

Short communication

Chaetoscypha Syd. reassessed

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Abstract This note proposes the recombination of *Chaetoscypha nidulans* in *Pirottaea*, and places *Pirottaea falcata* in synonymy with that species. As *C. nidulans* is the type species of *Chaetoscypha* Syd. 1924, this genus is now a synonym of *Pirottaea* Sacc. 1878.

Keywords *Pirottaea*; Hyaloscyphaceae; New Zealand; fungi; taxonomy

INTRODUCTION

Sydow (1924) described the genus *Chaetoscypha*, with the New Zealand fungus *C. nidulans* Syd. as the type species. No further species have been added to the genus, and its position remains uncertain. Kirk et al. (2001) considered that it may be a synonym of *Lachnum* Retz., possibly following Sydow's suggestion that this species belonged in his higher taxonomic group "Dasyscyphearum", a group similar in concept to the modern Hyaloscyphaceae. *Chaetoscypha nidulans* was described from a single collection made from fallen leaves of the alpine tree-daisy *Olearia colensoi*. *C. nidulans* develops within the tomentum on the lower leaf surface, a feature well developed on *O. colensoi* and many other New Zealand alpine Asteraceae.

Johnston (1998) described *Pirottaea falcata* from the leaf tomentum of Asteraceae in New Zealand (from species of both *Olearia* and *Celmisia*). The descriptions and illustrations of Johnston (1998; Fig. 1) and Sydow (1924; Fig. 2) clearly represent the same fungus, characterised by small apothecia with a short, stipe-like base, and sickle-shaped setae, embedded within the leaf tomentum on the undersides of leaves of Asteraceae. The ascospore sizes given in Sydow's (1924) description are slightly longer and narrower than those given by Johnston (1998). This may reflect differences in mounting media used in the studies, or could reflect differences in the level of maturity of the material examined. Johnston (1988) saw ascospores only within the asci, possibly indicating that the material examined was slightly immature.

The type specimen of *Chaetoscypha nidulans* was not able to be examined. Although listed in the PDD herbarium catalogue, the type specimen of *C. nidulans* was noted as missing from PDD by McKenzie et al. (1992). Duplicates of this specimen are not present in either of the European herbaria with major Sydow holdings, S and W.

Sydow (1924) considered that *C. nidulans* could not be placed in the genus *Pirottaea* Sacc. because of what he described as a prosenchymatous excipulum, in contrast to the parenchymatous excipulum that he considered characteristic of *Pirottaea*. The illustrations of Johnston (1998; Fig. 1) show that the excipular structure in fact appears to match *Pirottaea* well, although the excipulum is extremely reduced (in places the ectal excipular layer being a single cell wide), and there is a poorly developed outer layer comprising meandering hyphae across the surface of the receptacle. The dark, thick-walled setae are quite unlike the hair-like elements characteristic of Hyaloscyphaceae. *Chaetoscypha* was not treated by Nannfeldt (1932, 1985) in his detailed treatments of *Pirottaea* and related genera.

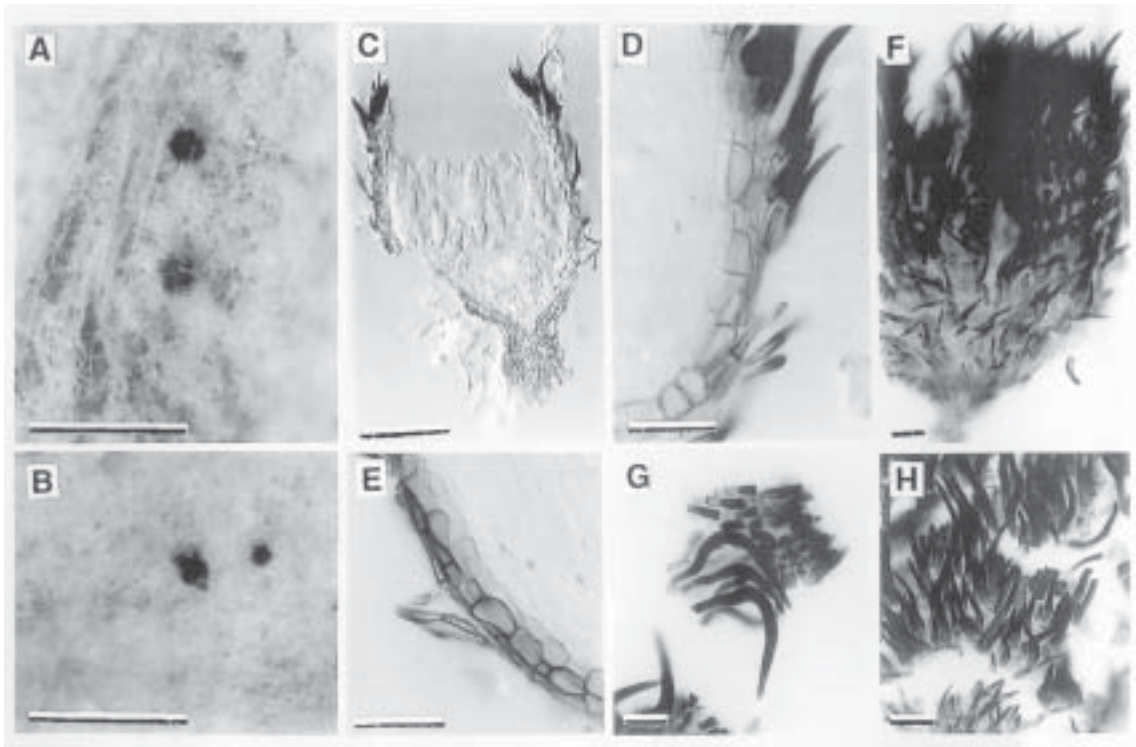
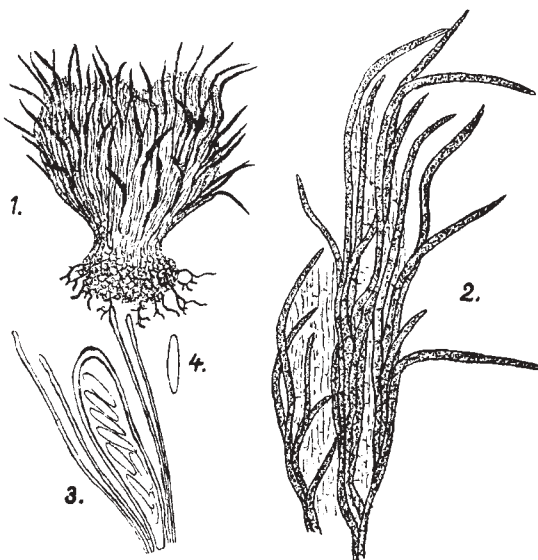


Fig. 1 *Pirottaea falcata* as illustrated by Johnston (1998). (Original caption: Fig. 1 *Pirottaea falcata* (A–F, H, PDD 62688; G, PDD 49112.) A, apothecia; B, apothecium dislodged and lying on leaf tomentum, showing short stipe; C, apothecium in vertical section; D, margin of apothecium in vertical section showing brick-shaped excipular cells and setae; E, margin of apothecium in vertical section showing outer excipular layer of narrow, cylindric cells; F, arrangement of setae on receptacle; G, sickle-shaped setae near apothecial margin; H, setae near base of receptacle. Scale bars: A, B = 1 mm, C = 50 μ m, D–H = 20 μ m.



TAXONOMIC TREATMENT

Pirottaea nidulans (Syd.) P.R.Johnst., comb. nov.

\equiv *Chaetoscypha nidulans* Syd., *Annales Mycologici* 22, 305 (1924).

= *Pirottaea falcata* P.R.Johnst., *New Zealand Journal of Botany* 36, 645 (1998).

As *Chaetoscypha nidulans* is the type (and only) species of *Chaetoscypha* Syd. 1924, this genus is now a synonym of *Pirottaea* Sacc. 1878.

Fig. 2 *Chaetoscypha nidulans* as illustrated by Sydow (1924). (Original caption: Fig. 2. *Chaetoscypha nidulans* Syd. 1. Seitenansicht eines Apotheziums. Vergr. 70:1.; 2. Teil der Wandung desselben. Vergr. 260:1.; 3. Schlauch mit Paraphysen. Vergr. 260:1.; 4. Spore. Vergr. 260:1.)

ACKNOWLEDGMENTS

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