POLISH ACADEMY OF SCIENCES • INSTITUTE OF ZOOLOGY
MEMORABILIA ZOOLOGICA

MEMORABILIA ZOOL.	36	61—72	1982

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CHRISIDIDAE (*HYMENOPTERA*) OF WARSAW AND MAZOVIA

ABSTRACT

Chrisididae are a family of *Aculeata* susceptible to urban pressure. They are scarce in urban green areas and occur only in parks and allotments. So far ten species have been recorded there, while 32 species are known from Mazovia. The town is colonized mostly by the species with large geographical ranges, i.e., Palaearctic and Euro-Siberian. One of the main factors limiting the occurrence of *Chrisididae* in urban green areas is the lack of host species. The town is mostly colonized by the species parasitizing *Sphecidae* of the genera *Pemphredon* Latr, *Passaloecus* Schuck., *Stigmus* Panz., *Trypoxylon* Latr., and *Crabro* Fabr. *Chrisididae* parasitizing solitary wasps and psammophilous *Sphecidae* do not occur in the town.

INTRODUCTION

Chrisididae of Mazovia have not been studied so far, thus the literature data from this region of Poland are casual and fragmentary.

There are 65 species of *Chrisididae* known from Poland but, as stated by Banaszak [2], this list is not complete since only some regions of Poland were under study. Relatively well known are *Chrisididae* of the Great Poland-Kujavian Lowland, Silesia, and the Little Poland Lowland. From other parts of Poland, including Mazovia, there are only mentions on the occurrence of single species. The whole literature on the occurrence of *Chrisididae* in Poland has been summarized by Banaszak [1, 2].

According to the literature data, 17 species of *Chrisididae* are known from Mazovia. In the present study, 15 species new to this area have been recorded. Thus 32 species are known from Mazovia at present.

In this paper, the species composition of *Chrisididae* living in Mazovia is characterized on the basis of the literature data, unpublished catalogue by Drogoszewski for materials in the collection of the former Zoological Muzeum in Warsaw destroyed during the war, and on author's materials collected in 1974—1977.

The earliest information on *Chrisididae* occurring in Mazovia is given by Nasonov, who lists the species recorded in the Płock surroundings [12].

Then Drogoszewski studied *Aculeata* of the region of Łowicz [7, 8]. The data taken from the unpublished catalogue by Drogoszewski concern such areas as the Kampinos forest and the surroundings of Łowicz, Płock, Grodzisk Mazowiecki, Błonie, and Podkowa Leśna. Later Głowacki [9] listed the *Chrisididae* occurring in Warsaw and some near localities such as Podkowa Leśna, Konstancin, Ożarów, Skolimów, Czarna Struga.

The author's materials were quantitatively collected by means of Moericke's traps suspended in tree crowns and on some plots, placed in grass [5, 11]. Also Barber's pitfall traps were used, and the observed insects were caught by a sweep net [5].

These materials were collected in three zones differing in the intensity of urban pressure [14]:

Zone I — non-urban areas, subject to lowest urban pressure. Samples were taken in such localities as Łomna, Radziejowice, Hamernia, Wola Mrokowska, Młochów, Radość, and Rybienko Leśne.

Zone II — suburban areas, adjoing urban areas of Warsaw, such as Białołęka Dworska, Ursynów, and Jelonki.

The non-urban and suburban plots were located in different habitats such as moist coniferous forests, mixed coniferous forests, oak-hornbeam forests, carrs, and rural parks managed or not.

Zone III — urban areas of Warsaw. Insects were caught in parks, green areas of housing estates, green of the centre of the town, and allotments.

Data on the occurrence of *Chrisididae* in suburban and urban areas were collected almost exclusively in the present study. Data on their occurrence in non-urban areas are largely supplemented by the literature materials, provided by different authors from various habitats for many years. It follows from this that the data from suburban and urban areas are likely to be incomplete, further studies being needed, particularly in the suburban zone where the known fauna of *Chrisididae* seems to be too poor as compared with that inhabiting non-urban areas.

SPECIES COMPOSITION

As already noted, 32 species of *Chrisididae* have been recorded in Mazovia, including 31 in non-urban and suburban areas. In green urban areas of Warsaw 10 species were recorded, accounting for 31.2% of the *Chrisididae* of Mazovia. In Warsaw, *Chrisididae* generally occur only in parks and allotments. They have also been recorded in one of the courtyards in the centre of the town. This courtyard is relatively rich in herbs and shrubs. It is located at a street with little traffic, thus little exposed to exhaust gases. At the same time it is well insolated.

In parks, 21,9% of the *Chrisididae* of Mazovia were recorded, and in the centre of the town 12,5% (but they occurred on only one of the

four plots in the centre). In green areas of housing estates no *Chrisididae* have been recorded so far.

In Mazovia the species of the genus *Omalus* Panz. are most abundant. These are *O. auratus*, *O. aeneus*, *O. violaceus*. Also one species of the genus *Chrisis* L., namely *Ch. ignita* belongs to this group. All these species are common over Poland.

Many species known as common in Poland, are relatively rare in Mazovia and to do not colonize towns. They include *Notozus panzeri*, *Omalus bidentulus*, *Holopyga amoenula*, *Hedychrum gerstaeckeri*, *Pseudochrisis neglecta*, *Chrisis cyanea*, *Ch. fulgida*, and *Ch. viridula*.

Chrisididae of Mazovia include five rare species. These are *Omalus bidentulus*, *Holopyga gloriosa*, *Spinola unicolor*, *Chrisis succinta*, and *Chrisis sexdentata*. None of them occurs in urban areas.

Urban green areas are inhabited by the species common over Poland, including Mazovia. These are mostly species of the genus *Omalus* Panz. and of the genera *Hedychridium* Ab., *Hedychrum* Latr., *Notozus* Foerst., and *Chrisis* L. The most common species in Warsaw are *Omalus auratus*, *O. aeneus*, and *O. violaceus*. The other species were sporadically caught.

In general, it may be stated that *Chrisididae* belong to the insects not well adapted to urban conditions and, consequently, few species have been recorded in Warsaw.

ZOOGEOGRAPHICAL ANALYSIS

On the basis of the present knowledge on the geographical distribution of *Chrisididae* occurring in Mazovia, the following geographical elements have been distinguished: Palaearctic, Euro-Siberian, south-Euro-Siberian, European, and submediterranean [5]. The proportion of Palaearctic species is the highest in Mazovia. They are also most abundant in urban green areas and their proportion increases with urban pressure. The other zoogeographical elements are restricted to single species (Tab. 1).

The analysis of the *Chrisididae* of Mazovia shows that the number of species is heavily reduced in urban green areas as compared with non-urban habitats (Tab. 2). In green areas of housing estates they have not been recorded at all. In the centre of the town four species occur, three Palaearctic and one European. In parks of Warsaw seven species have been recorded. Only two of them have smaller geographical ranges: *Omalus pusillus*, a European species, and *Hedychridium sculpturatum*, a submediterranean species.

Submediterranean species form a small group in Mazovia. They account for only 18.8% of the *Chrisididae* of Mazovia, while for 38.4% of the *Chrisididae* of Poland. In Czechoslovakia, submediterranean *Chrisididae* account for as many as 46% [2].

Table 1. Proportions of zoogeographical elements in *Chrisididae* of Warsaw and non-urban habitats of Mazovia (N—number of species)

Zoogeographical element	Mazovia		Warsaw									
			Suburbs		Urban green areas							
					Total		Parks		Housing estates		Town centre	
	N	%	N	%	N	%	N	%	N	%	N	%
Palaearctic	16.00	55.20	4.00	57.10	6.00	60.00	4.00	57.10	—	—	3.00	75.00
Euro-Siberian	3.00	10.30	1.00	14.30	2.00	20.00	1.00	14.30	—	—	—	—
South-Euro-Siberian	1.00	3.50	—	—	—	—	—	—	—	—	—	—
European	5.00	17.20	1.00	14.30	1.00	10.00	1.00	14.3	—	—	1.00	25.00
Submediterranean	4.00	13.80	1.00	14.30	1.00	10.00	1.00	14.3	—	—	—	—

In the family *Chrisididae* the same processes can be observed as in other *Aculeata* of the families *Vespidae* or *Sphecidae*. Submediterranean species are eliminated from urban fauna. Moreover, the European species of the families *Vespidae* and *Chrisididae* are eliminated from urban habitats. Palaearctic species, thus with large geographical ranges, are best adapted to urban conditions.

ECOLOGICAL ANALYSIS

Chrisididae, like most wasps, tend to occur in warm, insolated places. For this reason they are more rich on trees growing singly on insolated sites than on trees with close crowns, large parts of which are shaded. A similar situation is in the herb layer — dry and insolated sites support richer fauna.

Adult *Chrisididae* are free-living melliphages. In this relation an important element of their habitat is the abundance of flowers, and particularly the presence of melliferous plants. It is not known whether or not they prefer some plant species, thus whether they are associated with some crops.

Larval *Chrisididae* are parasites. Most of them develop in nests of *Vespidae*, *Sphecidae* and *Apoidea*. Some species parasitize lepidopterans, but the species occurring in Mazovia infest only *Aculeata*. The developing larva first uses the resources stored by the host and then it feeds on its larva. The *Chrisididae* most common in Mazovia belong to the genera *Omalus* and *Chrisis*. These are *O. auratus*, *O. violaceus*, *O. aeneus* and *Ch. ignita*. The species of the genus *Omalus* are also most frequent in urban green areas of Warsaw.

Omalus auratus occurs in different habitat types of Mazovia: in oak-hornbeam forests, moist coniferous forests, mixed coniferous forests, and in carrs. It is the most frequently met species (of the genus *Omalus*) on large open spaces of Slovakia [17]. It is also one of few species occurring in green areas of the ZOO in Berlin [6]. Therefore, this species has large ecological tolerance; it inhabits both open and wooded areas, and also urban green areas. *O. auratus* is a parasite of *Sphecidae* of the genera *Crabro* Fabr. (subgenera *Crabro* s. str. and *Rhopalum* Kirb.), *Pemphredon* Latr., *Philantus* Fabr., *Cerceris* Latr., *Trypoxylon* Latr., and *Passaloecus* Shuck. It also attack some *Apoidea*, e.g. *Anthidium lituratum* (Panz.). The *Sphecidae* parasitized by *O. auratus* in urban green areas are richly represented by the genera *Crabro*, *Pemphredon*, *Trypoxylon*, and *Passaloecus*.

The next species relatively frequently met in both Mazovia and urban green areas is *Omalus violaceus*. The data on the frequency of the occurrence of this species in Poland are not consistent. According to Noskiewicz and Puławski, it is irregulary dispersed over Poland, and according to Banaszak, it is common [2, 13]. Liesenmaier states that it is rare in

Central Europe [10]. In Mazovia it has been recorded from a moist coniferous forest, a mixed coniferous forest, and from an oak-hornbeam forest. In Warsaw, it inhabits parks and allotments. It does not occur in open areas of Slovakia, nor in green areas of the ZOO in Berlin. It seems thus that most likely this species has a irregular type of distribution. The present results show that it is associated rather with wooded areas. It parasitizes various *Sphecidae* of the genus *Pemphredon* Latr.

Also *Omalus aeneus* is relatively frequent in Mazovia and also in urban areas. This species is common in Poland and also recorded from open areas of Slovakia [17]. In Mazovia it was caught in the moist coniferous forest and in the mixed coniferous forest. It is a parasite of *Sphecidae* of the genera *Pemphredon* Latr., *Passaloecus* Shuck., and *Stigmus* Panz., which commonly occur in Warsaw [15].

Two other species of the genus *Omalus*, *O. pusillus* and *O. truncatus*, are also met in urban green areas, though not so often. *O. pusillus* parasitize *Sphecidae* common in Warsaw, of the genera *Pemphredon* Latr., *Trypoxylon* Latr., and *Passaloecus* Shuck. The biology of *O. truncatus* is not known so far.

A relatively frequent species in Mazovia but scarce in Warsaw is *Chrisis ignita*. In Mazovia it inhabits forests and open spaces. In the literature it is characterized as the most common species in Poland, occupying the greatest number of different habitats. It has been recorded from open areas of Slovakia, abundantly, occurs in southern Poland, was caught on oaks at Rogalin (on the site of a carr), and is the most common species of this family [1, 3]. It has also been recorded from green areas of the ZOO in Berlin [6]. Thus *Chrisis ignita* has a large ecological tolerance. So far it is known to parasitize 24 species of *Vespidae*, *Sphecidae*, and *Apoidea*. In Warsaw five host species have been recorded. These are *Vespa (Vespula) rufa* L., *Ancistrocerus parietum* (L.), *Trypoxylon figulus* (L.), *Trypoxylon* attenuatum Smith. and *Colletes daviesanus* [4, 15, 16]. Therefore, such species as *Omalus auratus*, *O. violaceus*, and *O. aeneus* have a better chance to find a host and thus to live in urban green areas than *Chrisis ignita*.

In addition, the following species occur in urban green areas: *Hedychridium sculpturatum*, a parasite of *Apoidea* of the genera *Halictus* Latr. and *Osmia* Panz., *Hedychrum nobile*, a parasite of *Apoidea* and solitary *Vespidae*; *Hedychrum rutilans*, a parasite of *Apoidea* of the genus *Halictus* Latr. and *Sphecidae* of the genus *Philantus* Fabr., *Notozus constrictus*, a parasite of the species *Psen* (*Mimesa*) *equestris* (Fabr.). The host of *N. constrictus* has not been recorded in Warsaw so far.

Six species of the *Chrisididae* caught in urban areas have large ecological tolerance. They occur in both wooded and open areas. These are *Notozus constrictus*, *Omalus pusillus*, *O. aeneus*, *O. auratus*, *Hedychrum nobile*,

and *Chrisis ignita*. The other species inhabiting urban green areas were caught only in wooded areas.

Of 22 species of the *Chrisididae* not entering the town, 13 species cannot find their hosts in Warsaw. This group includes parasites of solitary wasps and psammophilous *Sphecidae*. Solitary Vespidae are scarce in urban green areas, and psammophilous *Sphecidae* do not visit the town almost at all [15]. Thus the factor limiting the occurrence of 13 species of *Chrisididae* in Warsaw is the lack of host species. The biology of four species of the *Chrisididae* not occurring in Warsaw is not known.

The other species of the *Chrisididae* recorded from Mazovia but absent in urban green areas have their hosts in green of Warsaw. These are *Notozus panzeri*, a parasite of *Sphecidae* of the genera *Crabro*, *Pemphredon*, *Psen*, and *Trypoxylon*; *Omalus bidentulus*, a parasite of *Psenulus pallipes*; *Chrisis austriaca*, a parasite of *Apidae* of the genus *Osmia*; *Chrisis cyanea*, a parasite of 10 species, but only two of them (of the family *Sphecidae*) — *Trypoxylon attenuatum* Smith. and *T. figulus* (L.), are relatively frequent in the town; *Ch. fulgida*, a parasite of seven host species, of which two species of the family *Sphecidae* are most frequent in Warsaw: *Crabro cavifrons* Thoms. and *Trypoxylon figulus* (L.).

At present it is difficult to determine the factors limiting the occurrence of the *Chrisididae* having their hosts in urban green areas. The ecological and zoogeographical characteristics of these species are similar to those of the species colonizing urban areas. These are common species, occurring all over Poland, with large ecological tolerance, recorded in both open and wooded areas (except for *Chrisis austriaca*). At the same time, they have large geographical ranges.

CONCLUSIONS

It follows from the data on the biology of *Chrisididae* that the parasites of the species common in the town have greatest chance to survive in Warsaw. From *Vespidae*, these will be social wasps. But so far no *Chrisididae* have been found parasitizing the most common wasps such as *Vespula (Vespula) vulgaris* and *V. (V.) germanica* Fabr. Only one species, *Chrisis ignita*, can attack *V. (V.) rufa* L., which occur in urban green areas but much less frequently than *V. (V.) vulgaris* and *germanica*. Most of the *Chrisididae* parasitize solitary wasps, the latter being scarce in the town. Of the *Sphecidae*, such genera can be hosts of the *Chrisididae* as *Bembecinus costa*, *Bembix* Fabr., *Cerceris* Latr., *Tachysphex* Kohl. *Oxybelus* Latr., *Philanthus* Fabr., *Astata* Latr., and *Gorytes* Latr. These are mostly psammophilous *Sphecidae*, which in fact do not enter the town. But *Chrisididae* also parasite such genera as *Pemphredon* Latr., *Passaloecus* Shuck, *Stigmus* Panz., *Trypoxylon* Latr., and *Crabro* Fabr. (some subspecies). The species

of these genera are common in the town. At the present state of knowledge on the biology of *Chrisididae* and their susceptibility to physico-chemical factors, it is difficult to tell which of the factors of urban pressure limits the occurrence in the town of the *Chrisididae* parasitizing these common *Sphecidae*.

In Warsaw, the most abundant species associated with the *Sphecidae* commonly occurring in urban green areas belong to the genus *Omalus* Panz. They are characterized by large ecological tolerance. In non-urban and suburban areas they occur in different habitats such as moist coniferous forests, mixed coniferous forests, oak-hornbeam forests, and even carrs. They also occur in open areas, including crop fields.

The *Chrisididae* inhabiting urban green areas have not only large habitat spectrum but also large geographical ranges (Palaearctic, Euro-Siberian).

SPECIES NEW TO MAZOVIA

Here the species are listed recorded in the present study from Mazovia and Warsaw, and also the species from the unpublished catalogue prepared by Drogoszewski and based on the collection of the former Zoological Muzeum in Warsaw, destroyed during the war.

Notozus panzeri (Fabr.)

Kampinos forest, 1937, det. Drogoszewski.

Omalus biaccinctus Buys.

Łomna (moist coniferous forest), August 1976.

Omalus pusillus (Fabr.)

Łowicz 1936, Płock 1938, det. Drogoszewski; Warsaw (Łazienki park, Wilcza street), July and August.

Omalus violaceus (Scop.)

Łomna (moist coniferous forest, mixed coniferous forest); Ursynów; Białołęka Dworska (moist coniferous forest, mixed coniferous forest, oak-hornbeam forest); Warsaw (Saxon Garden, Praga park, allotments); caught from June to September.

Holopyga amoenula Dahlb.

Płock 1893, Łowicz 1935, det. Drogoszewski.

Holopyga gloriosa (Fabr.)

Łowicz 1936, Grodzisk Mazowiecki 1933, det. Drogoszewski.

Hedychridium sculpturatum (Ab.)

Warsaw (Łazienki park), August.

Hedychridium ardens (Latr.)

Białołęka Dworska (moist coniferous forest), August.

Pseudochrysis neglecta (Shuck.)

Łowicz 1936, det. Drogoszewski.

Chrysis bicolor Lep.

Łomna (mixed coniferous forest); Białołęka Dworska (moist coniferous forest); July.

Chrysis succinta L.

Łowicz 1937, Płock district 1893, det. Drogoszewski.

Chrysis sexdentata Christ.

Warsaw district 1869, det. R. Skobejko.

Chrysis viridula L.

Łowicz 1934, 1935, 1936, det. Drogoszewski.

Chrysis sybarita Foerst.

Łowicz 1936, det. Drogoszewski, Płock district 1893, det. R. Skobejko.

Chrysis ruddi Schuck.

Białołęka Dworska (oak-hornbeam forest), July.

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Table 2. Check-list of *Chrisididae* (*Hymenoptera*) species occurring in Warsaw and Mazovia

No.	○ — literature data ● — proved literature data + — unpublished data Species	Mazovia	Warsaw					
			Suburban areas	Parks	Green areas in housing estates	Town centre	Allotments	Other sampling areas
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1	*Notozus panzeri* (Fabr.)	+	—	—	—	—	—	—
2	*Notozus constrictus* Foerst.	○	—	+	—	—	—	—
3	*Omalus truncatus* (Dahlb.)	○	+	+	—	—	+	—
4	*Omalus bidentulus* (Lep.)	○	—	—	—	—	—	—
5	*Omalus biaccinctus* Buys.	+	—	—	—	—	—	—
6	*Omalus pusillus* (Fabr.)	+	—	+	—	+	—	—
7	*Omalus aeneus* (Fabr.)	●	—	+	—	+	—	—
8	*Omalus violaceus* (Scop.)	+	+	+	—	—	+	—
9	*Omalus auratus* (L.)	●	+	+	—	+	+	—
10	*Holopyga amoenula* Dahlb.	+	—	—	—	—	—	—
11	*Holopyga gloriosa* (Fabr.)	+	—	—	—	—	—	—
12	*Hedychridium roseum* (Rossi)	○	+	—	—	—	—	—
13	*Hedychridium sculpturatum* (Ab.)	—	—	+	—	—	—	—
14	*Hedychridium ardens* (Latr.)	—	+	—	—	—	—	—
15	*Hedychrum chalybaeum* Dahlb.	●	—	—	—	—	—	—
16	*Hedychrum nobile* (Scop.)	●	—	—	—	—	—	○
17	*Hedychrum rutilans* Dahlb.	●	—	—	—	—	+	—
18	*Hedychrum gerstaeckeri* Chevr.	●	—	—	—	—	—	—
19	*Panorpes grandior* (Pall.)	●	—	—	—	—	—	—
20	*Euchroeus purpuratus* (Fabr.)	○	—	—	—	—	—	—
21	*Spinolia unicolor* (Dahlb.)	○	—	—	—	—	—	—
22	*Pseudochrysis neglecta* (Shuck.)	+	—	—	—	—	—	—
23	*Chrysis austriaca* Fabr.	●	—	—	—	—	—	—
24	*Chrysis bicolor* Lep.	+	+	—	—	—	—	—
25	*Chrysis succincta* L.	+	—	—	—	—	—	—
26	*Chrysis cyanea* L.	●	—	—	—	—	—	—
27	*Chrysis sexdentata* Christ.	+	—	—	—	—	—	—
28	*Chrysis fulgida* L.	●	—	—	—	—	—	—
29	*Chrysis viridula* L.	+	—	—	—	—	—	—
30	*Chrysis sybarita* Foerst.	+	—	—	—	—	—	—
31	*Chrysis ruddi* Schuck.	—	+	—	—	—	—	—
32	*Chrysis ignita* (L.)	●	—	—	—	+	—	○

ZŁOTOLITKI (*HYMENOPTERA, CHRISIDIDAE*) WARSZAWY I MAZOWSZA

STRESZCZENIE

Na terenie Niziny Mazowieckiej stwierdzono (na podstawie danych literaturowych oraz materiałów własnych) występowanie 32 gatunków złotolitek, w tym 15 nowych dla Mazowsza. Najpospolitsze gatunki z rodziny *Chrisididae* na Mazowszu należą do rodzajów *Omalus* Panz. i *Chrysis* L. Są to: *O. auratus* (L.), *O. violaceus* (Scop.), *O. aeneus* (Fabr.) i *Ch. ignita* (L.).

W Warszawie stwierdzono występowanie tylko 10 gatunków, co stanowi 31,2% liczby gatunków wykazanych z Mazowsza. Najczęściej spotykane w zieleni miejskiej gatunki to, podobnie jak na całej Nizinie Mazowieckiej, przedstawiciele rodzaju *Omalus*: *O. auratus*, *O. violaceus*, *O. aeneus*.

Złotolitki są grupą owadów wrażliwych na wpływy presji urbanizacyjnej. W zieleni miejskiej występują nielicznie. W Warszawie ich występowanie jest ograniczone głównie do terenów parkowych i ogródków działkowych. Stwierdzono również ich występowanie na jednym z badanych podwórek śródmiejskich.

Owady dorosłe z rodziny *Chrisididae* żyją samodzielnie, są melitofagami. Stadia larwalne prowadzą pasożytniczy tryb życia. Złotolitki stwierdzone na Mazowszu pasożytują wyłącznie u żądłówek.

Jak wynika z danych dotyczących biologii złotolitek największe szanse utrzymania się w zieleni Warszawy mają gatunki pasożytujące u pospolitych w mieście gatunków. W Warszawie są to pasożyty grzebaczowatych (*Sphecidae*) z rodzajów: *Pemphredon* Latr., *Passaloecus* Shuck., *Stigmus* Panz., *Trypoxylon* Latr. i niektórych podrodzajów *Crabro* Fabr. Ze względu na brak gatunków żywicielskich do miasta nie wkraczają gatunki pasożytujące u takich owadów jak osy samotne i grzebaczowate psammofilne.

Analiza zoogeograficzna fauny złotolitek Mazowsza wykazała, że do miasta wkraczają głównie gatunki o szerokim zasięgu geograficznym tj. paleoarktyczne i eurosyberyjskie.

ЗОЛОТЫЕ ОСЫ (*HYMENOPTERA, CHRISIDIDAE*) ВАРШАВЫ И МАЗОВИИ

РЕЗЮМЕ

Золотые осы являются семейством чувствительным к влиянию урбанизационного пресса. В городской зелени встречаются немногие виды и только на территории парков и садово-огродных участков. До настоящего времени в городских зеленых насаждениях урбанизированной Варшавы констатировано только 10 видов, в то время, как на территории Мазовии известно 32 вида. В город входят главным образом виды, обладающие широким географическим ареалом: палеарктические и европеско-сибирские. Одним из главных факторов, ограничивающих распространение золотых ос в городской зелени, является отсутствие видов-хозяев. В городе встречаются главным образом виды, паразитирующие на роющих осах из родов *Pemphredon* Latr., *Passaloecus* Schuck., *Stigma* Panz., *Trypoxylon* Latr., *Crabro* Fabr. *Chrisididae*. Но нет видов золотых ос, которые паразитируют на одиночных осах и на псаммофильных роющих осах.