AN ADDITIONAL SPECIES OF THE GENUS AGLAOSTIGMA KIRBY (HYMENOPTERA: TENTHREDINIDAE) FROM JAPAN

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Abstract.—Aglaostigma kawazoei, n. sp., from Japan is described and illustrated. A key is provided for the nine Japanese species of Aglaostigma.

Key Words: Symphyta, Tenthredinidae, Aglaostigma, new species, Japan

Aglaostigma Kirby is a Holarctic and Oriental genus containing about 52 species (Taeger and Blank 2005). In Japan, A. albicinctum (Takeuchi 1953), A. amoorense (Cameron 1876), A. helvicinctum Togashi 1970, A. naitoi Togashi 1972, A. nebulosum (André 1881), A. occipitosum (Malaise 1931), A. sapporonis (Matsumura 1912), and A. yasumatsui Togashi 1970, are known. The Japanese species were first revised by Togashi (1970), with a subsequent species added by Togashi (1972). Recently, I obtained four specimens (two females and two males) of this genus collected by A. Kawazoe and M. Inagaki in Mie Prefecture. These specimens are very close to A. amoorense in body color, but they can be separated from the latter by the two middle cells in the hindwing (Figs. 4, 5, 7), the straight radial crossvein (2r) of the forewing (Figs. 3, 6), the shape of the tarsal claws (Figs. 10, 17), the shape of the inner tibial spur (Figs. 9, 16), and the color of the mesopleura. I concluded that these specimens represent a new species, and I describe and illustrate them and give a key to the Japanese species of Aglaostigma.

Key to Japanese Species of Aglaostigma (Females)

1. Hindwing without middle cell; postocellar furrow indistinct; hind tibia and tarsus black of blackish yasumatsui Togashi

_	Hindwing with one or two middle cells;
	postocellar furrow distinct; hind tibia and
	tarsus reddish yellow or black 2
2.	First abdominal tergite black or blackish . 3
_	First abdominal tergite yellow or reddish
	yellow
3.	Abdomen black or black with a white band
	on 4th segment 4
_	Abdomen yellow or reddish yellow 5
4.	Fourth abdominal segment with a white
	band; radial crossvein (2r) of forewing
	slightly curved albicinctum (Takeuchi)
-	Abdomen entirely black; radial corssvein (2r)
	of forewing nearly straight naitoi Togashi
5.	Supra-antennal tubercles distinctly elevat-
	ed, free standing and abruptly cut off from
	frontal ridges; postocellar area nearly
	quadrate; 2nd to 6th abdominal segments
	reddish yellow nebulosum (André)
-	Supra-antennal tubercles and frontal ridges
	confluent; postocellar area nearly transverse; narrow band on anterior margin of
	2nd to 6th abdominal segments black 6
6.	Mesopleuron with yellowish-white macula;
0.	hind wing with one middle cell (Fig. 7); anal
	cell of hind wing with a petiole (Fig. 7); tarsal
	claw as in Fig. 17 amoorense (Cameron)
_	Mesopleuron entirely black; hind wing with
	two middle cells (Fig. 4); anal cell of hind
	wing sessile (Fig. 4); tarsal claw as in
	Fig. 10 kawazoei, n. sp.
7.	OOL = 3POL; $OCL = 2POL$; hind margin
	of pronotum, posterior corner of mesopres-
	cutum, mesoscutellum, and mesoscutellar
	appendage yellow occipitosum (Malaise)

OOL = 2POL; OCL slightly longer than

POL; thorax with mesoscutellum and mesoscutellar appendage nearly black . . .

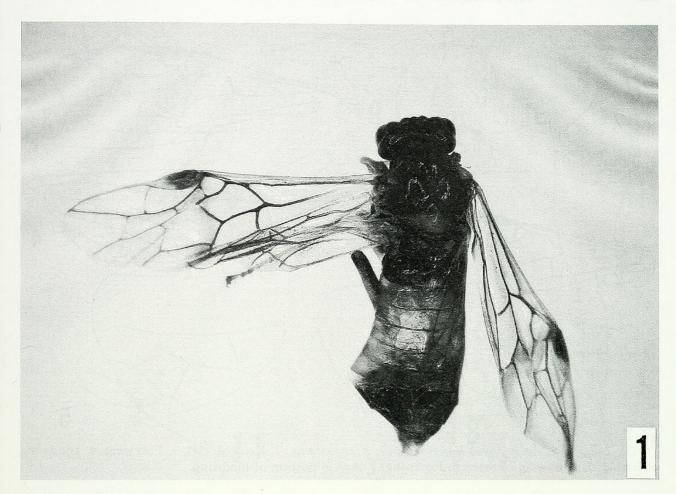


Fig. 1. Aglaostigma kawazoei, holotype.

- 8. Antenna shorter than costa + stigma of forewing; hind wing with two middle cells helvicinctum Togashi
- Antenna as long as costa of forewing; hind wing with one middle cell

. sapporonis (Matsumura)

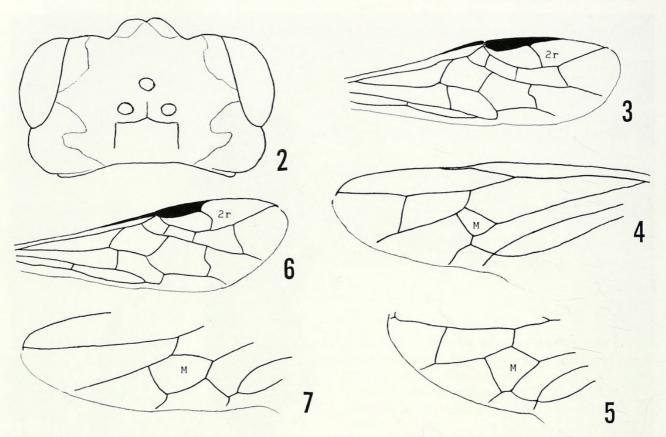
Aglaostigma kawazoei Togashi, new species

(Figs. 1-5, 8-15)

Female.—Length, 8–9 mm. Color: Head and thorax black with following yellow: postocellar area, inner orbits, supraclypeal area, antennal sockets, clypeus, labrum, basal half of mandible, labial and maxillary palpi, posterior half of pronotum, and tegula. Abdomen yellow with following black: 1st tergite, narrow band on anterior margin of 2nd to 6th tergites, posterior 1/3 of 6th tergite, triangular macula of posterior margin of 8th tergite, central portion of 9th tergite, and circus. Antenna pale

yellow with black stripe on dorsal side. Wings hyaline, basal half of stigma and veins dark brown to black with apical half of stigma and costa of forewing yellow; forewing with a dark band below stigma (Fig. 1). Legs yellow with following black: coxae, hind femur except for basal 1/3, and apical 1/3 of hind tibia.

Head: Transverse (Fig. 2); postocellar area transverse with ratio of width to length about 2:1, convex; OOL:PO-L:OCL = 2.4:1.0:1.6; interocellar, postocellar, and lateral furrows distinct; frontal area concave with raised frontal ridges; median fovea large, deep, and circular in outline; lateral fovea small and circular in outline; supraclypeal area slightly convex; supra-antennal tubercles confluent with frontal ridges; clypeus rather flattened, subtruncate in front; labrum nearly flattened; antenno-ocular distance nearly as long as distance



Figs. 2–7. 2–5, *Aglaostigma kawazoei*. 6–7, *A. amoorense*. 2, Head, dorsal. 3, Forewing. 4, Hindwing of female. 5, Hindwing of male. 6, Forewing. 7, Apical portion of hindwing.

between antennal sockets (ratio about 1.0:1.0); eyes rather small and slightly converge below, distance between them nearly as long as 1.3× height of each; occipital carina defined below and obsolete above; malar space nearly as long as diameter of front ocellus, nearly as long as 0.7× length of pedicel. Antenna neary as long as costa of forewing, about 2× head width; relative lengths of segments about 1.5:1.0:3.1:2.6:2.1:1.8:1.6:1.5:1.5, pedicel longer than wide.

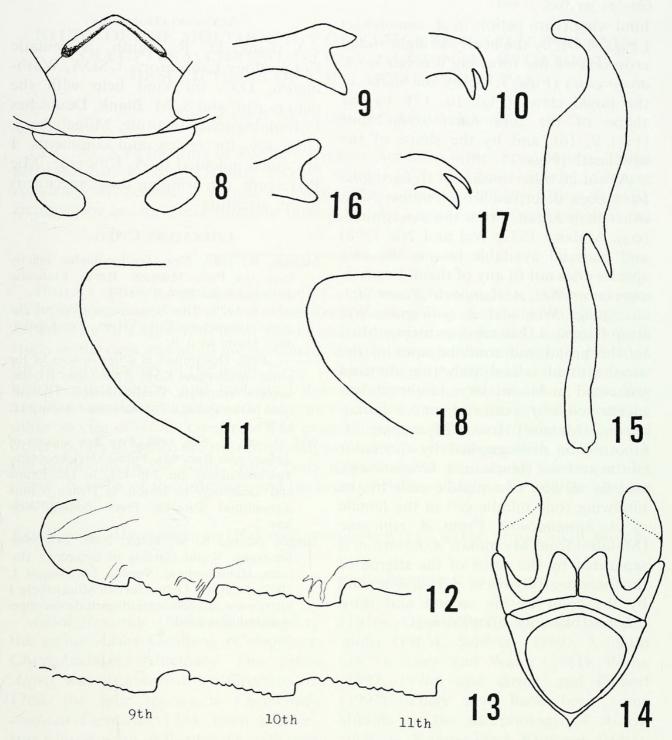
Thorax: Normal. Mesoscutellum convex, front margin acute (Fig. 8); cenchrus large, distance between cenchrinearly as long as breadth of one (Fig. 8). Wing venation as in Figs. 3, 4; radial crossvein (2r) of forewing nearly straight; hind wing with two middle cells; discoidal cell (M) small (Fig. 4); anal cell of hindwing sessile. Fore inner tibial spur as in Fig. 9; tarsal claws as in Fig. 10; hind basitarsus nearly as long as following 3 segments combined.

Abdomen: Normal. Sawsheath as in Fig. 11. Lancet with 20 serrulae; apical portion and 9th to 11th serrulae as in Figs. 12, 13.

Punctation: Head matt, with rather coriaceous sculpture; pronotum and mesoscutum covered with medium-sized punctures; mesoscutellum and mesopleuron covered with setigerous punctures; abdominal tergites shagreened.

Male.—Length, 8 mm. Color as in female, but 7th to 9th tergites black; structure same as female except for size of middle cell (Fig. 5) and sexual characters; hind wing without marginal vein. Genitalia as in Fig. 14, black but apical half of harpe milky white; penis valve as in Fig. 15.

Types.—Holotype $\,^{\circ}$, 21.IV.2005, Mt. Noto, Kameyama City, Mie Prefecture, Honshu, Japan, M. Inagaki leg. Paratypes: 1 $\,^{\circ}$, 2 $\,^{\circ}$, same data as for holotype except collectors, M. Inagaki and A. Kawazoe. All types deposited in



Figs. 8–18. 8–15, *Aglaostigma kawazoei*. 16–18, *A. amoorense*. 8, Mesoscutellum and mesoscutellar appendage, dorsal. 9, Fore inner tibial spur, lateral. 10, Tarsal claw. 11, Sawsheath, lateral. 12, Apical portion of lancet. 13, 9th to 11th serrulae of lancet. 14, Male genitalia, ventral. 15, Penis valve. 16, Fore inner tibial spur, lateral. 17, Tarsal claw, lateral. 18, Sawsheath, lateral.

the National Science Museum (Natural History), Tokyo.

Distribution.—Japan (Honshu).

Food plant.—Unknown.

Etymology.—Named in honor of Mr. Akio Kawazoe, Kuwana City, Mie Prefecture, Japan.

Remarks.—This new species is close to *A. amoorense*, but it is distinguished from the latter by the black mesopleuron (with yellowish white macula in *A. amoorense*); by having two middle cells in the hind wing (one in *A. amoorense*) (Figs. 4, 7); by the sessile anal cell of the

hind wing (with petiole in A. amoorense) (Figs. 4, 7); by the nearly straight radial crossvein of the forewing (curved in A. amoorense) (Figs. 3, 6); by the shape of the tarsal claws (Figs. 10, 17); by the shape of the fore inner tibial spur (Figs. 9, 16); and by the shape of the sawsheath (Figs. 11, 18).

About 20 other species of Aglaostigma have been described from eastern Asia, other than Japan. From the descriptions (e.g., Malaise 1937; Wei and Nie 1998) and material available to me, the new species does not fit any of them. From A. nigrocorne Wei, A. flatoposttrgitium Wei, A. zigzaga Wei, and A. qinlingium Wei from China, A. kawazoei is distinguished by the broad and rounded apex of the sawsheath in lateral view (narrow and truncated in lateral view in the abovementioned four species). From A. birmanicum (Malaise) from Myanmar, A. kawazoei is distinguished by the color of the antenna (black in A. birmanicum), and by having two middle cells in the hindwing (one middle cell in the female of A. birmanicum). From A. ruficorne (Malaise) from Myanmar, A. kawazoei is separated by the color of the stigma of the forewing (fulvous in A. ruficorne) and by the color of the second and third tergites (black in A. ruficorne).

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