

## **RESULTS REGARDING THE CHEMICAL CONTROL OF EUROPEAN CHERRY FRUIT FLY (*Rhagoletis cerasi* L.) IN CHERRY ORCHARDS FROM CLUJ AREA**

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### **Abstract**

In neglected orchards the attack of European cherry fruit fly can affect the production by up to compromising. For framing in the regulations asked by market, it is often required that in cherry plantations to intervene with several strategies of pest control, in which frequently appears chemotherapy. To apply a reduced number of treatments we must know the biological reserve of species and its life cycle. The experiment was conducted over two years, 2013-2014, in an orchard located near Cluj-Napoca city, Romania. To study the biological cycle of this species, we followed the dynamics of climatic factors, especially the accumulation of active degrees that were needed in going through several stages of development. In order to apply the treatments, we observed flight dynamics of *Rhagoletis cerasi* using sticky panels (provided by Institute of Chemistry "Raluca Ripan" Cluj-Napoca). The treatments applied in combating of the fly consisted in two applications of products belonging to synthetic pyrethroids group. In 2013, the first adults were recorded on 25 May, when the amount of active degrees accumulated was 410, 2 ° C. Frequency of fruits attacked by cherries worm this year was 1%. In 2014, the adults emergence took place on May 21, which corresponded to value of 343,8° C degrees accumulated. Although the population level was still high the frequency of attacked fruits was again 1%, which was mainly due to the possibility of migration of adults at distances over 100 m. In control variant, an untreated orchard, frequency of attacked fruits in both years exceeded 30%.

**Key words:** chemical control, degree-day, integrated pest management, *Rhagoletis cerasi* L.

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