Stuttgarter Beitr. Naturk. Ser. A Nr. 456 41-42 Stuttgart, 31. 12. 1990

Lichen Mapping in Poland

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Research on the lichen flora of Poland has started in the beginning of the 19th century. Earliest studies of major significance were made by German lichenologists, e. g. KÖRBER, FLOTOW, STEIN and OHLERT. The first Polish contributors to lichenology in the twenties of this century were MOTYKA, SULMA and KRAWIEC. Until 1950 only a few small regions were covered by detailed descriptions of the lichen flora. A more dynamic development in lichenological studies was initiated by TOBOLEWSKI forty years ago. Although a number of about 20 lichenologists are working in Poland at present, the state of knowledge of the lichen flora of many regions remains insufficient. The lack of data from Central and South-Western Poland is particularly obvious. The best studied areas are situated in the southern, eastern and northern parts of Poland.

Lichen mapping in Poland was started by Tobolewski twenty years ago. Since 1971 9 volumes of the "Atlas of the geographical distribution of spore plants in Poland – series on lichens" were published. The next volume is in press. Each volume comprises distribution maps of ten lichen taxa.

In 1984 the author decided to start work on an "Atlas of the geographical distribution of lichens in Poland" after a long discussion with Prof. TOBOLEWSKI. A grid system of 44 grids of 100 km x 100 km and 3137 grids of 10 km x 10 km was chosen. The central line of this grid system is identical with 19° eastern longitude. This system has been used by botanists of the Institute of Botany at the Polish Academy of Sciences for the mapping of vascular plants for many years. Unfortunately, the grid system adopted does not correlate with the one applied in the "Atlas Flora Europaea" project.

According to the "Preliminary Checklist of Polish lichens" (FALTYNOWICZ, unpubl. manuscript), 1420 lichen taxa have been recorded on the Polish territory until now. About 20% of them have not been recorded again after 1945. Almost all published as well as many unpublished data on Polish localities of lichen taxa have been compiled by the author. Herbarium collections are regarded only to a small extent. Additionally, taxonomical revision of herbarium material dating from the 19th and from the beginning of the 20th century is obligatory. Until now, about 300 distribution maps of lichen taxa in Poland have been prepared.

Although data on the Polish lichen flora have not been completed yet, it can be confirmed that the areas of many lichen species have an eastern boundary on the Polish territory, e. g. subatlantic species as *Buellia aethalea*, *Lecidea erratica*, *Pertusaria hymenea* and *Xanthoparmelia mougeotii*. Furthermore, areas of more than 100 taxa show a distinct gap between the northern part of Poland and the mountains in the south. Examples illustrating this fact are *Umbilicaria deusta*, *Collema flaccidum* and *Mycoblastus affinis*. The reasons for this gap in geographical distribution might be found in postglacial history of vegetation and climate.

The compilation of all obtained data is intended to be completed next year. Obviously, current studies on local lichen floras will result in a supplement and revision of the distribution maps of certain species.

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Digitale Literatur/Digital Literature

Zeitschrift/Journal: Stuttgarter Beiträge Naturkunde Serie A [Biologie]

Jahr/Year: 1990

Band/Volume: 456_A

Autor(en)/Author(s): Faltynowicz Wieslaw

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