Attack Assessment Produced by the Major Pests of Roses from Green Areas of Cluj-Napoca

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ABSTRACT

The most important pests of roses in Cluj area, are *Macrosiphum rosae* L. *Arge rosae*, *Arge ochropus* Gmel., *Arge pagan* cloth. and *Blennocampa pusylla* Klug. Populations of these species differ in number density from one location to another. This is determined primarily by the work of care that apply.

Keywords: *Arge* spp., *Blennocampa pusylla* Klug., *Macrosiphum rosae* L., monitoring.

INTRODUCTION

The aesthetic value of an arrangement is given both by its composition in terms of species used and by them health. Pest complex may attack different species of trees, shrubs and herbaceous plants; besides giving an unpleasant aspect of the plant attacked, can cause plants drying off. Roses, particularly popular species in landscaping, are host plants for a rich complex of pests. Of these the most common species are aphids and wasps (Jaukiewicz, 2003; Shaheen and Zaz, 2007).

AIMS

Identification of the main pests of roses, in Cluj green spaces and assessing the frequency and intensity of attack produced by them in 2012-2013.

MATERIALS AND METHODS

From the rose plants biological material was collected for taxonomic identification. Biological material was collected manually by shaking the plants on tarpaulins and evaluation of the frequency of the attack was made by visual inspection of the plant. Species identification was performed in the laboratory of Entomology.

RESULTS

The most common species that attack roses were the rose aphid, *Macrosiphum rosae* L. and different species of wasps (Fam. Tenthredinidae and Fam. Argidae). In the monitored location annual average rate of shoots attacked by *Macrosiphum rosae* L. increased from 13% in 2011 to 17% in 2013. The attack frequency on monitoring sites during three years, ranged from 8% (U.A.S.V.M. park in 2013) and 31% (Mărăști alignment in 2013). On the floral buds *Macrosiphum rosae* L. caused a frequency of attacks between 6% (U.A.S.V.M. park in 2012) and 21% (Mărăști alignment in 2011) (tab. 1).

From the wasp larvae reported in monitored locations, the most numerous species belonging *Arge rosae*, followed by *Arge ochropus* Gmel. and *Arge pagan* Panz. Frequency of attack produced by the larvae of phytophagous Hymenoptera species ranged from 5% (U.A.S.V.M. park in 2012) and 21% (Mărăști alignment in 2012). Regarding the intensity of the attack, it was between 8% (U.A.S.V.M. park in 2011) and 15% (Mărăști alignment, in 2012 and 2013) (tab.2).

On locations monitored, the frequency of leaves attacked by *Blennocampa pusylla* Klug.

Tab. 1. Frequency of young shoots and flower buds attacked by *Macrosiphum rosae* L. (Cluj-Napoca, 2011-2013)

Location	Year					
	2011		2012		2013	
	Young shoots %	Flower buds %	Young shoots %	Flower buds %	Young shoots %	Flower buds %
Mărăști roundabout	13	11	17	15	18	16
Green Zone „Cetățuia“	9	12	12	10	11	8
Mărăști market alignment	18	21	26	19	31	16
Mănăstur roundabout	14	16	15	12	17	10
U.A.S.V.M. park.	11	7	9	6	8	7
Average	13,0	13,4	15,8	12,4	17,0	11,4

Tab. 2. Frequency (F) and intensity (I) of attack in wasp larvae (Cluj-Napoca, 2011-2013)

Location	Year					
	2011		2012		2013	
	F %	I %	F %	I %	F %	I %
Sensul giratoriu Mărăști	15	10	18	15	13	15
Zona verde „Cetățuia“	11	10	9	13	15	10
Aliniamentul Piața Mărăști	17	15	21	9	18	14
Sensul giratoriu Mănăstur	10	8	15	12	9	13
Parcul U.S.A.M.V.	9	12	5	8	6	9
Average	12,4	11,0	13,6	11,4	12,2	12,2

Tab. 3. Frequency of leaves attacked by *Blennocampa pusilla* Klug. (Cluj-Napoca, 2011-2013)

Location	Year		
	2011	2012	2013
Sensul giratoriu Mărăști	8	6	6
Zona verde „Cetățuia“	6	4	7
Aliniamentul Piața Mărăști	10	9	9
Sensul giratoriu Mănăstur	6	8	7
Parcul U.S.A.M.V.	2	2	1
Average	6,4	5,8	6,0

was between 1% (U.A.S.V.M. park, 2013) and 10% (Mărăști alignment in 2011) (tab. 3).

CONCLUSION

Roses complex populations of harmful insects density differ from one location to another. This is determined primarily by the works of care that applies in each location.

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