

Two new species of Scelionoidea from East Asia (Hymenoptera: Platygasteridae et Scelionidae)

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Abstract. *Platygaster sinica* sp. n. (♂) is described from China, and *Trissolcus dobashii* sp. n. (♀) is described from Japan. Both are figured and compared with related species.

Samenvatting. Twee nieuwe soorten Scelionoidea uit Oost-Azië (Hymenoptera: Platygasteridae en Scelionidae)

Uit China wordt *Platygaster sinica* sp.n. (♂) beschreven, uit Japan *Trissolcus dobashii* sp.n. (♀). Beide nieuwe soorten worden afgebeeld en vergeleken met verwante soorten.

Résumé. Deux espèces nouvelles d'Asie orientale (Hymenoptera: Platygasteridae et Scelionidae)

Description de *Platygaster sinica* sp.n. (♂) de la Chine et description de *Trissolcus dobashii* sp.n. (♀) du Japon. Tous les deux sont figurés et comparés avec des espèces alliées.

Key words: *Platygaster* - *Trissolcus* - new species - China - Japan.

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Hitherto no species of the large cosmopolitan genus *Platygaster* Latreille, 1809 (Platygasteridae) seems to have been described from China, cf. Vlug (1995). The characteristic new species described below was the only material from China (Oriental region) among a batch of otherwise Palaearctic *Platygaster* spp. which I borrowed from the Natural History Museum, London.

On a trip to Japan in January 1996 I swept a single specimen belonging to a genus almost as large as *Platygaster*, namely *Trissolcus* Ashmead, 1893 (Scelionidae). The specimen proved to represent a distinct new species, also described below. Hitherto eight species of *Trissolcus* have been recorded from Japan (Ryu & Hirashima 1984).

Platygaster sinica sp. n.

Type material:

Holotype ♀, "China, Foochow, 1937-38, M.S. Yang".

Paratypes: 4 ♀ same data as holotype. All types glued on same triangular card, holotype closest to pin. Preserved in the Natural History Museum, London. Type locality on 26.09 N 119.17 E.

Description:

Female: body length 0.65 - 0.80 mm (holotype 0.65 mm). Colour dark brown; tegulae and petiole light brown; mouthparts, A1-A6 of antennae, and legs except last segment of all tarsi yellow.

Head sparsely hairy, from above (fig. 1) 1.65 times as wide as long; occiput and vertex moderately transversely striated and with fine reticulation; frons finely reticulate, shiny. Malar space about one-third the height of an eye; temples rounded, two-thirds the length of an eye; OOL:POL:LOL = 5:16:7. Antenna (fig. 2) with scape as long as A2-A6 combined; pedicel twice as long as wide; A4-A9 each slightly longer than wide; A7-A10 forming darkened club; scape with a few short hairs; flagellum with short pubescence.

Mesosoma narrower than head (9:11), one and a third times longer than wide and about as wide as high. Pronotum medially weakly rugose, sides of pronotum almost smooth, with a few hairs along upper margin; mesoscutum with weak rugosity and sparse hairs, not prolonged posteriorly, notauli only indicated in extreme posterior part; mesopleurae smooth and bare; scuto-scutellar groove almost absent; scutellum almost

smooth, hairy especially laterally, at level of mesoscutum; metapleurae and sides of propodeum with whitish pilosity; propodeal carinae parallel, well separated, area in between smooth and shiny.

Fore wing clear, slightly shorter than whole body (25:27), 2.8 times as long as wide; marginal cilia a little more than 0.1 the width of wing. Hind wing 6.3 times as long as wide, with two frenal hooks; marginal cilia hardly half the width of wing.

Metasoma (fig. 3) 1.4 times as long as wide, slightly longer than mesosoma (13:12), as wide as this and twice as wide as high. T1 more than twice as wide as long, almost smooth, with two longitudinal keels; T2 smooth and bare, transverse, with smooth and weak basal foveae; T3-T6 combined less than half as long as T2, smooth and with a few superficially implanted hairs.

Male: Unknown.

P. sinica sp.n. is perhaps closest to *P. nisus* Walker, 1835 known from England and Denmark (Buhl 1994), but this species differs from *sinica* in a number of respects, e.g. in being larger (0.9 mm), in having longer A5-A6 and in having T2 longer than wide, cf. Vlug (1985). From the other very small species of *Platygaster* the new species differs in, among other characters, light colour, relatively long marginal cilia of forewings and short metasoma, cf. e.g. Fouts (1924) and Rao (1950).

Trissolcus dobashii sp. n.

Type material:

Holotype ♀, Japan, Kyushu, Fukuoka, Mt Aburayama, 10.I.1996, leg. P.N. Buhl. Swept in woodland in vegetation consisting mainly of bamboo. Preserved in the Zoological Museum, University of Copenhagen. Unique. Type locality on 33.39 N 130.21 E.

Description:

Female: body length 1.20 mm. Color black; trochanters, all tibiae, and segment I of all tarsi red; mandibles, radicle, extreme ends of scape, apex of pedicel and base of A3 dark reddish.

Head from above (fig. 4) about 2.5 times as wide as long; occiput and vertex with strong reticulation, vertex with continuous transverse (hyperoccipital) carina; head from in front 1.4 times as wide as high; frons dilated, strongly reticulate and punctate, weakly transversely striate medially on lower half, smooth below anterior ocellus which is separated from carina of vertex by less than its (longer) diameter; orbital furrow wide ventrally; malar space 0.6 the height of an eye; lateral ocellus almost touching margin of eye; eyes with a few very short hairs, rest of head moderately hairy. Antenna (fig. 5) with scape shorter than height of head (13:18), scape as long as A2-A6 combined; pedicel hardly twice as long as wide, 0.75 as long as A3, this 2.5 times as long as wide, twice as long as A4 which is slightly longer than wide; A5 transverse; A6-A11 forming club.

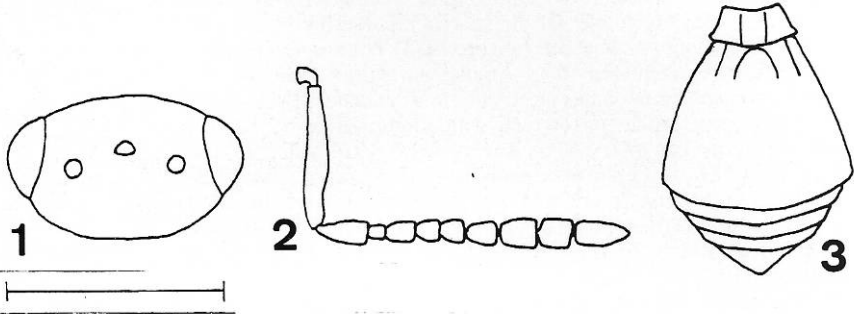
Mesosoma (fig. 4) slightly narrower than head, wider than long (24:21) and hardly as high as wide. Sides of pronotum reticulate along upper margin, rest with longitudinal furrows. Mesoscutum strongly and evenly reticulate and rather densely and evenly hairy, with strong and straight, evenly converging notauli reaching almost to middle of disc; central longitudinal keel absent; mesopleurae foveolate along hind, fore, and upper margins, rest smooth. Scutellum somewhat finer reticulate than mesoscutum and with longer hairs than this, sparsely punctate, foveolate along hind margin; dorsellum relatively long, foveolate. Metapleurae and sides of propodeum foveolate, glabrous.

Fore wing (fig. 6) slightly shorter than whole body (47:50), hardly 2.4 times as long as wide; postmarginal vein 1.8 times longer than stigmal vein; marginal cilia 0.1 the

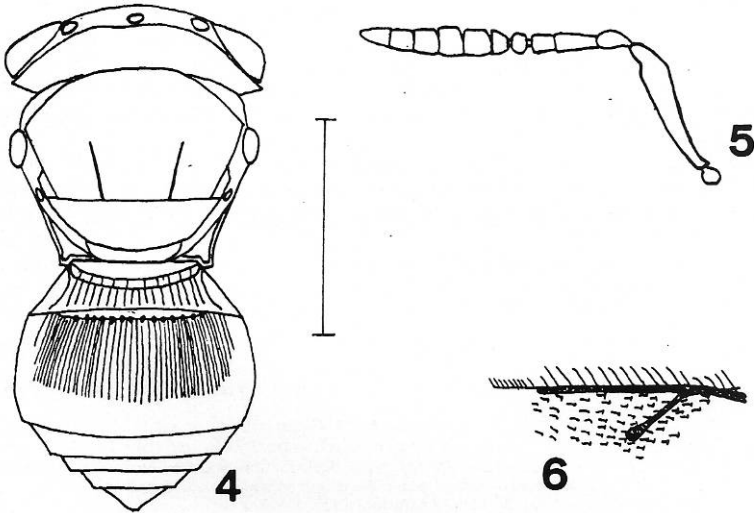
width of wing. Hind wing 3.6 times longer than wide; marginal cilia hardly 0.3 the width of wing.

Metasoma (fig. 4) slightly longer than mesosoma (22:19), hardly as long as wide and hardly twice as wide as high. T1 longitudinally striate except lateral and hind margins; T2 almost twice as wide as long, densely longitudinally striate in anterior 0.7, rest almost smooth and with sparse hairs; T3-T6 rather hairy, densely covered with fine punctures.

Male: Unknown.



Figs 1-3. *Platygaster sinica* sp. n., ♀; 1. Head in dorsal view; 2. Antenna; 3. Metasoma in dorsal view. Scale bar = 0.25 mm.



Figs 4-6. *Trissolcus dobashii* sp. n., ♀; 4. Body in dorsal view; 5. Antenna; 6. Venation of fore wing. Scale bar = 0.50 mm.

T. dobashii sp.n. clearly belongs to the *flavipes* species group, characterized by: hyperoccipital carina; large setigerous punctures at least laterally on frons; frons strongly bulging between antennal insertions and inner orbits; orbital furrow usually strongly expanded ventrally; radicle of antenna light in colour, concolourous with or lighter than

scape, never darker; notauli well-developed; central longitudinal keel between notauli usually present; and a few other characters. cf. Johnson (1984).

Regarding the Japanese species with notauli reported by Ryu and Hirashima (1984), *dobashii* sp.n. differs from *T. flavipes* (Thomson, 1861) e.g. in being smaller, having much less striated frons and darker legs; from *T. mitsukurii* (Ashmead, 1904) e.g. in having darker antennae and legs and in having A3 longer than A2; from *T. delucchii* Kozlov, 1968 in having darker antennae and legs; from *T. tumidus* (Mayr, 1879) in having A3 longer than A2 and in differently sculptured mesoscutum and scutellum; from *T. japonicus* (Ashmead, 1904) in having sculptured scutellum; from all these species in having T2 more transverse. Of the species reported by Nixon (1938) *T. dobashii* sp.n. comes close only to *T. vindicius* (Nixon, 1938), but this species has brighter coloured legs and differently sculptured frons. Among the Australasian species reported by Johnson (1991) *dobashii* sp.n. comes close only to *T. euander* (Dodd, 1914), but this is a larger species without orbital furrow and with shorter striae on T2. In Kozlov's (1978) key *dobashii* sp.n. runs to *T. pontus* Kozlov & L  , 1976 and *T. cercus* Kozlov & L  , 1976, but *pontus* has A3 shorter in relation to A2 (7:6), *cercus* has A2 and A3 of equal length and different head sculpture, and both these species have differently shaped notauli and less transverse T2 than *dobashii* sp.n., cf. also Kozlov & Kononova (1983). *T. dobashii* sp.n. differs widely from all the Neotropical species of the *flavipes* group reported by Johnson (1987).

Named after my wife, Yoko Dobashi (from Fukuoka).

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