

Survey of Aphids and Their Common Natural Enemies on Some Ornamental Plants at Alexandria Governorate, Egypt

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ABSTRACT

The performed inspection on 18 species of ornamental plants revealed a total of fourteen aphid species pertaining to families Aphididae and Luchnidae; representing eight genera belonging to two subfamilies (Aphidinae with thirteen species and Lachninae), respectively. The genus *Aphis* occurred by five species and each of geuns *Hyalopaterus* and *Macrosiphum* represented by two species for each one. The results also explained the host plants, seasonal abundance and levels of infestation for the following identified aphids: *Aphis citricola*, *A. craccivora*, *A. gossypii*, *A. nerii*, *A. punicae*, *Hyalopterus pruni*, *H. amygdale*, *Rhopalosiphum padi*, *Brevicaryne brassicae*, *Myzu persicae*, *Macrosiphum euphorbiae*, *M. rosae*, *Phorodon cannabis* and *Cinara tujaflina*. The present investigations also illustrated that *A. citricola*, *A. craccivora*, *A. gossypii*, *A. punicae* and *M. persicae* had wide range numbers of host plants as polyphagous species. Whilst, *H. pruni* and *H. amygdale* as oligophagous species widely distributed on reed plants. Moreover the following insect predators were collected and identified: the green lacewing *Chrysoperla carnea* (Stephens) (Neuroptera: Chrysopidae) was collected and scored in a few numbers on most of the ornamental plants, the midges(cecidomyiid flies) (Diptera: Cecidomyiidae) were common and widely distributed in most of the studied ornamental plants. The larvae were observed feeding on different aphid colonies. This family was represented by one species only, viz. *Aphidoletes aphidimyza* (Ront), The hover flies (Diptera: Syrphidae) the larvae are common predators of aphids and widely distributed on the majority of ornamental plants. This family was represented by one syrphid species only *Syrplus corollae* Fabr, the ladybirds (Coleoptera :Coccinellidae) were collected from aphid colonies associated with some ornamental plants, i.e. *Coccinella septempunctata* L., *C. undecimpunctata* L.and *Scymms syriacus* Maris and also a parasitoid species (Hymenoptera: Aphidiidae) was collected and identified as *Diaeretiella rapae* (M'Intosh) associated with *M. rosae* on rose shrubs.

INTRODUCTION

Aphids are considered among the most important serious insect pests of different ornamental plants all over the world. Aphids have fascinated and frustrated man for a very long time. This is mainly because of their intricate life style in close association with their host plants. They

cause immense damage either directly by sucking plant sap or indirectly as vectors of serious virus diseases. Associated with these damages, large quantities of honeydew are deposited on the leaves and a dense growth of sooty mould develops (Harris and Maramorosch, 1977; Dixon, 1985; Komazaki, 1993; Darwish *et al.*, 1994; Darwish, 1998 and Jozwiak *et al.*, 1998). Aphids taxonomically and ecologically are usually considered as a 'difficult' group. One reason is their polymorphism, the occurrence of several kinds or morphs of adult individuals within the same species. Aphid life cycles can be quite complicated and involve a succession of morphologically different morphs of the same species. A complete life cycle (holocycle) typically consists of one generation of sexual morphs (sexuales) and several generations in which only parthenogenetic females are produced. This phenomenon of cyclical parthenogenesis is basic, as well as primitive feature of aphid biology. Identification of single specimen by keys is difficult, sometimes impossible. Several specimens belonging to the same colony should be examined. Even then identification may be unsafe, if the host plant is unknown. The range of intraspecific variation of morphological characters is often considerable; specimens belonging to the same morph of some mutually related species are very similar even if the species are ecologically different.

Therefore the main objective of the present study is to carry out, taxonomic survey of aphid species infesting ornamental plants in public gardens and their natural enemies associated with them on some ornamental plants.

MATERIALS AND METHODS

Survey and collection of aphids specimens were carried out under the natural conditions in four gardens at different localities, i.e., Antoniadis, Montazah, El-Maamura and Saba Basha, Alexandria government. Investigation was continued through the elapsed period from March 2002 until September 2004.

Aphid specimens were collected from all parts of inspected plants (Table 1) on terminal shoots, leaves, roots, rhizomes, trunks, branches and among flowers. In fact aphids on branches or leaves at the top of tall trees were difficult to collect; some aphids were discovered through observation of ants on the trunks and then collected. Moreover, ladybirds and other predators as well as curled leaves, galls, honeydew and wax secretions on leaves and branches were considered as indicators for the presence of

aphids. The ornamental plants were examined at weekly intervals. The leaf examination for aphids was conducted by an ocular lens (3x). Samples of five small shoots with about 30 leaves were carefully picked out randomly from the terminal branches of foliage around the plants. Leaves were kept in polyethylene bags and then taken to the laboratory. Before preservation took place, color of the alive specimen and certain information were recorded. The collected aphids (apterae, alatae, larvae and nymphs) were placed in small glass tubes containing 70% ethyl alcohol. A moistened hair-brush was gently used for transferring aphids from host plants to the glass tubes, which were labeled and kept in closed jars until needed for preparation the permanent mountings. The method presented by Hill Ris Lambers (1951) and explained by Van Emden (1972) and applied with personal modification by Prof. Dr. Darwish *et al* (1994) was used for preparing mounted labeled slides, for the identification of the sampled aphid species during the period of study. The terms used in the identification and keys were in accordance with European aphidology given by Hill Ris Lambers (1960) , Habib and El-kady (1961) and Blackman and Eastop (1984 and 1994). Also the detected prevailing natural enemies as adults and immature stages of predatory insects and parasitic insects, found in colonies and aphid specimens were collected and identified. In addition, picking out of small shoots or leaves with parasitized aphids (mummies) was performed and localized in glass tubes; the emerged hymenopterous insect species was collected and identified. The predators and parasitoids were identified using keys of Hodek (1973) for coccinellids (Predators), Stary (1976) and Alford (1984) for parasitoids.

Table1: A list of the inspected ornamental plants.

No.	Common name	الاسم العربي	Scientific name	Family name
1	Flame nettle plants	كوليس	<i>Coleus blumei</i>	Labiatae
2	Cassia bark tree	كاسيا	<i>Cassia nodosa</i>	Leguminosae
3	Butcher's broom	سفندر	<i>Ruscus hypoglossum</i>	Liliaceae
4	Bamboo	غاب	<i>Bambusa vulgaris</i>	Polygonaceae
5	Oleander	دقله	<i>Nerium oleadiflora</i>	Apocynaceae
6	Tecoma	نيكوما	<i>Tecoma grandiflora</i>	Biogoniaceae
7	Rose	ورد بلدي	<i>Rosa spp.</i>	Rosaceae
8	Vinca	وينكا	<i>Vinca minor</i>	Araliaceae
9	Schefflera	شغليرا	<i>Schefflera spp.</i>	Myoporaceae
10	Myoperum	بزروميا	<i>Myoporum pictum</i>	Myoporaceae
11	Duranta	دورنتا	<i>Duranta plumeri</i>	Verbenaceae
12	Beef steak plant	أكاليفا	<i>Acalypha wilkesiana</i>	Euphorbiaceae
13	Paper plover plant	جهنمية	<i>Bougainvillea spp</i>	Nyctaginaceae
14	Ficus	فيكس	<i>Ficus nitida</i>	Moraceae
15	Hibiscus	هيبسكس	<i>Hibiscus mutabilis</i>	Malvaceae
16	Pistacia plant	بستاشيا	<i>Pistacia tentiscus</i>	Anacardiaceae
17	Lantana	لانتانا	<i>Lantana camara</i>	Verbenaceae
18	Elsterm plant	مستكة	<i>Cestrum spp.</i>	Solanaceae

RESULTS AND DISCUSSION

Nowadays, the ornamental plants are expected to play an important role in increasing the national income. So, many new cultivated areas with such plants are suffering from the sever attack of a pests among them aphids. It is known that the spring and summer abundance and distribution of some insects is closely related to the weather conditions of the preceding winter.

Therefore, a survey of possibly occurring aphids species was conducted as an essential work to determine the different aphids species infesting 18 plant species of ornamental plants in public Alexandria gardens through the period from March 2002 up to August 2004 under natural field conditions.

In order to clarify the relative contributions made to the fauna by infestation of aphid species, the system of grouping of Davis (1962) and modified by Darwish et al. (1994) has been adopted in which species were grouped into classes on the basis of their infestation levels. The degrees of infestation were calculated as the total numbers of apterae alatae viviparous adult females, larval and/or alatioid nymphal stages of any aphid species per plant sample unit. Whereby, low infestation means that the number of counted aphids was less than 10 individuals, moderate infestation means that the number of counted aphids was elapsed between 10-20 individuals, and high infestation means that the number of count aphids was more than 20 individuals per plant sample unit (Table,2).

Due to the absence of obvious symptoms, the early stages of infestations of some aphid species may be overlooked and their presence was often not noticed until the honeydew, which they secrete is seen glistening on the upper surface of the leaves (Dicker, 1979).

Survey of aphid species infesting ornamental plants:

More than 2000 individuals including morphs (apterae, alatae viviparous adult females) immature stages (larval and alatioid nymphal instars) of the fourteen aphid species under consideration were mounted and identified. The data obtained represented the distribution of aphid species in various selected ornamental plants under consideration. The systematic position of the fourteen aphid species was partly adapted from Szelegiewicz (1978) and Blackman and Eastop (1984 and 1994).

The taxonomic survey revealed a total of fourteen aphid species represented eight genera belonging to two subfamilies (Aphidinae thirteen species and Lachninae one species only) following two families (Aphididae and Lachnidae, respectively) of super family Aphidoidea were collected and

identified on different 18 kinds of ornamentals by five species and each of genus *Hyalopterus* and *Macrosiphum* represented by two species for each one.

The ornamental host plants, periods of occurrence and infestation rate of the studied aphid species are present in (Table 2). The data represent the distribution of the aphid species on their different species of ornamental plants. The investigations and observations revealed the following:

Systematic position

Order: Homoptera

Suborder: Sternorrhyncha

Infraorder: Aphidifomes

Section: Aphidomorpha

Superfamily: aphidoidea

Family: aphididae

Subfamily: Aphidinae Tribe: Aphidini

Subtribe: Aphidina

Genus: *Aphis* Linnaeus, 1758

Aphis citricola v.d Goot, 1912

Aphis craccivora Koch, 1854

Aphis gossypii Glover, 1877

Aphis nerii Boyer, 1945

Aphis punicae Passerini, 1860

Subtribe: Rhopalosiphina

Genus: *Hyalopterus* Koch, 1854

Hyalopterus pruni Geoffroy, 1762)

Hyalopterus amygdale (Blanchard, 1840)

Genus: *Rhopalosiphum* Koch, 1854

Rhopalosiphum padi (Linnaeus, 1758)

Tribe: Macrosiphini

Subtribe: Macrosiphina

Genus: *Brevicoryne* v.d. Good, 1917)

Brevicoryne brassicae (Linnaeus, 1758)

Genus: *Myzus* Passerine, 1860

Myzus persicae (sulzer, 1776)

Genus: ***Macrosiphum*** Passerine, 1860

Macrosiphum euphorbiae (Thomas, 1878)

Macrosiphum rosae (Linnaeus, 1758)

Genus: *Phorodon* Passerine, 1860

Phorodon humuli (Schrank, 1801)

Family : Lachnidae

Subfamily: Cinarinae

Tribe: Cinarini

Table 2: The identified aphid species on inspected ornamental plants; throughout the elapsed period from March 2002, till August, 2004.

Aphid species	Host plant	Seasonal abundance	Infestation rate
<i>Aphis citricola</i>	<i>Cassia nodosa</i>	Summer	***
	<i>Cestrum sp.</i>	Spring	***
	<i>Pistacia lentiscus</i>	Spring	***
		Autumn	*
	<i>Hibiscus mutabilis</i>	Spring	***
		Summer	***
<i>Aphis craccivora</i>	<i>Tecoma grandiflora</i>	Spring	*
	<i>Vinca minor</i>	Autumn	*
	<i>Cassia nodosa</i>	Summer	**
	<i>Bougainvillea sp.</i>	Spring	***
		Summer	*
		Autumn	**
<i>Aphis gossypii</i>	<i>Cassia nodosa</i>	Summer	*
	<i>Rosa sp.</i>	Spring	**
		Summer	*
		Autumn	**
	<i>Myoporum pictum</i>	Spring	***
		Summer	***
		Autumn	**
<i>Aphis nerii</i>	<i>Nerium oleander</i>	Spring	***
		Summer	***
		Autumn	***
		Winter	**
<i>Aphis punicae</i>	<i>Coleus blumei</i>	Spring	**
	<i>Acalypha wilkesiana</i>	Spring	**
		Summer	*
	<i>Duranta plumeri</i>	Spring	**
	<i>Bambusa vulgaris</i>	Summer	***
	<i>Bambusa vulgaris</i>	Autumn	***
	<i>Rosa sp.</i>	Winter	*
<i>Hyalopterus pruni</i>	<i>Myoporum pictum</i>	Summer	***
<i>Hyalopterus amygdale</i>	<i>Myoporum pictum</i>	Summer	***
<i>Rhopalosiphum padi</i>	<i>Rosa sp.</i>	Summer	*
<i>Brevicaryne brassicae</i>	<i>Vinca minor</i>	Autumn	**

<i>Myzua persicae</i>	<i>Ruscus hypoglossum</i>	Spring	**
	<i>Rosa sp.</i>	Spring	**
	<i>Vinca minor</i>	Summer	**
	<i>Ruscus hypoglossum</i>	Spring	**
<i>Macrosiphum euphorbiae</i>	<i>Rosa sp.</i>	Spring	***
		Summer	***
		Autumn	***
<i>Phorodon cannabis</i>	<i>Schefflera sp.</i>	Spring	*
		Autumn	**
<i>Cinara tujafilina</i>	<i>Thuja orientalis</i>	Spring	***

Where* = low infestation, ** = moderate infestation and *** = high infestat

Genus : *Cinara* Curtis, 1935

Cinara tujafilina (Del Guercio, 1909)

The systematic position (After Szelegiewicz (1978) and Blackma and Eastop (1984).

More details observed for each of these inspected and identified aphid species could be breively explained as follow:

- *Aphis citricola*: The green citrus aphid, is among the polyphagous aphid species with high distribution and high populations during spring and summer seasons. It was found on four ornamental plants with large number.
- *A. craccivora*: The cowpea aphid or black legume aphid or groundnut aphid, is a polyphagous species and ranked the most distributed one with high populations on paper flower plants (*Bougainvillea* spp.) in spring. It was found in moderate and low number on four kinds of ornamental plants
- *A. gossypii*: The cotton aphid or melon aphid, is also polyphagous species. It was found in small colonies on three ornamental plant species, i.e. in bark tree (*Cassia nodosa*) and occurred in high numbers during spring and summer seasons on *Myoporum pictum*.
- *A. nerii*: The oleander aphid, occurred with high colonies as a monophagous species on *Nerium oleander* all the year round throughout the present investigation.
- *A. punicae*: The duranta aphid or pomegranate aphid, is also polyphagous species. It was found in different criteria of population densities on three ornamental plant species, i.e. in small population

on *Coleus blumei* and *Acalypha wilkesiana* during spring, while this aphid species infested *Duranta spp.* All the year round.

- *Hyalopterus pruni*: The mealy plum aphid, occurred in high populations on bamboo (*Bambusa vulgaris*) or reed plants in summer season.
- *H. amygdale*: The mealy peach aphid, occurred also in high populations on bamboo (*Bambusa vulgaris*) or reed plants in the same time (summer season) as the mealy plum aphid. It is of worthy to mention that the mealy plum aphids or mealy peach aphids are closely related species as oligophagous species feed on a certain kind of host plant of the same genus during summer season.
- *Rhopalosiphum padi*: The aphid had a low population on rose shrubs during summer season. It is widely distributed on wheat and maize plants.
- *Brevicoryne brassicae*: The green cabbage aphid or mealy cabbage aphid, is an oligophagous aphid species (feeding on a few plant species) and widely distributed on all cruciferous plants, which were often attacked severely. It occurred in moderate population on *Myoporum pictum* only in autumn.
- *Myzus persicae*: The green peach aphid or peach-potato aphid, was moderately distributed on three kinds of ornamental plants during the present investigation e.g., *Myoporum pictum*, *Rosa sp.* (in spring) and *Vinca minor* (in summer).
- *Macrosiphum euphorbiae*: The potato aphid, was found occasionally in spring on *Ruscus hypolossum* only with a moderate number. The primary host plant is rose plant, it is highly polyphagous on secondary host plants among them potato plants.
- *M. rosae*: The rose aphid occurred with high population densities on *Rosa spp.* all year round, except for in winter season. It is polyphagous and highly distributed world wide on cultivated roses.
- *Phorodon cannabis*: The cannabis aphid, it was found on *Schefflera sp.* with a moderate number in autumn.
- *Cinara tujaflina*: The thuja aphid, occurred with high population as a monophagous species on *Thuja orientalis* in spring. This aphid species represented family Lachnidae.

In addition the present investigations illustrated that each of *A. citricola*, *A. craccivora*, *A. gossypii*, *A. punicae* and *M. persicae* had wide range numbers of host plants as polyphagous species. Whilst, *H. pruni*, and *H. amygdale* as oligophagous species are widely distributed on reed plants.

Tamaki (1981) mentioned that the host range of the green peach aphid, *M. persicae* infested over 875 plant species, many of them are vegetables, ornamentals and field crops all over the world.

Darwish et al (1985 a,b and 1994) described and keyed the apterous viviparous adult females of the two closely related aphid species *H. pruni* and *H. amygdale* as well as the most aphid species under consideration.

On the other hand, four aphid species, i.e. *A. gossypii*, *R. padi*, and *M. rosae* attacked rose shrubs. Three aphid species, i.e. *A. gossypii*, *B. brassicae* and *M. persicae* infested *Myoporum pictum*.

All different morphs of aphids feed on plant juice extracted from nearly every part of the host. Enormous populations of aphids could be built up a relatively short time causing different symptomatic infestations. However, infestation by aphids is recognized by malformation of the branches, leaves and branches below aphid colonies get covered with sooty mould fungi. Infestations by *Aphis* spp. that recognized as honeydew secretion usually make a dull blackish film on the contaminated surfaces of the infested leaves that also turn to yellowish color.

The present results are in general harmony with those of Bergmann *et al.* (1988) who found and identified four genera, i.e. *Aphis*, *Myzus*, *Macrosiphum* and *Rhopalosiphum* on ornamental plants in Brazil. Premachand and Prasad (1989) recorded seventeen species of aphids belonging to 12 genera on different crop plants, weeds and ornamental plants in India. Three species, *Aphis gossypii*, *A. craccivora* and *M. persicae*, were commonly found in the region on a various groups of plants.

Nasir and Yousuf (1995) mentioned that *A. gossypii* and *M. persicae* were commonly observed on different plant species. The maximum number of aphid species recorded on a single plant species was 5 (on roses).

Our results are in agreement with those of Ozdemir and Toros (1997) who found 11 aphid species, amongst *A. fabae*, *A. gossypii*, *M. euphorbiae* and *M. persicae* as the most common species feeding on seasonal ornamental plants in Turkey.

Peronti and Sousa (2002) collected a total of 25 aphid species from 49 ornamental plant species in Brazil, 12 aphids were monophagous, four were oligophagous and nine were polyphagous.

NATURAL ENEMIES:

Predators as well as parasitoids found on ornamental plants along with the colonies of aphid were collected and identified. True spiders (order Araneida) are found in a few numbers to prey on aphid colonies attacking ornamental plants during the spring season of 2003.

The predators species:

A total of six species of insect predators representing five genera, belonging to four families and following three insect orders along with aphid's colonies were collected from the surveyed ornamental plants. these predators are the following:

The green lacewing (Neuroptera :Chrysopidae): larvae of the green lacewing, *Chrysoperla carnea* (Stephens)(synonym of *Chrysopa vulgaris* Sclun.) were collected and scored in a few numbers on majority of the ornamental plants .

The midges (Diptera: Cecidomyiidae): Migdes (cecidomyiid flies) were common and widely distributed in most of ornamental plants. The larvae were observed feeding on different aphid colonies. This family was represented by one species only, viz. *Aphidoletes aphidimyza* (Ront)

The hover flies (Diptera: Syrphidae): larvae of the hover flies are common predators of aphids and widely distributed on ornamental plants. This family was represented by one syrphid species only *Syrplus corollae* Fabr.

The ladybirds (Coleoptera :Coccinellidae): Three species of ladybirds were observed and recorded from all aphid colonies associated with some ornamental plants through the present study, i.e. *Coccinella septempunctata* L., *C. undecimpunctata* L. and *Scymms syriacus* Maris. However, the adults and larval stages of ladybirds are considered among the most important aphidophagous predators that prey upon the same victims overall the year round.

The parasitoids:

The minute wasp parasitoid species (Hymenoptera: Aphidiidae) was collected and identified as *Diaeretiella rapae* (M' Intosh) associated with *M. rosae* infesting rose shrubs.

In this concern, Azab *et al.* (1965) mentioned that the larvae of *C. carnea* were always less frequently found. This was resulted mainly due to the egg-laying habit of the predator. The ladybird larvae were found all over the year. Alford (1984) reported that Aphidiids are similar to braconids but parasitic on aphids and usually attacking apterous females. *D. rapae* and

P. volucre both parasitoids are common very polyphagous animals attacking many speises of aphids. Darwish (1992) pointed out that the parasitoid *Praon volucre* (Holiday) was common active in controlling the aphid colonies on fruit trees through the year round. Wnuk and Wojciechwiez (1993) reported that syrphid larvae play a considerable role in regulation the density of cruciferous 'aphid colonies; the beneficial activity of predators was delayed in comparison with aphid appearance. Darwish (1994) recorded fourteen species of predatory insects increased gradually with the increasing of aphid populations, Wiackowski *et al.* (1997) found a total of 25 species of Aphidiidae [Braconidae] belonging to six genera of them *Praon* (five species), and *Diaeretilla* (one species). El-Komy (1999) recorded the coccinellid *Hippodamia variegata* preying on 12 different aphid species on a variety of crops, weeds and ornamental plants. Pons *et al.* (2004) registered seven species of aphids on the ornamental shrubs in Spain. They observed *Scymnus* spp. and *Lysiphlebus testaceips* as the most common predator and parasitoid species.

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الملخص العربي

حصر لإتواع المن وأعدائها الطبيعية علي بعض نباتات الزينة في محافظة الإسكندرية

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أوضحت نتائج فحص ١٨ نوع من نباتات الزينة وجود ١٤ نوعاً من أنواع المن تنتمي إلى ٨جناس مختلفة منها ١٣ نوع ينتمي لتحت عائلة Aphidinae التابعة لعائلة Aphididae ، ونوع واحد فقط لتحت عائلة Lachninae التابعة لعائلة Lachnidae واللذان تتبعان لفوق عائلة Aphidoidea. كما أمكن تحديد ٥ أنواع منها الجنس Aphis؛ ونوعان لجنس Hyalopterus ونوعان لجنس Macrosphum. و قد تم تلخيص نتائج الفحص والمشاهدة التي إجريت علي أنواع المن المختلفة من حيث عوائلها المختلفة ، فترات نشاطها و إنتشارها علي مدى الفصول السنوية المختلفة لكل من الأنواع التالية: من الموالح *Aphis citricota*، من اللوبيا أو من بقوليات الاسود أو من الفول السوداني *A. craccivora*، من القطن أو من البطيخ *A. gossypii*، من الدقلة *A. nerii*، من الدورنتا أو من الرمان *A. punicae*، من البرقوق *Hyalopterus pruni*، من الخوخ الحقيقي *H. amygdale*، من الخوخ *Rhopalosiphum padi*، من الكرنب الاخضر أو الحقيقي *Brevicaryne brassicae*، من الخوخ الأخضر *Myzua persicae*، من البطاطس *Macrosiphum euphorbiae*، من الورد البلدي *M. rosae*، من *Phorodon cannabis* ومن التويا *Cinara tujaeflora*.

كما أمكن تحديد أنواع من المن واسعة الإنتشار و عديدة العوائل *polyphagous* هي *A. citricota*، *A. craccivora*، *A. gossypii*، *A. punica*، *M. persicae* بالإضافة إلي نوعين محدودي العوائل *oligophagous* هما *H. pruni* و *H. amygdale* منتشرة بكثرة علي نبات الحجنة.

كذلك تم حصر و تعريف كل من المفترسات التالية هي: أسد المن (Chrysopidae: رتيبه شبكية الاجنحة): حيث وجدت يرقات أسد المن بأعداد قليلة علي معظم نباتات الزينة ، نياية الأفيديبييس (Cecdamyiidae: رتبة ثنائية الأجنحة) التي وجدت بأعداد كبيرة علي أغلب نباتات الزينة وتتغذي اليرقات بشراة كبيرة علي مختلف انواع المن. وهذه العائلة تحتوي علي نوع واحد فقط وهو *Aphidoletes aphidimyza* (Rond)، الذباب المحلق (السرفس) (Syrphidae: رتبة ثنائية الجنحة) يعرف هذا الذباب بأن يرقاته تقتصر المن بأعداد كبيرة علي مختلف نباتات الزينة. وهذه العائلة تحتوي علي نوع واحد فقط *Syrphus corollae* Fabr بالإضافة إلي خنافس أبو العيد (Coccinellidae: رتبة غمدية الاجنحة) تم جمع ثلاثة أنواع من خنافس أبي العيد علي مختلف نباتات الزينة وهذه الأنواع هي : *Coccinella septempunctata* L. و *C. Undecimpunctata* L. و *Scymnus syriacus* Mars. وهذا النوع واحد من المتطفلات تنتمي لعائلة الزنابير (Aphidiidae: رتبة غشائية الأجنحة) وهذا النوع هو *Diaeretilla rapae* (Minlosh) الذي وجد علي نوع المن الذي يصيب شجيرات الورد البلدي *M. rosa*.