

***RICKIA LABOULBENIOIDES* DE KESEL (LABOULBENIALES) ON *CYLINDROIULUS BRITANNICUS* (VERHOEFF) (JULIDA: JULIDAE)****Malcolm Storey**

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*Rickia laboulbenioides* is the only laboulbeniomycete fungus recorded from millipedes in the British Isles (Wier, 1996) where it was long misidentified as *Rickia dendroiuli* (de Kesel *et al.*, 2013; as reported in Enghoff & Reboleira, 2015).

In the UK the fungus is mainly found on *Cylindroiulus punctatus* (Leach) (Figs. 1A, 1B), but was originally described from *C. latestriatus* (Curtis) in the Netherlands (de Kesel *et al.*, 2013). The tiny thalli (technically ascomata/ascocarps; fruitbodies) appear on the first few legs, especially the second pair (de Kesel *et al.*, 2013; Santamaria, *et al.* 2016) but are by no means confined to these.



**Figure 1: *Cylindroiulus punctatus*.**

A) Ascocarps (thalli) on anterior legs of male; B) The clubbed telson of the above specimen confirming *Cylindroiulus punctatus*.

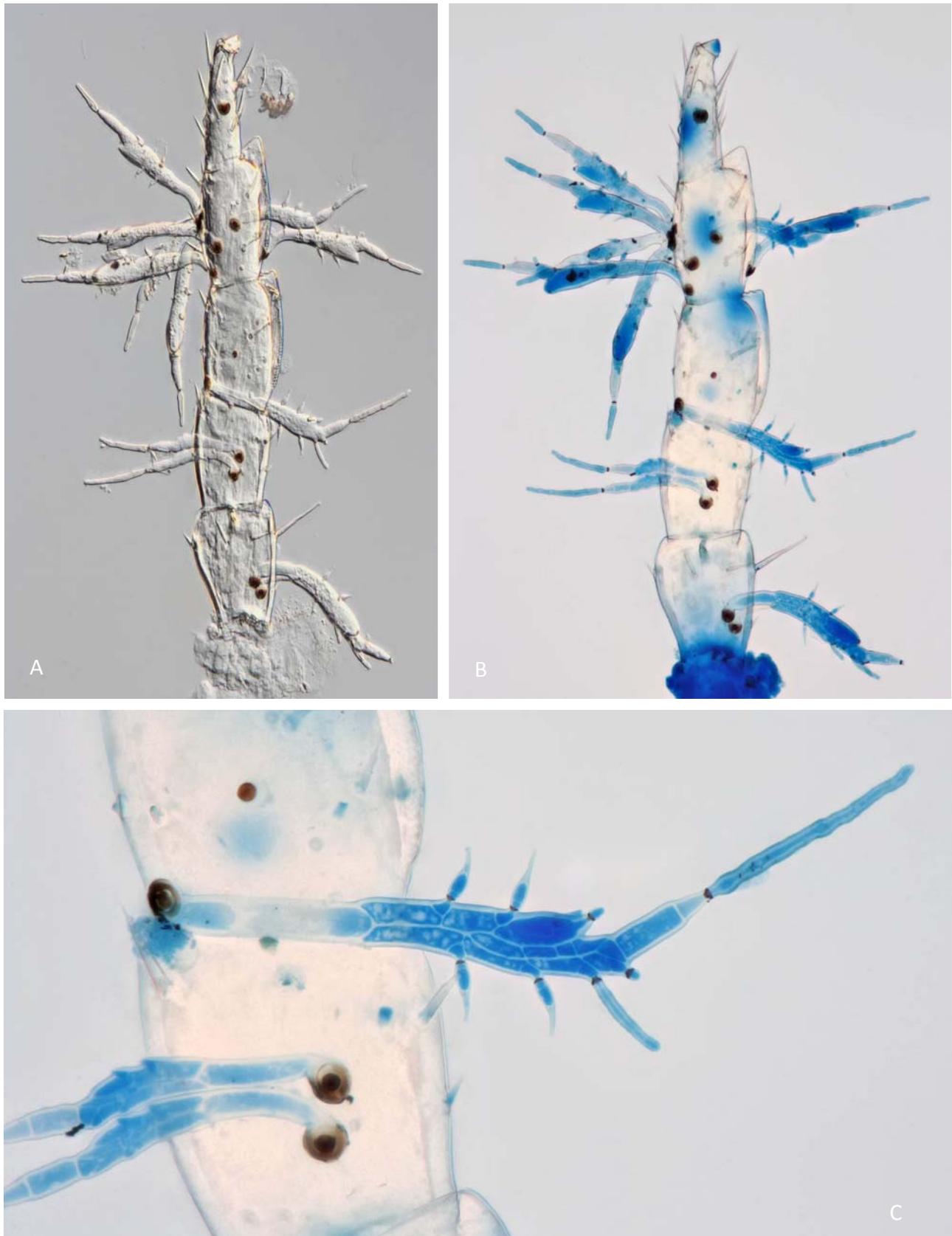
On 6<sup>th</sup> October 2017 I found a single *Cylindroiulus* millipede, under a piece of fallen wood at SU410023, by Exbury Road, New Forest, South Hants. Laboulbeniomycete thalli could be seen on the fore legs under the 20x hand lens (Fig. 2A). At the time the host was assumed to be *Cylindroiulus punctatus*, but this was corrected to *Cylindroiulus britannicus* (Verhoeff) by Steve Gregory when he saw my photographs. It was a male and I've since dissected the specimen to confirm (Fig. 2B). The immature thalli on this specimen are shown in Figs. 3A-C.

There's one previous probable record on this host, an unidentified Laboulbeniales reported by Irwin (1989), (cited in Gregory *et al.*, 2018 who also provide the full host list). However, this is the first confirmed record of *Rickia laboulbenioides* using *Cylindroiulus britannicus* as a host.



**Figure 2: *Cylindroiulus britannicus*.**

A) Thalli on anterior legs, dry. (Stack of 83 frames using Zerene Stacker); B) Dissection confirming identification, dry. (Stack of 109 frames using Zerene Stacker).



**Figure 3: Immature thalli on leg of *Cylindroiulus britannicus*, microscope preparations.**

A) Decalcified in lactophenol, differential interference contrast (DIC); B) and C) Stained and decalcified in lactophenol cotton blue. All images stacked using Zerene Stacker and colour of excess stain digitally removed.

All photos online at:

[https://www.bioimages.org.uk/html/Rickia\\_laboulbenioides.htm](https://www.bioimages.org.uk/html/Rickia_laboulbenioides.htm)

[https://www.bioimages.org.uk/html/Cylindroiulus\\_britannicus.htm](https://www.bioimages.org.uk/html/Cylindroiulus_britannicus.htm)

[https://www.bioimages.org.uk/html/Cylindroiulus\\_punctatus.htm](https://www.bioimages.org.uk/html/Cylindroiulus_punctatus.htm)

## ACKNOWLEDGMENTS

Thanks to Henrik Enghoff for confirming the identification of *Rickia laboulbenioides* and pointing out that the thalli are immature. Thanks also to Steve Gregory for correcting my hasty identification of the millipede and tutoring me through the dissection.

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