BRIEF COMMUNICATION

A SECOND RECORDING OF FOSSIL HELODIUM BLANDOWII (WEB. & MOHR) WARNST. (MUSCI) IN THE NETHERLANDS

J. WIEGERS

Hugo de Vries-Laboratorium, Sarphatistraat 221, 1018 BX Amsterdam

Helodium blandowii (Web. & Mohr) Warnst. (Musci, Thuidiaceae) has been wide-spread in Europe in post-glacial times (HERZOG 1926). Due to draining and reclamation of peatlands the species disappeared in the last 150 years from its known localities in The Netherlands (MARGADANT & DURING 1982) and Great Britain (DICKSON 1973, SMITH 1978). In Belgium only recordings are known from before 1900 (MATHIEU 1853, WILDEMAN & DURAND 1898). Recent sites of the species are unknown in this country (pers. comm. H. Stieperaere). A few branches and many detached leaves of this species were found in a sample from the bottom of a 12th century artificial well near Dommelen (N.Brabant) (fig. 1). The other species found in this sample (both bryophytes and seeds of higher plants, sample number 10202, Instittuut voor Pre- en Protohistorie, Amsterdam) present a mixture of cultivated and wild plant species with totally different ecological preferences. The most frequent species (each more than 10 percent of the total number of seeds) are Chenopodium album, Juncus bufonius s.l., Rumex acetosella and Spergula arvensis. From the composition of the sample no inferences can be made about the vegetation in which Helodium blandowii has occurred.

The locality at Dommelen is in the Dutch Kempen district. In the adjacent part of this district in Belgium the species might also have occurred (Herzog 1926). In The Netherlands *Helodium blandowii* was gathered in 1859 at two sites in Drenthe (Nederlandsche Botanische Vereeniging 1893). The only record of this species as a fossil in The Netherlands was given by Landwehr (1949) in peat from the Dutch Haf district. The material referred to by Meijer (1950) is obviously the same as described by Landwehr (1949).

Although not all the species from which macro-remains were found in this sample will have grown in the immediate vicinity of the well and long-distance transport cannot be excluded completely, it seems very well possible that this species of minerotrophic mires (LANDWEHR 1974) has occurred in the margins of the vast peatlands in this area.

490 J. WIEGERS

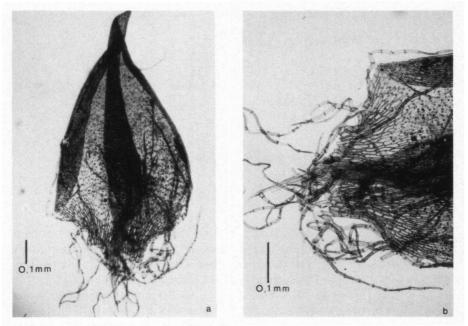


Fig. 1. Helodium blandowii (Web. & Mohr) Warnst.

- a. Dorsal view of stem leaf
- b. Leaf base, showing multicellular, branched paraphyllia.

ACKNOWLEDGEMENTS

Thanks are due to H. Eland for placing the bryophyte material and other data concerning the sample at my disposal.

REFERENCES

DICKSON, J. H. (1973): Bryophytes of the Pleistocene. University Press, Cambridge.

HERZOG, T. (1926): Geographie der Moose. Fischer, Jena.

LANDWEHR, J. (1949): Bladzijden uit een oud boek. Natura 46: 142-146.

- (1974): Atlas van de Nederlandse Bladmossen, 2nd ed. K.N.N.V., Amsterdam.

MARGADANT, W. D. & H. J. DURING (1982): Beknopte Flora van de Nederlandse Blad- en Levermossen. Thieme, Zutphen.

MATHIEU, C. (1853): Flore générale de Belgique, II. Muquardt, Bruxelles.

Meijer, W. (1950): Over de waarde van de bryologie bij het onderzoek van subfossiele veenlagen. Buxbaumia 4(1): 13-15.

Nederlandsche Botanische Vereeniging (1893): Prodromus Florae Batavae, II. 1. Macdonald, Nijmegen.

SMITH, A. J. E. (1978): The Moss Flora of Britain and Ireland. University Press, Cambridge.

WILDEMAN, E. DE & TH. DURAND (1898): Prodrome de la Flore Belge, II. Castaigne, Bruxelles.