

**Anisothecium staphylinum (Whitehouse) Sipman,  
Rubers & Riemann comb. nov. found in Belgium, Denmark  
and the Netherlands,  
with a remark on its costal anatomy**

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Abstract. *Dicranella staphylina* WHITEHOUSE, a species recently described from Great Britain, is now recorded from Belgium, Denmark and The Netherlands. A new combination, *Anisothecium staphylinum* (WHITEHOUSE) SIPMAN, RUBERS & RIEMANN, is proposed. A study of the costal anatomy revealed that *A. staphylinum* in this respect most resembles *A. rufescens*.

Резюме. *Anisothecium staphylinum* (WHITEHOUSE) SIPMAN, RUBERS и RIEMANN comb. nov. доказан в Бельгии, Дании и Голландии. Обсуждаются характеры в жилке листа.

*Dicranella staphylina*, a moss species with tubers, was recently described from Great Britain by WHITEHOUSE (1969). It closely resembles *Anisothecium varium* and *A. rufescens* but differs a.o. from the former by its wider cells. From the latter it differs by its tubers which are composed of more than two cells. It might have been overlooked, for in England it soon proved to be common on open, neutrophilous, loamy sites in pastures, roadsides, fallow fields etc., especially on disturbed soil.

Afterwards, NEU (1970) found it to be common in Münsterland (Germany). Now the species is recorded from Belgium, Denmark and The Netherlands. Once recognized, *Dicranella staphylina* proved to be very common in all the regions investigated by the authors, for instance in Denmark between True and Randrup, in Belgium near Durbuy and in The Netherlands near Utrecht, Culemborg and Sittard. In The Netherlands the species has proved to be common along the great rivers

("fluviatiel district") and in the south-east ("löss- and krijt-district"), but it is perhaps less so in the other parts.

Bryophytes, with which *Dicranella staphylina* is commonly associated in these countries, include *Barbula unguiculata*, *Bryum rubens*, *Pottia truncata*, *Phascum cuspidatum*, *Physcomitrium pyriforme* and *Anisothecium schreberianum*. It is remarkable that several of the associated species possess tubers too.

WHITEHOUSE (1969) indicates that the most closely related species are *Dicranella varia* and *D. rufescens*. These belong to a group which is often regarded as a separate genus, for instance in the Index Muscorum (VAN DER WIJK et al. 1959) and by VAN DER WIJK (1962). In accordance with this taxonomic point of view, the authors herewith propose the new combination *Anisothecium staphylinum* (WHITEHOUSE) SIPMAN, RUBERS & RIEMANN (*Dicranella staphylina* WHITEHOUSE 1969 in Trans. Brit. Bryol. Soc. 5: 759).

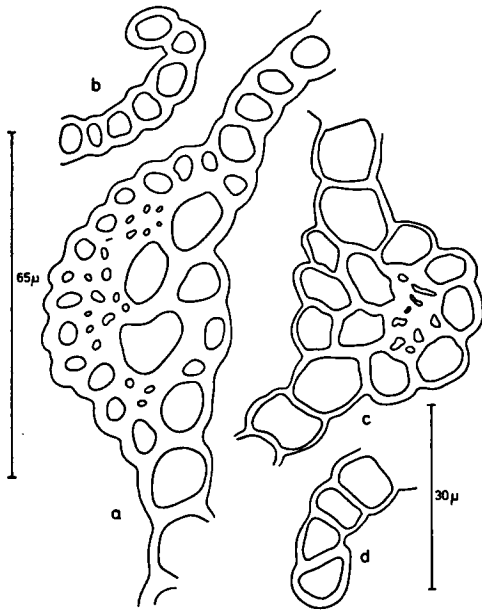


Fig. 1. a, b: *Anisothecium varium*, leg. NANNENGA-BREMEKAMP 1370B (U); c, d: *A. staphylinum*, leg. CRUNDWELL & NYHOLM 66-79 (U). - a, c: Cross sections of costae; b, d: Cross sections of leaf margins.

Examination of the costal anatomy in several species of *Anisothecium* has shown that *A. staphylinum* is in this respect more like *A. rufescens* than *A. varium*. The observations are based on the study of four different collections of each species. In *A. varium* the costa in transverse section showed a ventral layer of large, thin walled cells and a broad, flat strand of stereidiform cells dorsally, see fig. 1a. In *A. rufescens*, on the contrary, the costa is composed of an outer ring of large, thin walled cells surrounding a central strand of stereidiform cells. The same structure is present in *A. staphylinum* (fig. 1c).

It is amazing that such a widespread and apparently common species had been overlooked hitherto. A study of the described infraspecific taxa in *Anisothecium varium* might be rewarding for finding an older name for *Anisothecium staphylinum*.

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**BELGIUM.** Luxembourg. Durbuy, pasture along the Ourthe, with *Pleuridium subulatum*, *Ephemerum minutissimum*, *Bryum micro-erythrocarpum*, RUBERS 2452, 1972 (U). Durbuy, arable field, RUBERS 2470, 1972 (U).

**DENMARK.** Aarhus, near Botanical Institute, RIEMANN, 1971. Moesgaard, 7 km. S. of Aarhus, on arable field, RIEMANN, 1971. Marselisborg forest, behind "Skovmøllen", RIEMANN, 1971. Between True and Randrup (distr. 13b), in fields, RIEMANN, 1971.

**THE NETHERLANDS.** Gelderland. Culemborg, outside and inside the dikes, RUBERS, 1972 (U). Driel, near the Rhine bridge, MULLER 09428, det. A. TOUW, 1971. Druten, pit outside the dike, MULLER 09259, 1971, det. A. TOUW. Gendt, pit outside the dike, TOUW 13250, 1972 (L), det. A. TOUW. - Utrecht. Fort Vechten, SE of Utrecht, SIPMAN 5148, 1972 (SIPMAN). Utrecht, Johannapolder, SIPMAN 5187, 1972 (SIPMAN). Utrecht, Galgenwaard, RUBERS, 1971 (U). - Limburg. Meerssen, pasture along the Geul, GRADSTEIN et al. 1, 1970 (U). Schinnen, fallow field, SIPMAN 3447, 1971 (SIPMAN). Sittard, arable field on the Kolleberg, SIPMAN 5180, 1972 (GRO, L, U). Sittard, pit at the Lahrweg, SIPMAN 5176, 1972 (SIPMAN).

The collection of GRADSTEIN et al. is mentioned in Lindbergia 1: 96 (1971) sub *Anisothecium varium*.

## Literature

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