The main aim of this study is to present the role of anthropogenic habitats created by the remnants of old iron ore mining activities in preserving the ancient woodland plant species (AWS). The studies, which took place in 2010–2015, covered 30 former post-mining fields in the northern foreland of the Świętokrzyskie Mountains (SE Poland). Each field contains the remnants of old iron ore mining – gob piles and the areas not transformed by mining, which surround the heaps. Within each post-mining fields, two lists (on gob piles and in their surroundings) covering the AWS were prepared. Additionally, two substrate samples were taken – one from the randomly selected gob pile, and one from the non-transformed site. The relationships between the numbers of AWS and selected environmental variables were analysed by statistical methods. It was found that the difference in the number of AWS characteristic of the *Querco-Fagetea* class between gob piles and their surroundings is significant. The conducted analyses indicated that this difference is not resulting from the difference in the areas between gob piles and their surroundings but from the pH of the substrate. The numbers of the mesophilous AWS in gob piles are not uniform and range from 3 to 37 and are correlated with the age of gob piles, the pH values and the depth of the iron ore deposits. At present, the remnants of old ore mining – gob piles constitute the sole habitat islands for the ancient mesophilous deciduous woodland species within the northern foreland of the Świętokrzyskie Mts.

**INTRODUCTION**

The term ‘habitat island’ means a territorially limited habitat which, owing to its specificity, enabled species to survive. But these are also places from where these species can spread, e.g. from one island to another (Taberlet et al. 1998, Nekola 1999). Because of these characteristics they can constitute the remnants of ecosystems which survive anthropogenic pressure. Most often, these habitats are natural, for example, the isolated fragments of ancient forests (Dzwonko and Loster 1992, 2001). But the habitat islands can also have an anthropogenic origin, e.g., Ukrainian kurgans, where steppe species have remained (Moysiyenko and Sudnik-Wójcikowska 2009).

It is sometimes difficult to know when we are dealing with ancient ecosystems, for example, with ancient forests. In most cases, the forest stands cannot be necessarily old, because it can undergo various management measures. Therefore, the main indicators of the old age of these forests are the species of the forest floor layer called ’the ancient woodland plant species’ (AWS). The list of the ancient woodland plant species for Europe was prepared by Hermy et al. (1999). These are species whose presence suggests the long existence of the forest habitat in a given place, and it may