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A NEW HYPHOMYCETE FROM NORTHUMBERLAND

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ABSTRACT. *Bloxamia sanctae-insulae* Coppins & Minter is described from Holy Island, Northumberland, and characters distinguishing it from the other species of the genus are briefly considered.

During a recent visit to Holy Island off the Northumberland coast, the species described below was collected.

Bloxamia sanctae-insulae Coppins & Minter, **sp. nov.** Fig. 1.

Conidiomata sunt sporodochialia, superficialia, sparsa, elliptica vel formae et magnitudinis respectu variabilia, nonnumquam confluentia, magnitudinem interdum attingentia paene 1500 × 750 μm. Statu udo pulvinata sunt et nigrescenti-brunnea; sicco autem statu nigra vel griseo-nigra sunt et contracta, plana atque corneola tactu. Cum in sectione verticali videntur, habent quaeque stroma in fundamentum quod altitudinem habet circa 10–20 μm in centro conidiomatis, et in extremis circa 5–10 μm, et ex cellulis 2–5 μm diam. compositum est quae texturam fingunt globulosam vel aliquid angularem. In inferiore parte stroma est brunneum, sed ad apicem pallidior et gradatim hyalinum fit. Cellulae stromatis cum desuper scrutantur texturam intricatam radiantem fingunt. Conidiophori ad cellulas conidiogenas singulas restricti sunt. Cellulae conidiogenae ex stromatis superficie statim stipatae exoriuntur; sunt discretae, terminales, monophialidicae, determinatae et leves; ventrum quaeque habent cylindricum, pallide brunneum vel hyalinum, 10–14 × 1·5–2·5 μm qui primum in collo angusto circa 0·5 μm lat. fastigatur, dein latiorem in collarettam cylindricam, brunneam 5–7 × 1·5–2·5 μm sese porrigit. Conidia endogena, catenata, hyalina, aseptata, levia, globosa vel cum minutissimo hilo, circa 2 μm diam. sunt.

In ligno trunci sine cortice arboris ignotae nonihil in harena immersi, in regione anglice 'The Links' vocata, Holy Island, Northumberland, leg. *B. J. Coppins*, 10 iv 1979, in herb. E, holotypus.

Conidiomata sporodochial, superficial, scattered, elliptical or variable in shape and size, sometimes confluent, occasionally reaching 1500 × 750 μm in size, when wet pulvinate and blackish brown, but when dry black or greyish black and shrunken, flat and horny to the touch. When examined in vertical section, the conidiomata each have a basal stroma about 10–20 μm deep in the centre of the conidioma, and about 5–10 μm deep at the edges, composed of cells 2–5 μm diam. which form a globose or somewhat angular texture. In its lower part the stroma is brown, becoming paler, gradually hyaline towards the top. When the cells of the stroma are examined from above they form a radiating intricate texture. Conidiophores limited to single conidiogenous cells. Conidiogenous cells arising thickly packed from the stroma surface, discrete, terminal, monophialidic, determinate and

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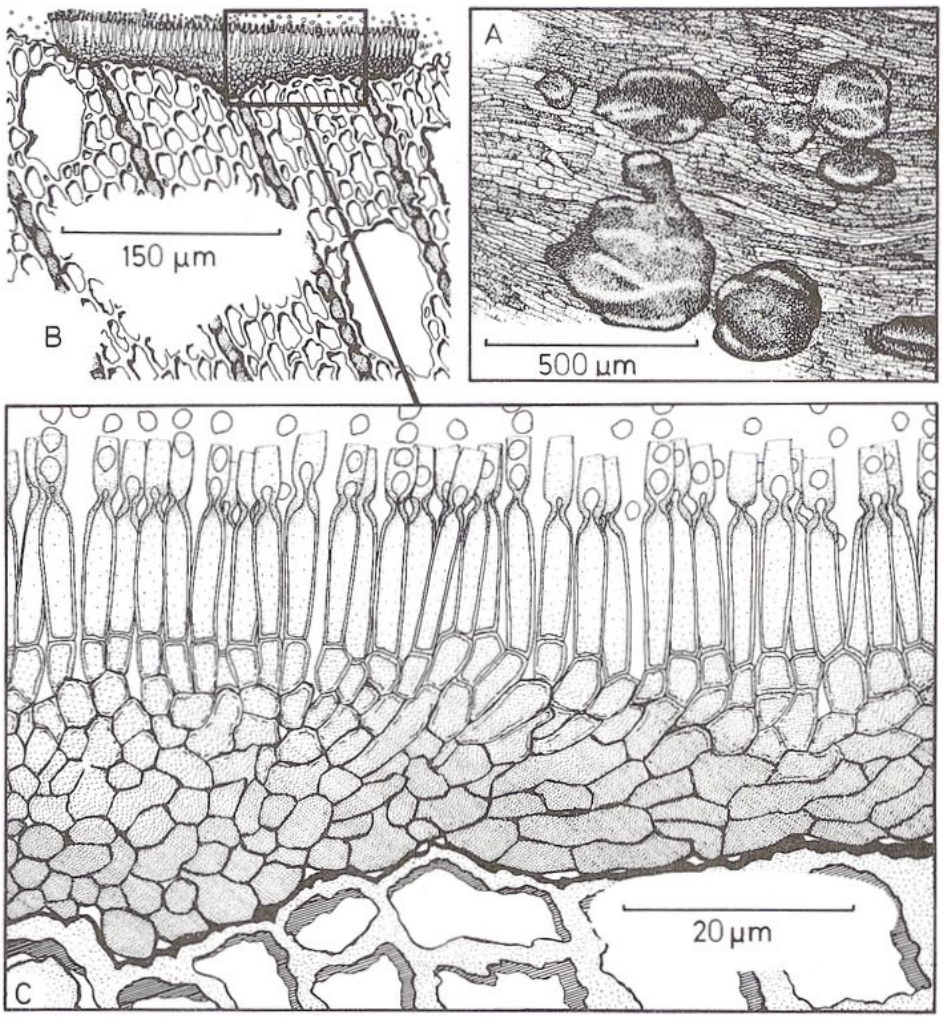

FIG. 1. *Bloxamia sanctae-insulae*. A, surface view of sporodochia on lignum; B, vertical section of sporodochium; C, vertical section of sporodochium showing detail of stromatic tissue, conidiogenous cells and conidia. From the holotype.

smooth, each with a cylindrical, pale brown to hyaline venter 10–14 × 1·5–2·5 µm which is tapered into a narrow neck about 0·5 µm wide, then extending into a broader, cylindrical, brown collarette 5–7 × 1·5–2·5 µm. Conidia endogenous, catenate, hyaline, aseptate, smooth, globose or with a very small hilum, about 2 µm diam.

In the most recent monograph of *Bloxamia* (Nag Raj & Kendrick, 1975) two species (*B. nilagirica* (Subram.) Nag Raj & Kendrick and *B. truncata* Berk. & Br.) are recognised. *Bloxamia nilagirica* is known only from India and cannot be confused with *B. sanctae-insulae* because it forms synnemata. *Bloxamia truncata*, the type of the genus, differs in having more or less cubic conidia produced from phialides whose collarettes are not constricted at the junction with the venter. Minter & Holubová-Jechová (1980) have recently described a third species, *B. bohemica* from Czechoslovakia on rotting needles of *Pinus sylvestris* L. The authors also

cited a collection from Scotland. *Bloxamia bohemica* differs from *B. sanctae-insulae* in the colour of the colony when wet and sometimes also when dry, and in the spore masses above the sporodochia being amber or greenish. Its conidia are cylindrical and biguttulate, 3·5–5·5 × 1 μm, and arise from phialides which taper gradually into a brown, cylindrical collarette with no constriction.

References

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