# A DISTINCT NEW SPECIES OF PLATYGASTER FROM LATVIA (HYMENOPTERA: PLATYGASTRIDAE)

## **Peter Neerup Buhl**

Neerup Buhl P. 2021. A distinct new species of *Platygaster* from Latvia (Hymenoptera: Platygastridae). *Acta Biol. Univ. Daugavp.*, 21 (1): 33 – 35.

*Platygaster baltica* sp. nov. is described, illustrated and compared with similar species.

Key words: Platygaster, Platygastridae, new species, taxonomy, Palaearctic region.

Peter Neerup Buhl. Tårsvej 33, DK-4990 Sakskøbing, Denmark, E-mail: pnbuhl@hotmail.com

#### INTRODUCTION

Platygastrinae Ashmead, 1893 is a subfamily of tiny wasps, predominantly egg-larval or egg-pupal parasitoids of gall midges (Diptera: Cecidomyiidae Newman, 1835). Platygastrids are taxonomically challenging insects, and even the European fauna is poorly studied, as demonstrated by new species being frequently described from areas where other insect orders and families are traditionally well-studied (e.g. Buhl 2009, 2010). However many platygastrid species are similar and probably cryptic, so a new species which is rather distinct morphologically as the one described below is becoming a rare occurrence. Since 2006 I have collected platygastrids in Latvia to document this hitherto unexplored group in that country. In Buhl (2016) I reported 72 species from Latvia, but probably three times as many occur there.

#### MATERIAL AND METHODS

The type specimen was trapped in alcohol and mounted with glue on card point and examined and drawn using a Leitz-Wetzlar stereomicroscope (x 64). For the relative

measurements below a unit is used in which  $1 = 17 \mu m$ . Antennal segments are measured along their medial length and at their widest, tergites and other body parts at their longest and widest. The discussed material is deposited in the collection of the Natural History Museum of Denmark (ZMUC), the handwritten label is quoted verbatim.

Terminology: Standard abbreviations used are A1-A10 = antennomeres 1-10, OOL = distance between lateral ocellus and eye, LOL = distance between lateral and anterior ocelli, POL = distance between lateral ocelli, and T1-T6 = tergites 1-6.

#### **Taxonomy**

### *Platygaster baltica* sp. nov. (Fig. 1-4)

Holotype ♀: Latvia / forest 10 km SW of Jēkabpils / 23.VIII.-26.IX.2010 / Malaise trap, P.N. Buhl (ZMUC).

Derivatio nominis: Named after the supranational region of the type locality.

Diagnosis: Occiput with longitudinal and oblique lines posteriorly, transverse anteriorly; frons

smooth except for median carina; female A1 longer than height of head, A9 1.33 times as long as wide; notauli nearly complete; scutellum low and smooth; fore wing 2.2 times as long as wide; female metasoma hardly as long as rest of body, with T1 hardly 0.4 as wide as T2 which is smooth.

Description: ♀. Total body length 1.25 mm. Black; legs more or less pale brown, meso- and metafemora and distal half of metatibiae darkest; A1-A6 and mandibles medium brown, A1-A6 lighter ventrally; A7-A10, coxae and tegulae dark brown (procoxae somewhat lighter).

Head in dorsal view (Fig. 1) 1.9 times as wide as long, about as wide as mesosoma; occiput with a longitudinal median carina from posterior margin over most of its length, obliquely carinate laterad of median carina, laterally vertically striated, anteriorly transversely striated, without hyperoccipital carina but two rather coarse, most anterior, transverse striae just behind ocellar area. Vertex finely pustulated. OOL:POL:LOL = 2.8:7.0:3.0. From smooth except for three transverse wrinkles just above antennal insertions, between these with a median longitudinal carina extending four-fifths of the way towards depression in front of anterior ocellus; frons also with an irregular row of setae along inner orbits. Compound eyes large, in lateral view higher than wide (11:7), 2.9 times as high as malar space, with sparse and very short interfacetal setae. Head in frontal view wider than high (22:18). Antenna (Fig. 2) with A1 longer than height of head (19:18), 1.35 times as long as distance between inner orbits. Measurements of antennomeres A1-A10 (length: width) = 19.0:3.0; 4.8:1.9; 2.2:1.5; 3.8:2.3; 3.0:2.0; 3.0:2.0; 3.3:2.8; 4.0:3.0; 4.0:3.0; 6.0:2.7. Flagellar setation short but distinct.

Mesosoma 1.4 times as long as wide, slightly higher than wide. Lateral sides of pronotum with pustulate microsculpture in about anterior half, smooth in posterior half except for raised hair-sockets. Mesoscutum with a few setae along notauli and margins, smooth; mid lobe in anterior half and lateral lobes along narrow anterior margin and in posterior third pustulated

leathery; admedian lines weakly indicated on anterior two-fifths of disc, parallel; notauli strong, ending shortly before anterior margin, posteriorly well separated; mid lobe ending bluntly, distinctly prolonged, covering extreme base of scutellum. Scuto-scutellar grooves rather narrow, each covered by five long setae. Mesopleuron smooth. Scutellum (Fig. 3) slightly raising above level of mesoscutum, evenly and weakly convex, moderately densely setose. Metapleuron with pilosity all over. Propodeal carinae parallel; area between them smooth, about 1.2 times as long as wide.

Forewing slightly shorter than total body length (74:75), 2.2 times as long as wide, surpassing tip of metasoma by a distance equal to about 3.5 times combined length of T3-T6, clear, with dense and rather long microtrichia; marginal

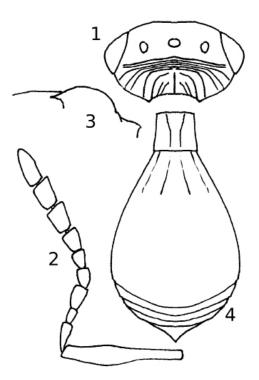


Fig. 1-4. *Platygaster baltica* sp. nov. holotype female 1 – head from above; 2 – antenna; 3 – scutellum and propodeum in lateral view (propodeum to the right); 4 – metasoma from above.

cilia 0.06 width of wing. Hindwing slightly more than five times as long as wide (creased in type), with two hamuli; marginal cilia one-quarter the width of wing.

Metatibia about 0.85 times as long as tarsus, the basal segment of which is 0.45 as long as metatibia, two-thirds as long as tarsal segments 2-5 combined.

Metasoma (Fig. 4) 0.95 as long as rest of body, 1.8 times as long as wide, 1.7 times as wide as high, 0.95 as wide as mesosoma. Measurements of tergites T1-T6 (length: width) = 6.5:7.5; 25.0:20.5; 1.0:19.5; 1.0:18.5; 1.0:15.0; 3.0:10.0. T1 smooth, with two strong longitudinal carinae which are slightly converging from anterior margin to midlength of segment, then becoming parallel, laterally of two strong carinae with two weaker, incomplete carinae in anterior part on each side inside lateral margins, segment with only a few setae standing out from sides. T2 with two smooth basal foveae, these margined at lateral slopes of fovea to 0.25 length of tergite; foveae with a few long hairs, between them with very short crenulae; T2 otherwise smooth except for faint micropunctation along narrow posterior margin. T3-T6 dull, with pustulate microsculpture all over, and with a few setae in superficial punctures: two on T4, six on each of T5-T6. Sternite 1 and anterior 0.2 of sternite 2 with dense whitish setation; sternite 2 not convex anteriorly in profile.

Differential diagnosis: Similar to *P. martikaineni* Buhl, 2003 known from North and Central Europe, but that species has the occipital sculpture transverse, the frons smooth, in most of lower one-third with the transverse reticulation, OOL:LOL=2:3, A1 shorter than the height of the head, and the flagellar segments shorter (A9 as wide as long). *P. baltica* sp. nov. runs to *P. oscus* Walker, 1835, known from North Europe, also from Latvia (probably even east to Mongolia), in Vlug's (1985) key, but that species has the occiput strongly transversely striated, the frons with superficial striation, and T1 hardly less than half as wide as T2. In Buhl's (2006) key *P. baltica* sp. nov. could also run to *P. soederlundi* 

Buhl, 1998, known from North and Central Europe (and east to Korea), but that species has the occiput with the weak, irregular, transverse sculpture, and A9 as wide as long. Undoubtedly, *P. baltica* sp. nov. is an interesting discovery and a specifically characteristic species primarily due to the head sculpture in the combination with the conformation and the sculpture of particularly the metasoma.

#### REFERENCES

Buhl P.N. 2006. Key to *Platygaster* (Hymenoptera, Platygastridae) from Denmark, with descriptions of new species. *Steenstrupia*, 29: 127-167.

Buhl P.N. 2009. New or little known Palaearctic species of Platygastrinae (Hymenoptera: Platygastridae). III. *Entomologica fennica*, 20: 65-83.

Buhl P.N. 2010. New or little known species of Platygastrinae from Northern Europe (Hymenoptera: Platygastridae). *Latvijas Entomologs*, 48: 33-49.

Buhl P.N. 2016. New European species of Platygastrinae, with an updated list of Latvian species of Platygastrinae and Sceliotrachelinae (Hymenoptera: Platygastridae). *Latvijas Entomologs*, 53: 3-13.

Vlug H.J. 1985. The types of Platygastridae (Hymenoptera, Scelionoidea) described by Haliday and Walker and preserved in the National Museum of Ireland and in the British Museum (Natural History). 2. Keys to species, redescriptions, synonymy. *Tijdschrift voor Entomologie*, 127: 179-224.

Received: 28.01.2021. Accepted: 15.07.2021.