

TWO NEW SPECIES OF PLATYGASTRIDAE  
(HYMENOPTERA: PROCTOTRUPOIDEA)

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**Abstract**

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*Synopeas osgoodi* n. sp., associated with balsam gall midge, Mariaville, Me., U.S.A., and *Platygaster kimballi* n. sp., associated with thistle, Houlton and Belfast, Me., U.S.A., are described herein.

**Introduction**

*Synopeas osgoodi*, described herein, was collected occasionally during balsam gall midge studies, but details of the life history are unknown.

Mr. Kimball collected many specimens of *P. kimballi* from yellow pan traps in Houlton, Me. The species can be tentatively associated with midge larvae inhabiting thistle, based on observations made later in Belfast, Me.

***Synopeas osgoodi* MacGown n. sp.**

**DIFFERENTIAL DIAGNOSIS.** *Synopeas osgoodi* differs from *S. pennsylvanicum* (Fouts 1924) by its generally lighter color, more strongly shagreened upper face and by its parallel notauli, briefly indicated posteriorly but absent in *S. pennsylvanicum*. *S. maculipes* (Ashm.) may be mistaken for *S. osgoodi* but has the thorax much more strongly compressed.

*S. osgoodi* was collected from balsam fir, and is apparently associated with the balsam gall midge, while *S. pennsylvanicum* was collected from milkweed.

**Male.** Length 0.9 mm. Head wider than thorax across tegulae; face strongly transversely striate on lower half, coarsely punctate above; vertex densely, coarsely punctate, flattened in front view, bordered by a high, sharp carina; ocello-ocular space coarsely punctate; cheeks aciculate; occiput striate, shining laterally, with coarse punctations forming concentric rings around foramen; front margins of eyes slightly convergent ventrally; malar space coarsely punctate.

Scape narrowed basally and apically; pedicel clavate, as long as IV; III tiny, bell-like; V much narrower than IV, cylindrical; VI widened and obliquely truncate apically; VII, VIII and IX subequal, loosely joined; X as long as pedicel, narrowly rounded at apex.

Thorax twice longer than wide, one-third longer than high, one-third higher than wide, convex above; pronotum sparsely punctate dorsally. Mesonotum moderately punctate with sparse, regularly placed setae; notauli absent anteriorly, briefly indicated posteriorly, parallel or barely divergent; posterior mesonotal margin concavely sinuate; pronotum smooth laterally, polished, translucent in pinned specimens, the upper margin with scattered setae; mesopleura bare, translucent, sparsely setaceous near ventral margin, with a short transverse impression just beneath tegulae; metapleura with the upper margins strongly reflexed, below this an impressed line extending from that on mesopleuron; posterior margins of metapleura bordered by white setae, the dorsal margins with a few long white setae; metacoxae setose anteriorly.

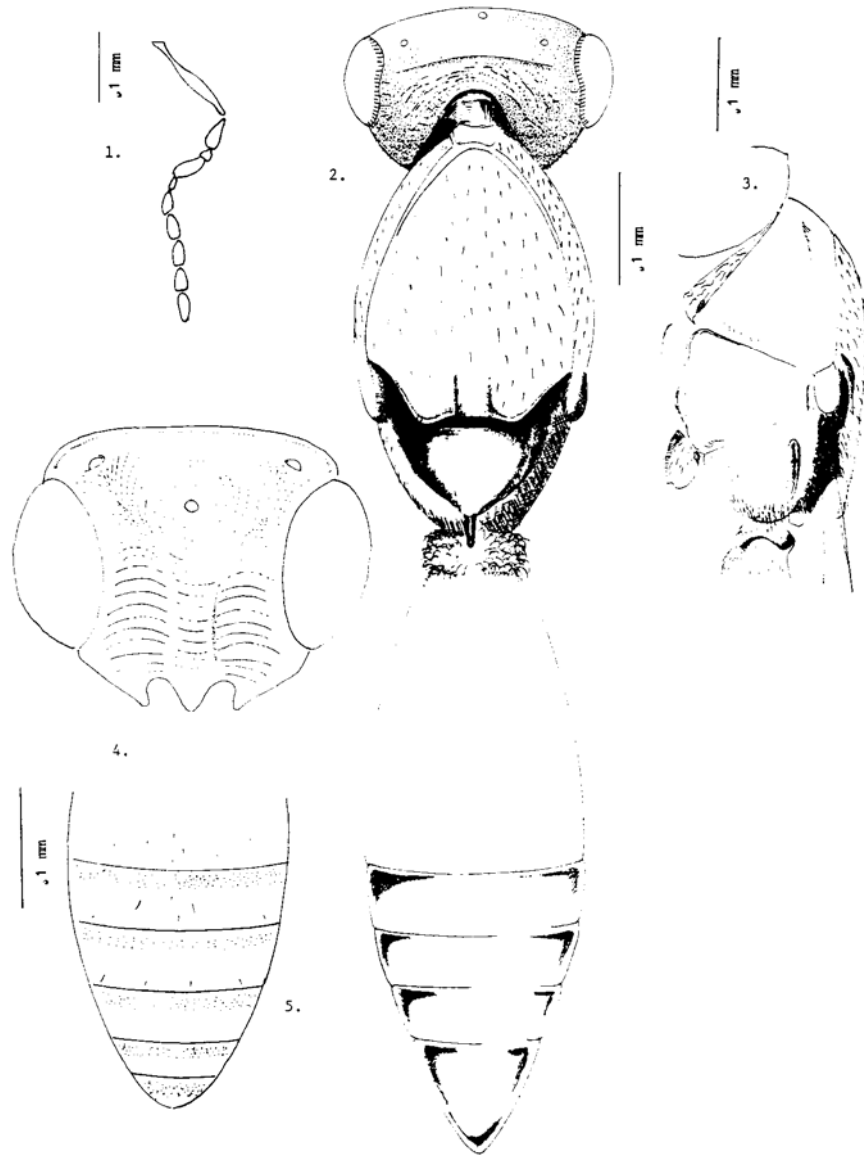
Tergite I transverse, fused with II, sparsely setaceous at the line of fusion I-II; tergite II, 1.33 times as long as wide, convex, unsculptured; remaining tergites transverse, subequal, each transversely, minutely punctate with scattered setae.

Color: reddish brown, the sutures outlined darker; femora and tibiae reddish brown except basal part of tibiae lighter; tarsi yellowish, antennae light brown.

**Female.** Similar to male except: tergite VI elongate, triangular, equal to IV and V combined; antennal pedicel large, clavate; III minute; IV cylindrical, slightly widened apically; V and VI subequal, as wide as IV; VII, VIII, IX and X widened, bell-shaped, forming a loosely jointed, gradually incrassate club.

**TYPES.** Holotype, male, Mariaville, Me., 11 July 1968; E. A. Osgood, coll., USNM No. 72524; swept from balsam fir.

Paratypes, 3 males, same data as holotype, in colln. USNM; 1 female, 3 males, same data, colln. Univ. Maine; 1 female, same data, colln. MacGown.



FIGS. 1-5. *Synopeas osgoodi*. 1, 4, 5, male; 2, 3, female.

REMARKS. Due to the close similarity between *S. osgoodi* and *S. pennsylvanicum*, the accompanying illustrations should be sufficient to diagnose either species. Fouts (1924) diagrammed the female antenna of *S. pennsylvanicum*.

Very little variation was observed among the type specimens. It is a pleasure to name the species after Dr. E. A. Osgood, Jr., University of Maine Department of Entomology.

*Platygaster kimballi* n. sp.

DIFFERENTIAL DIAGNOSIS. *P. kimballi* differs very little from *P. virginensis* (Ashm.). The holotype is slightly longer than *P. virginensis*, with the anterior mesonotal corners lightly, diagonally aciculate, and the basal foveae of tergite II generally well defined, with fewer striae. Antennae are nearly identical except that segment III is 1.5 times longer than wide instead of twice longer than wide as in *P. virginensis*. The abdomen is more elongate and pointed apically.

**Female.** Length 1.5 mm. Head in top view 1.85 times as broad as long, not especially full behind the eyes; 1.2 times wider than high in front view; occiput with 6-8 concentric striae surrounding the foramen, sparsely setaceous on the lower portion; vertex lightly shagreened around and between lateral ocelli, more strongly so between lateral ocelli and anterior ocellus, the latter set in a round, lightly shagreened depression; frons with a depressed line extending from anterior ocellus downward, becoming raised before the antennal bases. Diagonal aciculae extend downward from frontal line, these turning upward distally; minute punctures mingle with facial aciculae, giving face a mat appearance.

All antennal segments longer than wide; scape, 6 times longer than wide; pedicel, 2.6 times as long as wide, as wide apically as VI; III, 1.5 times as long as wide, 0.6 as long as IV; IV through IX about equally long, IV twice as long as wide; V as long and wide as IV, narrowed at both ends; VI equal to V but not narrowed; VII and VIII each 1.5 times as long as wide; IX, 1.6 times as long as wide; X lanceolate, 2.7 times as long as wide, slightly narrower than IX.

Thorax, 1.1 times as long as high, 1.2 higher than wide across tegulae, 1.4 longer than wide. Pronotum aciculate laterally, sparsely setaceous around dorsal and posterior margins, bare and polished with a few minute punctures dorsally. Mesonotum pubescent, aciculate on the anterior corners, finely punctate at apex of median lobe and on adjacent areas of the lateral lobes; notauli absent on anterior fourth; apex of median lobe broadly, concavely rounded, extending over scutellar foveae and touching the scutellum. Scutellum high, pubescent anteriorly, sharply sloping posteriorly. Mesopleura closely, finely punctate; metapleura and propodeum densely pubescent.

Abdomen 1.4 times as long as thorax; tergite I twice as long as wide, bare, with deep longitudinal striae; tergite II, 1.1 times as long as wide, bare; basal foveae shallow, striate only on the inner margins, the striae extending nearly to the middle of the tergite; median area broad, with vague longitudinal aciculae. Tergites III to VI subequal, narrowed to apex, VI sharply pointed. Tergite III, 0.3 as long as wide; IV, 0.5 as long as wide; V 1.25 times wider than long; VI, 0.6 as wide basally as long. Tergites III to V each with a transverse row of setae; all tergites finely punctate, III to V most densely so.

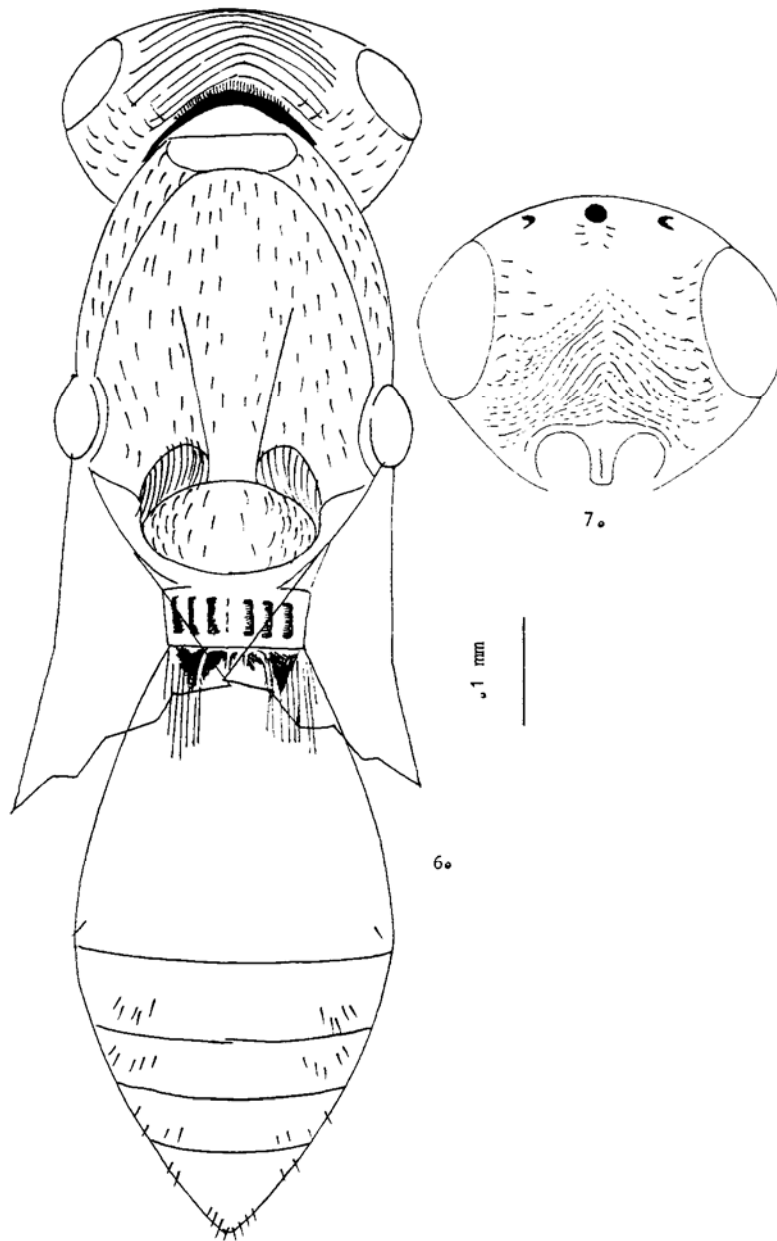
Color: black except apices of fore femora, bases and apices of fore tibiae and fore tarsi piceous.

**Male.** Length 1.28 mm. Scape 4.6 times as long as wide, not narrowed as in female; pedicel twice longer than wide, narrower than IV; III as long as wide, slightly less than half as long as IV; IV, V, and VI all subequal in length and width, 1.7 to 1.8 times longer than wide, IV slightly notched apically; VII, VIII, and IX all 1.6 times longer than wide, equally long; X, 2.3 times as long as wide, lanceolate as in the female. Abdomen narrower than thorax across tegulae, 0.9 as long as head and thorax united; tergites III and IV equally long, 2.5 times longer than V; V and VI subequal, twice longer than VII. Abdomen shining, tergites III to VII each with a transverse row of setae and a bare median line.

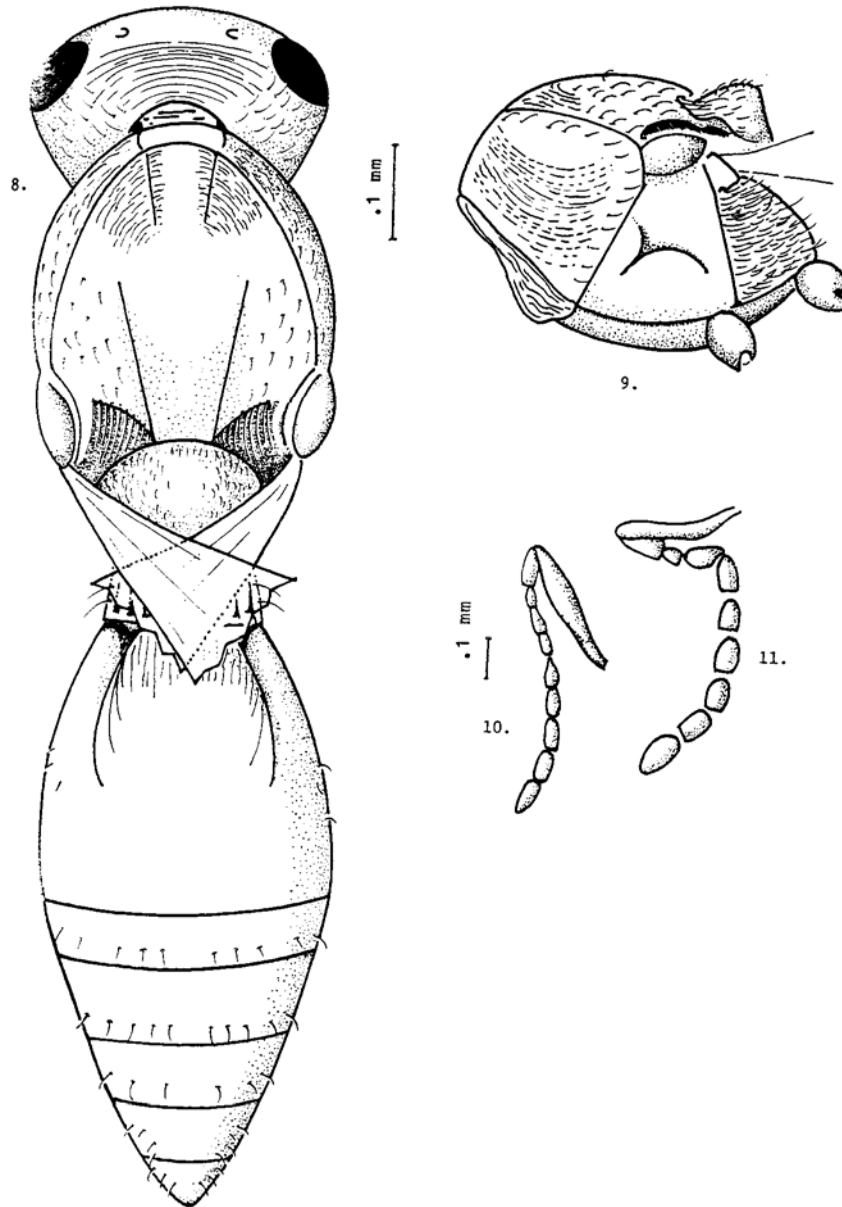
Color: similar to female.

TYPES. Holotype, female, Houlton, Me., summer, 1970, coll. A. Kimball from yellow pan traps; USNM No. 72525.

Paratypes, six females, 94 males, same data as holotype; 2 females, Belfast, Me., coll. MacGown, 21 July 71, ovipositing in thistle flowers. Types distributed in colln. USNM, CNC, Univ. Maine (Orono), colln. A. Kimball, colln. MacG.



FIGS. 6-7. *Platygaster virginiensis* (Ashm.), female. 6, dorsal view; 7, head, front view.



FIGS. 8-11. *Platygaster kimballi* n. sp. 11, male; 9, 10, female.

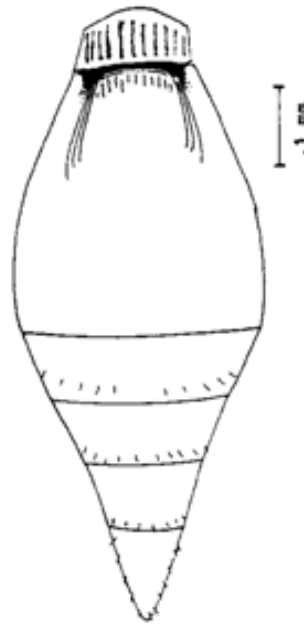


FIG. 12. *Platygaster kimballi* n. sp. Female abdomen.

REMARKS. Arthur Kimball collected a long series from yellow pan traps in potato fields at Houlton, Me., in 1970. No hosts were then known, but in 1971 MacGown collected females ovipositing in Canada thistle at Belfast simultaneously with unidentified adult cecidomyiids and their larvae (in colln. MacG.).

Some variation occurs in the number and length of the carinae on the median area of tergite II in both sexes. The occiput may be mat, the striae reduced dorsally but not laterally.

#### Reference

- Fouts, R. M. 1924. Revision of North American wasps of the subfamily Platygasterinae. *Proc. U.S. natn. Mus.* 63(15): 77, 78; 119, 120.

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