

SUMMARY

Wilczek Z., Holeksa J., Romańczyk M. The plant cover of the “Żaki” nature reserve in the Kotlina Oświęcimska Basin – threats and prospects of conservation

Chrońmy Przyrodę Ojczyzną **64** (2): 93–99.

The “Żaki” nature reserve was established in 1959. It is located within boundaries of Żaki village near Oświęcim (the Kotlina Oświęcimska Basin, S Poland). The need of protection of this subcontinental oak-linden-hornbeam forest of *Tilio-Carpinetum* with lime's old-growth prevailing the canopy, resulted from its great natural value. Flora of the reserve is composed of 126 species of vascular plants (there are 8 protected species among them) and 27 species of mosses. Moreover, it is one of the last natural fragments of forest typical for the Kotlina Oświęcimska Basin, which as a region, has actually an agricultural character, because it has been transformed for a very long time.

The greatest threats for the “Żaki” nature reserve are: the small area (11,84 ha), proximity of agricultural land and considerable drop of water-table level within the reserve and its neighbourhood. Pollutants from chemical works located in Oświęcim and – unfavourable for forest-ecosystem – CWD (coarse woody debris) removal are the next important threats. These factors cause synanthropization of flora (10,5%) and monotypization of the ground cover (domination of *Milium effusum* and *Carex brizoides* on many surfaces). The most important activities which necessarily should be taken up in order to stop these negative changes and save the reserve are: improvement of water regime by construction of water gate in a ditch in the nature reserve and increasing of amount of deadwood at the forest floor.