

**EXPANSION OF ANTHROPOPHYTE SPECIES *POA ANNUA* L. IN THE MARITIME ANTARCTIC – A CONSEQUENCE OF CLIMATE WARMING ?**

Maria Olech

*Jagiellonian University, Krakow, Poland*

A long term monitoring of introduced grass *Poa annua* was carried out in the area of the Henryk Arctowski Station (Admiralty Bay region, King George Island, South Shetlands). In Austral summer seasons 1986/87, 87/88, 89/90, 91/92, 2001/02, 2005/06 the distribution and expansion of the grass was mapped and counted. *Poa annua* was observed for the first time in 1985/86, when some plants were found in front of the entrance to the Henryk Arctowski Station living quarters. During the subsequent years an increased number of *Poa annua* localities was observed. Recently, in summer 2005/06 a sudden increase in number of localities was recorded. Observations on permanent plots showed a tremendous increase in number of individuals in the many studied populations. *Poa annua* colonizes places changed by man, where the natural vegetation was destroyed. It is an example of a naturalized anthropophyte which was transported to the Antarctic region in an unintentional way, encroaching here from other areas of the Earth. It was transported to the study area probably by the boot dust or with the soil for greenhouse plants cultivation. In the investigated localities *Poa annua* grows either as single specimens or as small tussocks. In 2005/06 season the occurrence of this grass was observed in the communities with *Deschampsia antarctica* and mosses. The observed expansion of the grass might be a response to warmer and longer growing seasons caused by recent regional warming.