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## ***Porella platyphylla* (L.) Pfeiff. (*Hepaticophyta, Porellaceae*) in the Białowieża Primeval Forest (Poland)**

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*Porella platyphylla* (L.) Pfeiff. (*Hepaticae: Porellaceae*) in the Białowieża Primeval Forest (Poland). – *Čas. Slez. Muz. Opava (A)*, 52: xx-xx, 2003.

Abstract: In September of 2003 two new abundant localities of *Porella platyphylla* were found in the Białowieża Primeval Forest. In this area is the species of liverwort very rare known; it was reported only from one place in the 19th century. Details of the new observed localities and description of habitats are given.

Keywords: *Porella platyphylla*, Bryophyta, liverwort, threatened species, Białowieża National Park, Białowieża Primeval Forest, Poland

### **Introduction**

The Białowieża Primeval Forest (=Puszcza Białowieska) is a large forest complex located in the NE part of Poland. The part with the best-preserved forest communities of the Middle Europe Lowland, mainly linden-oak-hornbeam forest *Tilio-Carpinetum*, bog-alder forest *Carici elongatae-Alnetum*, mixed forest *Pino-Quercetum* and ash-alder flood plain forest *Circaeo-Alnetum*, is protected as a Białowieża National Park. The liverwort flora of the Białowieża Primeval Forest is well known. Until 2003 year 71 species have been reported from this area (Klama 2002). One of the most interesting species is *Porella platyphylla*, which was reported from Białowieża Primeval Forest (part called Lada Forest) only once (Błoński, Drymer 1889). Despite over 100-year-long exploration taking place in this area, including some specialist investigations into epiphytic and epixylous vegetation (Wiśniewski 1929, Hackiewicz-Dubowska 1936, Mickiewicz & Trocewicz 1958), any new locality hasn't been found (Klama 2002).

### **Notes about distribution and ecology of *Porella platyphylla* in Poland**

*Porella platyphylla* (L.) Pfeiff is the most common species of the *Porella* genus in Poland. Its stations are known from the almost whole Poland (Szweykowski 1958). The species occurs mainly on bark of deciduous trees and limestone rocks, rarely on logs and sandstone rocks. It is sensitive to air pollution and intensive forest management, that's why on large part of Poland its localities have vanished. At the present it is quite frequent species only in calcareous areas, where it grows on limestone rocks, for example on the Wyżyna Krakowsko-Częstochowska Upland in southern Poland. *P. platyphylla* was placed on the "Red list of threatened liverworts in Poland" (Szweykowski 1992).

### **New localities**

During the bryological workshop in 'Białowieża 2003' surprisingly new localities of *Porella platyphylla* were found. The locations of the stations are drawn in map. 1 (see below).

1. Białowieża National Park; forest section No. 373. *Porella platyphylla* grows in abundance together with *Anomodon viticulosus*, *Neckera complanata*, *N. pennata* and other epiphytic species on trunks of two old maples *Acer platanoides* occurring in patches of linden-oak-hornbeam forest *Tilio-Carpinetum* (leg. A. Stebel, 11th of September 2003, SOSN).
2. Białowieża Primeval Forest; Forest section No. 450. The liverwort was found on trunks of maples *Acer platanoides*, hornbeams *Carpinus betulus*, linden *Tilia cordata* (one time) and log of *Carpinus betulus* in patches of *Tilio-Carpinetum* near yellow tourist track (leg. A. Stebel, 12th of September 2003, SOSN; leg. H. Klama, 12th of September 2003, personal herbarium HK; leg. S. Wierzcholska et V. Plášek, 12th of September 2003, OP and personal herbarium SW; not. B. Fojcik, P. Górski, J. Żarnowiec). *Porella platyphylla* was associated with other epiphytic bryophytes such as *Anomodon viticulosus*, *Hypnum cupressiforme*, *Metzgeria furcata*, *Neckera complanata*, *N. pennata* and *Radula complanata*.

At the present it is difficult to explain the occurrence such abundant populations of *Porella platyphylla* on the bryologically well known area. It is rather impossible that earlier bryologists overlooked this evident species. Further detailed investigations are necessary to solve this problem.

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### ***Porella platyphylla* (L.) Pfeiff. (*Hepaticophyta*, *Porellaceae*) v Białowieżském pralesie (Polsko)**

Ačkoliv výzkum jätrovek v pralesní vegetaci Białowiežského národního parku byl v minulých letech velmi intenzívní a aktuální seznam obsahoval 71 druhů (Klama 2002), podařilo se v průběhu bryologického setkání v září 2003 zaznamenat výskyt recentně neznámé jätrovky *Porella platyphylla* (L.) Pfeiff. Tato jätrovka zde nebyla 115 let nalezena. Zajímavá je především značná abundance i dominance populací, které by těžko mohly být přehlednuty při detailním bryologickém průzkumu v minulých letech. Vysvětlení tohoto náhlého výskytu je předmětem dalšího zkoumání.

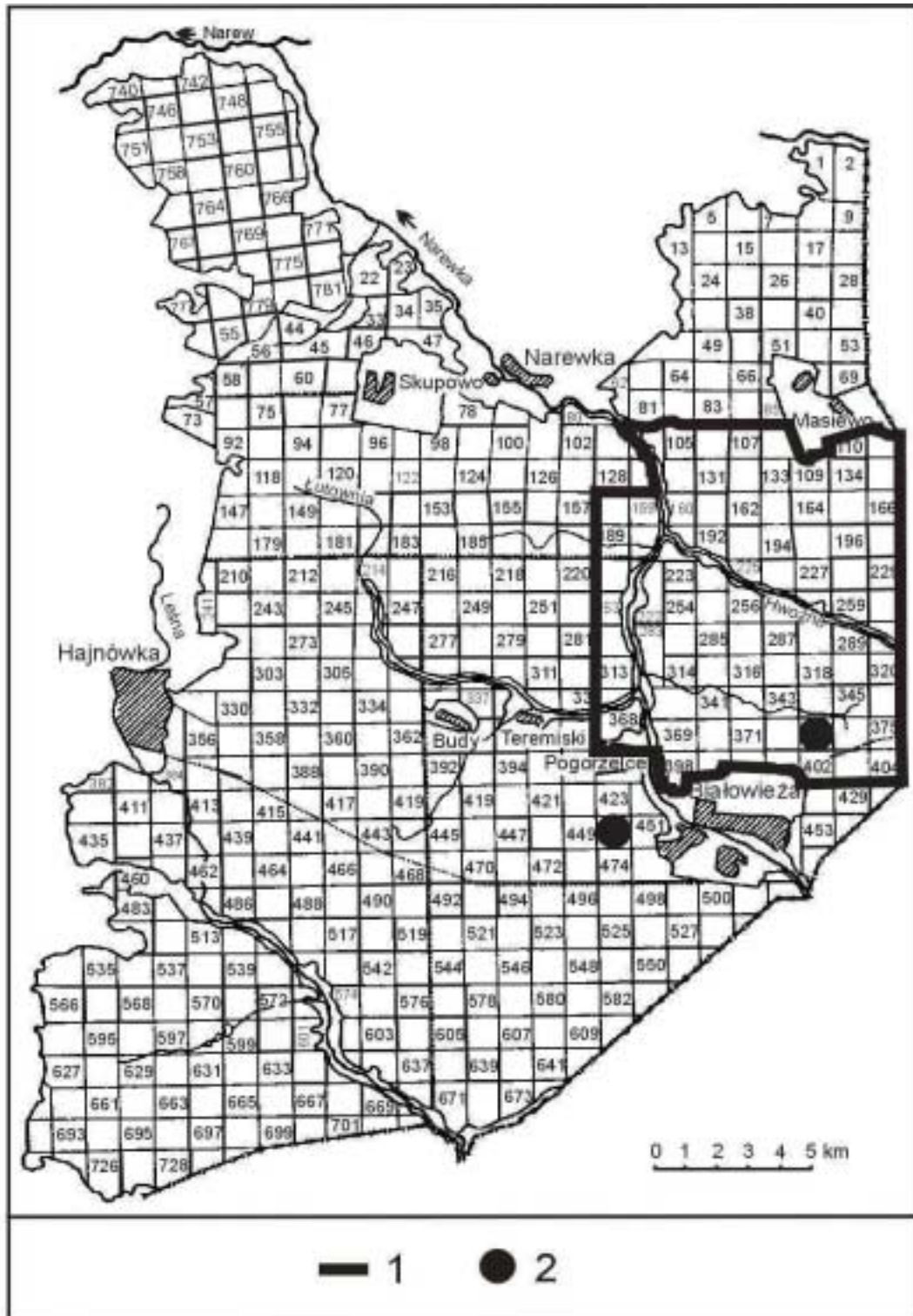
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Map. 1. Map of the Białowieża Primeval Forest.



Explanatory notes: 1 – border of Białowieża National Park, 2 – new localities of *Porella platyphylla*.