

PYRENOMYCETES OF THE POLISH NATIONAL PARKS

by

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Comparative studies have been started on altitudinal distribution and geographical areas of the *Pyrenomycetes*, *Loculoascomycetes* and their anamorphs in relation to the distribution of host-plants. First, detailed mycofloristic investigations have been done, in particular a specific list of fungi for every examined plant association, an exclusive species and so on. Secondly comparative studies of the mycoflora of particular vascular plants which occurred in different plant communities and different climatic and geographic conditions have been carried out.

The aim of the mycosociological investigation was to define changes in the mycoflora of individual plant species which took place while passing from the general area of plant species to the boundary and isolated localities of this species. A registration of fungi occurring in different plant species characterized by a different type of distribution have been started, especially on trees, mountain, alpine, arctic-alpine, boreal and arctic plant species.

The first study (1) is devoted to the distribution and variability in *Diatrypella favacea* which occurs on different trees and scrubs. A new conidial anamorph associated with the perithecial stroma and *D. favacea* subsp. *nespiakii* from *Acer pseudoplatanus* has been described. It is restricted to the forests in the lower montane zones of the Sudeten and Carpathians although the sycamore on which it occurs has a broader range.

A preliminary study of the mycoflora of *Acer pseudoplatanus* (2) has been carried out. Twenty-three species of fungi including some rarely found in Europe — *Petrakia irregularis* and *Melanconiopsis inguinans* have been listed. Recently, a study of one of the Carpathian national parks (3) was published. This study contains descriptions of 133 fungus species, their distribution in Poland, a species list for every examined community with temporarily distinguished exclusive species, and vertical distributions of selected fungus species.

The following alpine species have been distinguished: *Arthrimum luzulae* on *Luzula spadicea*, *Pleospora chrysospora* on *Sempervivum montanum*, *Brunnipila calycioides* on *Juncus trifidus*, *Stagonospora anemones* on *Anemone narcissiflora* and *Pulsatilla alpina*. A mountain species — *Dangeardiella macrospora* on *Athyrium distentifolium*, has been collected. Comparative studies of the mycoflora of *A. pseudoplatanus*, *Fagus sylvatica* and *Sorbus aucuparia* have been carried out. The mycoflora of the investigated trees changed significantly in various plant associations. The differences observed in the altitudinal distribution of some studied fungi compared to the altitudinal distribution of plants show considerable influence of the changing ecological conditions with increasing elevation. At present collections of fungi from Białowiecki National Park are being investigated.

References

1. Chlebicki, A. 1986. Variability in *Diatrypella favacea* in Poland. Trans. Br. mycol. Soc. 86(3): 441-449.
2. Chlebicki, A. (in press) Some ascomycetous fungi or their anamorphs occurring on trees in Poland I. (*Acer pseudoplatanus* L.) Acta Mycol.
3. Chlebicki, A. (in press) The occurrence of *Pyrenomycetes*, *Loculoascomycetes* and their anamorphs in the plant communities of Babia Góra Mountain, Polish Western Carpathians. Acta Mycol.