

## SUMMARY

### **Bionomy and morphology developmental stages of *Alucita grammodactyla* ZELLER, 1841 (LEPIDOPTERA: ALUCITIDAE)**

There are over 200 species in the world which belong to the Alucitidae LEACH, 1815 Family (Many-plumed moths). They occur on all continents except for Antarctica. The representatives of the family are characteristically small in size and have wings with long notches divided into six or seven narrow pieces.

The objectives of this research were: the study of the species bionomy *Alucita grammodactyla* (ZELLER, 1841), the study of the morphology features of the individual developmental stages and the determination of the dimorphic features which favour the distinction of the specimen. The studies were carried out in the north Częstochowa Upland in the area of the Towarne Mountains (Góry Towarne), the Castle Hill (Góra Zamkowa) in Olsztyn, and in the laboratory. The laboratory research consisted mainly in the breeding of eggs, caterpillars, pupae and imago.

The occurrence of two generations was observed in the *A. grammodactyla* species. The whole life cycle included the development from the egg through four larva stages, pupa to adult, attached to the host-plant species *Scabiosa ochroleuca* L. The wintering took place in the second larval instar. It was observed that young larvae were egzophagous larvae, which then switched to an endophagous way of preying that caused the creation of characteristic galls. The pupating took place in the ground between the *S. ochroleuca* roots. The adults lead a diurnal and nocturnal lifestyle.

The developmental stages of the *A. grammodactyla* hold morphology features typical for the representatives from the Alucitidae family. At present there are also features, which distinguish this species amongst the representatives of this family as well as the features that are different from other Lepidoptera species. The larvae hold specific morphology features, which differ from each other, following the developmental stages. It has been shown that the sexual dimorphism of the pupae and the adults is well developed and enables the distinction of the specimen.

The study of the bionomy and morphology of this species is the complement and broadening of knowledge in this field. It could be used as an addition in taxonomical and genetic research. The data obtained from the study on bionomy and morphology of the developmental stages of the *A. grammodactyla* could be used in identification keys, as well as in the effective protection of the species and its habitat.