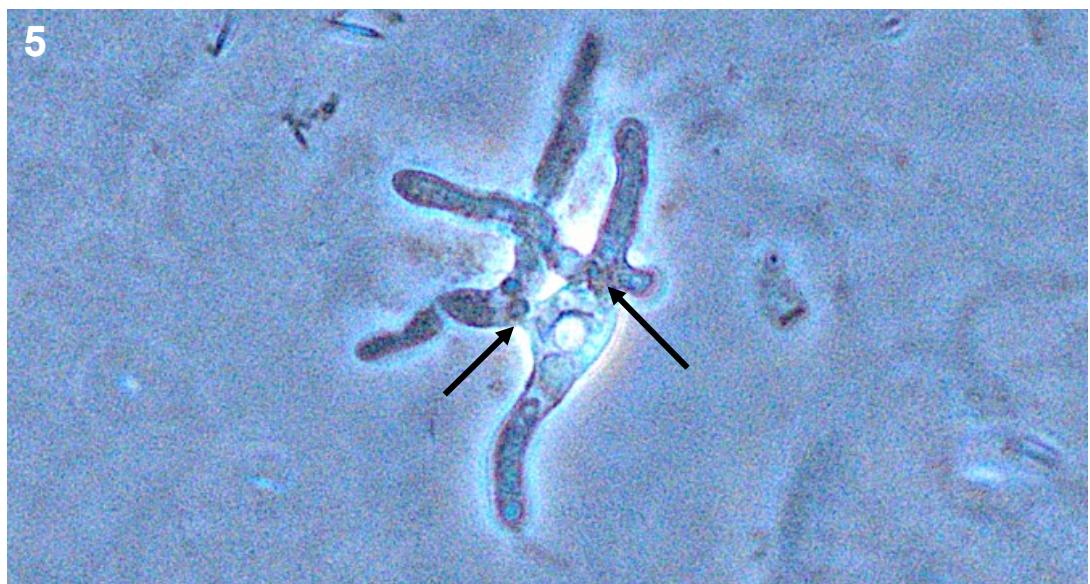
Known hosts and distribution: On dead, decorticated wood in Germany (type locality) (Saccardo 1882); on dead wood in Belgium, Denmark, England, Finland, France, Germany, Hungary, Italy, New Zealand, Poland, Russia, Sweden, UK, Ukraine and USA (Lundqvist 1972; Miller and Huhndorf 2005).

Notes: We re-examined authentic materials of *Bombardia bombarda*, F750 and F753, collected by Saccardo and Petrak, respectively. The molecular data of *B. bombarda* were provided (Miller and Huhndorf 2005; Spatafora et al. 2006), and in this study, *B. bombarda* (SMH4821) is sister to *Bombardioidea anartia* (HHB99-1) (100% ML/1.00PP, Fig. 26).

Also worth noting are the figures on the next page that accompanied the above description. The gradual development of ascospores shown left to right at the bottom culminates in the dark pigmentation of the ellipsoid apical cell. This latter dark pigmentation feature was not observed in AEB 1008.



Fig. 2. *Bombardia bombarda*: a, b, d, g–i, m–p (S-F750); c, e, f, j–l, q–t (S-F753). **a** Herbarium material. **b, c** Ascomata on host. **d, e** Ascoma in cross-section. **f** Ostiole with periphyses. **g** Peridium. **h–l** Ascospores. **m–t** Ascospores. Scale bars: b–c = 1 mm, d–e = 200 μ m, f = 100 μ m, g = 50 μ m, m–t = 20 μ m



5–7. Photos taken 7 Dec. 2025 from Ann's 1 May 2007 SMF slide containing germinating ascospores (and bacteria). She had inoculated Potato Carrot Agar only 24-hours earlier with ascospores exuding from the ostiole of a fresh ascoma. Note germ tubes emerging from the ellipsoid apical cell (solid black arrows) & those emerging from the pedicel or lower cell (dotted black arrow).