Cydalima perspectalis Walk. (Lepidoptera: Crambidae)
FLIGHT PHENOLOGY IN THE WESTERN PART OF ROMANIA

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Abstract
The flight of the pest Cydalima perspectalis Walk. was registered in July and August, during a period of 36 days. The flight began on the 4 th of July, has a maximum level on the 4 th of August and stopped on the 8 th of August. The majority of butterflies were present at the end of July and beginning of August (more than 80% of the total capture). In the period of maximum flight, both colour forms of the pest were registered. The brown form, usually more rare, represents in our study of this period of maximum flight more than 28% of the total capture.

Keywords: theme of the design, investor, architect, project, systematization, founding ground, utilities, execution deadlines.

INTRODUCTION
The box tree moth Cydalima perspectalis Walk. (Lepidoptera: Crambidae), comes from Eastern Asia: China, Corea and Japan (Leraut, 2012). This pest was most probably introduced to Europe at the same time with the seeding material, and in less than a decade it spread throughout almost the entire continent, due to its mobility and propitious reproduction conditions. It was first observed in Europe in Germany in 2007 (Krüger, 2008), and then in Switzerland, Holland, England, France, Austria, Lichtenstein, Belgium, Italy, Hungary, Romania, the Czech Republic, Turkey, Slovenia, Croatia, Slovakia, Denmark, Serbia, Ukraine, Russia, Spain (EPPO, 2016).

Caterpillars of this defoliator feed exclusively on the Buxus Genus species, of which Buxus sempervirens is the most spread in common in our country, in parks as well as in gardens. In the Timis county, the defoliator is present in most localities where the host plant occurs, observing an average infestation level (Fora et al., 2015). Caterpillars can frequently produce a total defoliation which determines the attacked individuals to dry out, for which reason this pest must be met with a special attention regarding not only its biology, in our country, but also from the point of view of applying necessary measures to prevent it from spreading as well as pest control methods. Thus, an important aspect is the knowledge regarding the butterfly flight phenology, aspect treated in our paper.

MATERIAL AND METHOD
The monitoring of the adult C. perspectalis flight was carried out in 2015, from the beginning of May until the end of September, at the Green Forest (Pădurea Verde) from Timisoara, Romania. A light trap was used in the monitoring process (figure 1). The light bulb was one of cold light, of 03 Watt, 1450 Lumen. During the entire observation period, the captures were registered. The sampled C. perspectalis...
butterflies were deposited in the lepidoptera collection insectarium of the Forest Entomology laboratory of the Faculty of Horticulture and Forestry from Timisoara.

RESULTS AND DISCUSSIONS

During the entire observation period, C. perspectalis butterfly captures were registered in July and August (figure 2). The flight lasted for 36 days. During the whole period, 16 individuals were captured. The first individuals were captured on 04.07., while the maximum number of captures was registered in 04.08., a month after the flight started, whereas the last captures were registered on 08.08.

The flight was concentrated towards the end of July and beginning of August. During this period, over 80% of the individual total was captured.

The defoliator observes two colour forms (figure 3), a white, slightly shiny one, more frequent and a brown, slightly shiny one, more rare. During the maximum flight period, the brown form registered over 28% of the total.

In our area, the pest hibernates during winter in the caterpillar stage, in first or second instars, in the buxus specimen crown. The caterpillars build winter nests out of dry buxus leaves in autumn, which they keep together with the help of silk threads. In early spring in March, the caterpillars leave these nests and continue the defoliation started in autumn. The spring defoliation is much stronger than the one produced in autumn. A strong defoliation leads to the drying out of the attacked plants.

CONCLUSIONS

As a result of the C. perspectalis defoliator flight phenology monitoring, during the vegetation season, the following conclusions could be elaborated:

- the butterfly flight takes place in July-August;
- the flight lasts for 36 days;
- the flight maximum takes place during the first decade of August;
- during the maximum flight period, both colour forms of the species were identified.

REFERENCES

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