

New records of Platygastriinae (Hymenoptera: Platygastriidae) in Poland, including sixteen species new in the Polish fauna

Nowe stanowiska Platygastriinae (Hymenoptera: Platygastriidae) w Polsce, w tym szesnaście gatunków nowych dla fauny Polski

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ABSTRACT. New distributional records of twenty species of Platygastriinae (Hymenoptera: Platygastriidae) in Poland are given. Sixteen species are recorded for the first time: *Amblyaspis scelionoides* (HALIDAY), *Anopedias lacustris* (KIEFFER), *Euxestonotus clavicornis* BUHL, *Leptacis fimbriata* KIEFFER, *Leptacis halia* (WALKER), *Leptacis ozines* (WALKER), *Platygaster cebes* WALKER, *Platygaster chloropus* THOMSON, *Platygaster doczkali* BUHL, *Platygaster euhemerus* WALKER, *Platygaster nisus* WALKER, *Platygaster sterope* WALKER, *Platygaster uniformis* BUHL, *Synopeas inerme* THOMSON, *Synopeas lugubre* THOMSON, and *Synopeas trebium* (WALKER). *Platygaster doczkali* has been known so far only from the holotype collected in Germany. As this hymenopteran family is exceptionally poorly studied, and such a remarkable number of species new to the fauna of Poland was collected in only three geographic regions (Wielkopolsko-Kujawska Lowland, Lower Silesia and Bieszczady Mts), future surveys are expected to significantly extend the checklist of Polish platygastriids.

KEY WORDS: Hymenoptera, Platygastriidae, Platygastriinae, new records, Poland.

Introduction

Platygastriidae is a large hymenopteran family comprising over a thousand nominal species. These are typically minute organisms, often around 1-2 mm in length, usually darkly pigmented. Platygastriids are mostly koinobiont egg-larval or egg-pupal parasitoids, predominantly developing

in gall midges (Diptera: Cecidomyiidae), less frequently in adult Hemiptera and the eggs of Coleoptera. They are very common in broad ranges of habitats, but because of their small size, platygastriids often avoid collecting efforts focused on more popular insect groups, as Lepidoptera, Coleoptera or large Hymenoptera. Moreover, this family is exceptionally difficult to identify at the species level, in many genera only one sex (often the female) can be identified. Greatly confused older literature records presenting dubious data on species impossible to be unambiguously identified at that time make any faunistic studies on platygastriids a challenging task.

Distributional data on the platygastriid fauna of Poland are nearly all based on old and problematic records and require verification of identifications. These records are scattered throughout faunistic literature, but they were summarized by GARBARCZYK (1997). The author of this checklist gives the number of 56 species of Platygastriidae and 66 species of Scelionidae (currently regarded as a subfamily of Platygastriidae) recorded so far from Poland. Later *Synopeas bialowiezaensis* BUHL, 2005 and *Inostemma kaponeni* Buhl, 2005 (Platygastriinae) were described from Poland, and a species of Sceliotrachelinae, *Amitus longicornis* (FÖRSTER, 1878) was reported by WIŚNIEWSKI (2007). This gives a very small number, compared to about 260 species of Platygastriinae alone known from the British Isles (BUHL & NOTTON 2009). Certainly this small number of species known to occur in Poland is a result of identification problems and lack of specialists interested in this family.

In the present paper we list new records of twenty species of Platygastriinae in Poland; sixteen of them are reported for the first time to occur in the Polish fauna. All voucher specimens are deposited in the collection of the second author, Wrocław, Poland. Species new to the fauna of Poland are marked by an asterisk. We are indebted to Marek WANAT, who kindly provided samples of sifted leaf litter, from which some specimens of interesting platygastriids were extracted.

Amblyaspis scelionoides (HALIDAY, 1835)*

(Fig. 1)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, sweeping net, leg. P. JAŁOSZYŃSKI.
A common species, known from Europe and Mongolia.



Figs / Ryc. 1–20. Platygastriinae: 1 – *Amblyaspis scelionoides*, female/samica; 2 – *Anopedias lacustris*, female/samica; 3 – *Euxestonotus clavicornis*, female/samica; 4 – *Inostemma reticulatum*, female/samica; 5 – *Leptacis fimbriata*, female/samica; 6 – *Leptacis halia*, female/samica; 7 – *Leptacis orchymonti*, female/samica; 8 – *Leptacis ozines*, female/samica; 9 – *Platygaster cebes*, female/samica; 10 – *Platygaster chloropus*, female/samica; 11 – *Platygaster doczkali*, female/samica; 12 – *Platygaster euhemerus*, female/samica; 13 – *Platygaster nisus*, male/samiec; 14 – *Platygaster pelias*, female/samica; 15 – *Platygaster sterope*, male/samiec; 16 – *Platygaster uniformis*, female/samica; 17 – *Synopeas ciliatum*, female/samica; 18 – *Synopeas inerme*, female/samica; 19 – *Synopeas lugubre*, female/samica; 20 – *Synopeas trebium*, female/samica. [Not to the same scale / W różnej skali].

Anopedias lacustris (KIEFFER, 1926)*

(Fig. 2)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, dry meadow on sandy ground, sweeping net, leg. P. JAŁOSZYŃSKI.

Rarely collected platygastrid, previously known from Northwest Europe and Hungary; recorded also from Canada.

Euxestonotus clavicornis BUHL, 1995*

(Fig. 3)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, dry meadow on sandy ground, sweeping net, leg. P. JAŁOSZYŃSKI.

This is a rarely collected species, previously known only from Scandinavia and the British Isles.

Inostemma reticulatum (SZELENYI, 1938)

(Fig. 4)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 5♀, dry meadow on sandy ground, sweeping net, leg. P. JAŁOSZYŃSKI;
- Lower Silesia: XS05 Jaroszów, 19 VII 2014, 5♀, dry meadow on sand and clay, sweeping net, leg. P. JAŁOSZYŃSKI.

Relatively common platygastrid, known from several countries in Europe and from Iran; a parasitoid of the Brassica pod midge, *Dasineura brassicae* (WINNERTZ) and *Ozirhincus tanacetii* KIEFFER (both Cecidomyiidae) on *Tanacetum vulgare* L.

Leptacis fimbriata KIEFFER, 1917*

(Fig. 5)

- Lower Silesia: XS57 Szczodre ad Wrocław, 11 XI 2014, 1♀, sifted leaf litter in riparian forest, leg. M. WANAT.

Rarely recorded species, previously known only from Romania, Sweden and Denmark.

Leptacis halia (WALKER, 1835)*

(Fig. 6)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI.

Previously known only from the British Isles, but probably confused with *L. vlugi* BUHL, 1997, which had been recorded from many European countries.

Leptacis orchymonti (DEBAUCHE, 1947)

(Fig. 7)

- Lower Silesia: XS57 Szczodre ad Wrocław, 11 XI 2014, 1♂, sifted leaf litter in riparian forest, leg. M. WANAT.

Moderately common, broadly distributed from Europe to the Korean Peninsula.

Leptacis ozines (WALKER, 1835)*

(Fig. 8)

- Lower Silesia: XS46 Wrocław, 28 IX 2014, 1♀, lawn at the Herbarium building of the Natural History Museum, sweeping net, leg. P. JAŁOSZYŃSKI; XS57 Szczodre ad Wrocław, 11 XI 2014, 1♀, sifted leaf litter in riparian forest, leg. M. WANAT.

A common platygastriid, distributed from Europe (Northern and Southern) to the Korean Peninsula.

Platygaster cebes WALKER, 1835*

(Fig. 9)

- Lower Silesia: XS57 Szczodre ad Wrocław, 11 XI 2014, 4♀, sifted leaf litter in riparian forest, leg. M. WANAT.

Moderately common in Northwestern Europe.

Platygaster chloropus THOMSON, 1859*

(Fig. 10)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI.

Common in Northwestern Europe; doubtful records are also known from Mongolia and the Korean Peninsula.

Platygaster doczkali BUHL, 2010*

(Fig. 11)

- Lower Silesia: XS37 Wrocław-Świniary, 17 VIII 2014, 1♀, remnants of an old oak forest, sweeping net, leg. P. JAŁOSZYŃSKI.
Hitherto known only from the holotype collected in Germany.

Platygaster euhemerus WALKER, 1835*

(Fig. 12)

- Lower Silesia: XS37 Wrocław-Świniary, 17 VIII 2014, 1♀, remnants of an old oak forest, sweeping net, leg. P. JAŁOSZYŃSKI.
Moderately common in Northwestern Europe, occurs also in Spain and the Korean Peninsula.

Platygaster nisus WALKER, 1835*

(Fig. 13)

- Wielkopolsko-Kujawska Lowland: XU51 Promno ad Poznań, 14 IX 2014, 1♂, wet meadow close to a beech forest, sweeping net, leg. P. JAŁOSZYŃSKI.
Common, distributed from Europe to the Korean Peninsula, parasitoid of *Sitodiplosis mosellana* (GÉHIN) (Cecidomyiidae).

Platygaster pelias WALKER, 1835

(Fig. 14)

- Wielkopolsko-Kujawska Lowland: XU51 Promno ad Poznań, 23 III 2015, 26 exx., reared from galls of the raspberry gall fly (*Lasioptera rubi* (SCHRANK, 1803), Diptera, Cecidomyiidae) collected from raspberries in a beech and oak forest, adults obtained in April and May 2015, leg. & cult. P. JAŁOSZYŃSKI; XT29 Puszczykowo ad Poznań, 8 IX 2014, 2♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI;
- Bieszczady Mts: FV23 Halicz Mt, 29 V 2014, 1♀, grassland north of the mount, 1266 m, sifted from grass and soil, leg. M. WANAT.
Common, known from Northern to Southern Europe, also from Iran and the Korean Peninsula. A well-known parasitoid of *L. rubi* on *Rubus* spp., also reared from an unidentified cecidomyiid larva on *Crataegus monogyna* JACQ.

Platygaster sterope WALKER, 1835*

(Fig. 15)

- Lower Silesia: XS37 Wrocław-Świniary, 12 IV 2015, 1♂, remnants of an old oak forest, sweeping net, leg. P. JAŁOSZYŃSKI.
Rarely collected, previously known only from the British Isles.

Platygaster uniformis BUHL, 2006*

(Fig. 16)

- Wielkopolsko-Kujawska Lowland: XU51 Promno ad Poznań, 23 III 2015, 19 exx., reared from galls of a gall midge *Rhabdophaga* sp. (Diptera, Cecidomyiidae) collected from willows in marshland, adults obtained in April and May 2015, leg. & cult. P. JAŁOSZYŃSKI.
Fairly rare, previously known from Denmark, Sweden and the United Kingdom, reared from *Rhabdophaga albipennis* (H. LOEW) on *Salix alba* L. in the UK.

Synopeas ciliatum THOMSON, 1859

(Fig. 17)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI.
Common, known from countries all over Europe, distributed from Karelia to Spain.

Synopeas inerme THOMSON, 1859*

(Fig. 18)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI;
- Lower Silesia: XS46 Wrocław, 28 IX 2014, 1♂, lawn at the Herbarium building of the Natural History Museum, sweeping net, leg. P. JAŁOSZYŃSKI; XS37 Wrocław-Świniary, 17 VIII 2014, 1♂, remnants of an old oak forest, sweeping net, leg. P. JAŁOSZYŃSKI;
- Sudety Zachodnie: WS64 Wojcieszów, 19 VII 2014, 1♀, ad natural reserve Góra Miłek, sifted from leaf litter of a beech forest, leg. P. JAŁOSZYŃSKI.
Common, known from Northern Europe ad from Spain. Reared from cecidomyiids *Contarinia medicaginis* KIEFFER on *Medicago sativa* L., and *Jaapiella veronicae* (VALLOT) on *Veronica longifolia* L.

Synopeas lugubre THOMSON, 1859*

(Fig. 19)

- Wielkopolsko-Kujawska Lowland: XT29 Puszczykowo ad Poznań, 8 IX 2014, 1 ♀, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI.

Moderately common in Northwestern Europe. A parasitoid of the Brassica pod midge, *Dasineura brassicae* (WINNERTZ) (Cecidomyiidae).

Synopeas trebium (WALKER, 1835)*

(Fig. 20)

- Wielkopolsko-Kujawska Lowland: XU51 Promno ad Poznań, 14 IX 2014, 3 ♀2 ♂, mixed forest, sweeping net, leg. P. JAŁOSZYŃSKI.

Common, known from countries all over Europe, from Mongolia and the Korean Peninsula.

STRESZCZENIE

Dane faunistyczne dotyczące drobnych błonkówek z rodziny Platygastriidae występujących na terenie Polski są niezwykle fragmentaryczne i skąpe. Zaledwie 58 gatunków z podrodziny Platygastriinae i 66 Scelioninae zostało jak dotychczas wykazanych z terytorium Polski (dla porównania, fauna samych tylko Platygastriinae Wysp Brytyjskich liczy ok. 260 gatunków). W niniejszej pracy podane są nowe rekordy dwudziestu gatunków Platygastriinae, w tym aż szesnaście z nich nie było dotychczas podanych z Polski: *Amblyaspis scelionoides* (HALIDAY), *Anopedias lacustris* (KIEFFER), *Euxestonotus clavicornis* BUHL, *Leptacis fimbriata* KIEFFER, *Leptacis halia* (WALKER), *Leptacis ozines* (WALKER), *Platygaster cebes* WALKER, *Platygaster chloropus* THOMSON, *Platygaster doczkali* BUHL, *Platygaster euhemerus* WALKER, *Platygaster nisus* WALKER, *Platygaster sterope* WALKER, *Platygaster uniformis* BUHL, *Synopeas inerme* THOMSON, *Synopeas lugubre* THOMSON i *Synopeas trebium* (WALKER). *Platygaster doczkali* znany był wcześniej zaledwie jednego okazu (holotypu) odłowionego w Niemczech.

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