SUMMARY

Changes in forest communities and their importance for protection of environmental values of the nature reserve "Dolina Żabnika" (Silesian Upland)

In the present paper the results of comparative phytosociological studies were shown which aimed at indication and evaluation of changes in structure and species composition of forest phytocoenoses (*Leucobryo-Pinetum*; *Querco roboris-Pinetum*) for the protection of valuable mire ecosystems in bog-forest reserve "Dolina Żabnika" in the Silesian Upland.

The following intensified harmful changes in forest communities, mainly due to forest management, were observed: impoverishment of tree stand (Fig. 2-4) and sod formation built by grass species in herb layer (Fig. 4). The main threat to valuable plant communities, occurring in the valley of stream, are invasive species both of alien and native origin, characterized by wide ecological amplitude and easily penetrating phytocoenoses being under protection in sites disturbed by human activity.