OBSERVATION REGARDING THE APPARITON, THE BIOLOGY AND THE INTEGRATED CONTROL OF SOME PESTS OF ROSES

OBESRVAȚII ASUPRA APARIȚIEI, BIOLOGIEI ŞI COMBATERII UNOR DĂUNĂTORI DIN CULTURILE DE TRANDAFIR

GEORGESCU T., BERNARDIS R.
University of Agricultural Sciences and Veterinary Medicine Iassy

Abstract. *In the paper are presented dates regarding the apparition the biology and the integrated control of some pests from roses plantation such as:*
- roses green grub - Macrosiphum rosae L.;
- flowers' hair bug- Epicometis hirta Poda;
- rose cycorite- Typhlocyba rosae L.;
- golden bug- Cetonia aurata L.

Rezumat. *În lucrare sunt prezentate date asupra apariției,biologiei şi combaterii integrate a unor dăunători din culturile de trandafir şi anume:*
- păduchele verde al trandafirului - Macrosiphum rosae L.;
- gândacul păros al florilor - Epicometis hirta Poda;
- cicorița trandafrului - Typhlocyba rosae L;
- gândacul auriu - Cetonia aurata L.

INTRODUCTION

The rose is the flower most related with the mankind history being mentioned in legends, fair tails, customs, traditional medicine, arts literature.

By the form and elegance of the bud, the fineness of the perfume and various colours it is the most loved and wanted flower.

In roses plantations are numerous species of pests from which some are polyfags and others are specific, which attack different organs of the plant. After the attack, the foliar apparatus is damaged, the floral buds are smaller and do not open or the flowers have stained leaves, without aesthetic and commercial value.

MATERIAL AND METHOD

Observation were made in the rosarium of Iasi Botanic Garden and also in different rose plantation from Iasi City area.

The following pests were studied:

- *rose green grub – Macrosiphum rosae L;*
- *rose cycorite – Typhlocyba rosae L;*
- *flowers hair bug – Epicometis hirta Poda;*
- *golden bug – Cetonia aurata L.*

We have in view the following aspects: apparition of the pests, the intensity of the attack and was made a list of the recommended insecticides for controlling of these pests.

RESULTS AND DISCUSSIONS

The rose green grub – *Macrosiphum rosae* L. appears frequently in the years with hot and draught springs. Attack is recognized by the presence of some massive colonies on the lower side of leaves on copse and on floral buds (figure 1).Due to the attack the leave are turned over, getting an yellow colour and fall down. Copses do not develop, the tissues are dieing and at last they droop. The floral buds do not open. On the attacked organs are find the insects' dejection and a part of the non-digested glucides, which is a favourable environment for developing the *Capnodium salicinum* Sacc. fungi. Are attacked also the kind of roses with dwarf bushy nature and the climbing ones.

The chemical treatments are applied from the moments in which the first colonies of aphides are observed on leaves till the moment of the floral buds opening, using the insecticides showed in the table 1.

Table 1

The recommended insecticides used for roses garden grub - *Macrosiphum rosae* L control

No.	Chemical group of the insecticide	Action mode of the insecticide	Used product (%)
1	Organic- phosphorus	contact and swallow	Actellic 50 EC– 0,15 Carbetox 37 CE – 0,4 Novadim 40 EC – 0,1 Sinoratox 35 CE – 0,15 Zolone 35 CE – 0,2
2	Carbamics	shock effect	Pirimor 25 WG – 0,1
3	Syntesis piretroid	contact and swallow	Faster 10 EC – 0,03 Faster Forte 20 – 0,015 Polythrin 200 EC – 0,015 Supersect 10 EC – 0,03 Talstar 10 EC – 0,03
4	Others	shock effect	Chess 25 WP – 0,04

Rose cycorite – *Typhlocyba rosae* L. is a pest frequently find in the tree nurseries, parks and gardens which attack leaves of roses from the end of April till September – October.

Larvae and adults are find on the inferior side of leaves stinging and sucking the cellular juice. Due the attack on the leaves appear white spots, and in time the spots join together and will occupy great areas of limbus. The floral buds do not develop and the attacked copses do not grow and they dry.

The limitation of the attack is made by foliar treatments applied when the first larvae are observed on the leaves with one of the insecticides specified in table 2.

Flowers' hair bug – *Epicomites hirta* Poda. is a pest frequently finds in roses plantations. In the last years it was observed an increase of the biological reserve of this pest and so at the same time of the flower: stamens, ovary, pistils and sometimes sepals are chewed.

Table 2

The recommended insecticides used for roses garden cycorite - *Typhlocyba rosae* L. control

No.	Chemical group of the insecticide	Action mode of the insecticide	Used product (%)
1	Organic – chlorine	contact and swallow	Thiodan 35CE – 0,2 Thionex 35CE – 0,2
2	Organic - phosphorus	contact and swallow	Danex 80PU – 0,15 Onefon 90 – 0,15 Senthion 30CE – 0,1 Sumithion 50EC – 0,1
3	Synthesis piretroides	contact and swallow	Fastac 10EC – 0,02 Polythrin 200EC – 0,015 Sumi – Alpha 2,5EC – 0,05 Supersect 10EC – 0,03

In the invasion years flowers' hair bug is difficult because the application of the chemical treatments during blossoming time present the danger of damaging the flowers and also of the pollening insects. Must be used selective insecticides showed in table 3.

Table 3

The recommended insecticides used for flowers' Hair bug – *Epicomites hirta* Poda. control

No.	Chemical group of the insecticide	Action mode of the insecticide	Used product (%)
1	Organic - phosphorus	Contact and swallow	Zolone 35WP – 0,2 Zolone 35CE – 0,2
2	Carbamics	Contact and swallow	Sevin 85WP – 0,05
3	Synthesis piretroides	Contact and swallow	Karate Zeon- 0,015 Mavrik 2F – 0,05
4	Inhibitors of insects metamorphosis	Contact and swallow	Calypso 480EC – 0,02

Ileana (golden bug)- *Cetonia aurata* L.. is one of the most beautiful insects, which was avowed by a jury formatted by personalities from Germany the "insect

of the year". Adults are eating the flowers pollen of some bushes (rose, lilac, elder tree) without making any economic damages and larva's are eating the organic matter in decay or with the sawdust from the hollows of old trees etc.

Ileana is one of the most beautiful insect from Romania, which must be protected.

CONCLUSIONS

1. In rose plantation are find various pests and economic damage are produced by:
   - rose garden grub – *Macrosiphum rosae* L;
   - rose cycorite – *Typhocyba rosae* L;
   - flowers' hair bug – *Epicometis hirta* Poda.
2. The attack leaves copse, floral buds and also the flowers which will have a poor quality.
3. To prevent and to control foliar treatments are applied with organic-phosphorus, carbamics, synthesis, piretroides, insecticides.
4. Ileana *Cetonia aurata* L. is one of the most beautiful insect from Romania wich do not produce economic damage.

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