Study Upon Life Cycle of *Monarthropalpus buxi* Geoff. on Cluj Climatic Conditions

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ABSTRACT

Monarthropalpus buxi species is the major pest in *Buxus* plants. To establish strategies to control this pest is compulsory to know the biological cycle, to act during the periods of maximum sensitivity of the species.

Keywords: life cycle, *Monarthropalpus buxi* Geoff, colored panels.

INTRODUCTION

Monarthropalpus buxi Geoff. shows one generation per year (Baylac, 1989; Brewer et al.), but Vamvakas et al. (2006), shows that in Greece over 92% of the population has developed a single generation, and 8% of the population has developed two generations. Also BAYLAC 1989, shows that in the warmer areas of France may develop two generations. The larva feeds on leaf, impupation taking place in March and in April start flying.

AIMS

During 2011-2013 in Cluj, was monitored the life cycle of the species *Monarthropalpus buxi* Geoff.

MATERIALS AND METHODS

Establishing the biological cycle was done by analyzing in the laboratory, biological material collected, specifying the scheduling period of each stage of development and influence of various environmental factors in the development cycle. Adult flight period was determined using colored adhesive panels.

RESULTS

Impupation of hibernating larvae occurs in the last half of April, around the date April 18 to 22.

Pupal stage is spread over an interval of 2-3 weeks, depending on the average temperature of the day.

Flight of adults start the first days of May, when the average temperature reaches around 14°C, and the flight occurs until the end of May.

Maximum flight curve is recorded 4-8 days after the flight start. With green and yellow colored panels can note the flight period of adults, being a method that can be used in chemical treatments warnings. Flight of adults occurs between the hours of 6 and 22 and is more intense until 12 o'clock.

Most adults of *Monarthropalpus buxi* Geoff. fly at the height of the *buxus* plant. Incubation was between 12 and 22 days, being strongly influenced by the thermal value.

Larvae occur in the last days of May, the date when the attack symptoms show first. Pests were reported on *buxus* leaves until the second decade

of June, after which the larvae have evolved only. The larvae have evolved till autumn.

CONCLUSION

On climatic conditions of monitored area, *Monarthropalpus buxi* Geoff. has a single generation per year.

Flight adults start the first days of May.

Maximum flight curve is recorded 4-8 days after the flight start.

Ponta were reported on buxus leaves until the second decade of June.

The larvae have evolved till autumn.

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