

# LICHENS OF BIAŁOWIEŻA PRIMEVAL FOREST IN COMPARISON WITH OTHER FOREST COMPLEXES IN NORTH-EASTERN POLAND

## S u m m a r y

The work contains the results of comparative analyses of lichens forest flora derived from the primeval forest complexes situated in north-eastern Poland. Some chosen traits of lichens' flora vary in analysed forest but in spite of differences, from lichenological point of view, they are all very precious forest areas on the Lowland of Central Europe. There are still growing many very rare species which disappeared from other regions or are endangered. In the forests there are about 51% of species which are on the national list of endangered lichens (E). Many of the lichens were found very vigorous which means that there are many good niches for their establishment and maintenance; especially in Białowieża Forest. This forest complex, in spite of some influence of human impact, is characterised by many features that distinguish it from other Polish forest areas and it should be treated as a refuge of forest epiphytic and epixylous lichens. From the lichenological point of view, the Knyszynska,

Augustowska and Borecka Forests are only a little less valuable objects.

The destructive human impact on lichens flora could be observed also in all the forest areas studied. The process of decreasing species diversity, extinction of stenotypic species, impoverishment of epiphytic lichens flora has been noted. A great majority of species from the genera *Usnea* and *Bryoria* are extinct.

Permanent maintenance of many stenotypic species in Białowieża Forest, in the so called group of forest relicts, need the protection of all the area of Białowieża Forest as a National Park. Conservation *in situ* may protect characteristic habitats, in which stenotypic species, especially sensitive for human impact, can find good conditions to live and develop.