To systematics of the genus *Saetheria* Jackson (Diptera, Chironomidae) from the Russian Far East

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**Abstract**

The genus *Saetheria* Jackson from the Russian Far East is reviewed. The males of *S. reissi* Jackson, 1977, *S. tamanipparai* (Sasa, 1983) and *S. tylus* (Townes, 1945) are redescribed and figured. The pupa of *S. reissi* is redescribed and illustrated. The larva of *S. reissi* Jackson is described for the first time. Comments on the systematics and distribution of each species are provided. *Paracladopelma kisopediformis* Sasa, Kondo, 1993 is designated a new junior synonym of *S. reissi* Jackson, 1977. Keys to the males, pupae and larvae of the Russian *Saetheria* are given.

**Key words:** Chironomidae, Chironomini, *Saetheria*, key, Russian Far East

**Introduction**

The genus was erected by Jackson in 1977 for *Harnischia* (*Cladopelma*) *tylus* Townes, 1945. Species of this genus are the middle size non-biting midges with immature stages inhabit sandy substrata of standing and flowing waters. The genus *Saetheria* includes 1 widespread Holarctic species, *S. tylus* (Townes, 1945), 1 Nearctic species, *S. hirta* Sæther, 1983, and 5 Palaearctic species, *S. reissi* Jackson, 1977, *S. tamanipparai* (Sasa, 1983), *S. digitata* Yan *et al.*, 2011, *S. glabra* Yan *et al.*, 2011, and *S. separata* Yan *et al.*, 2011. In addition, descriptions of the five larvae with 6-segmented antenna, allocatable to *Saetheria*, are present in North America (*Saetheria* sp.1), Japan (*S. tylus, Saetheria* sp. SE, *Saetheria* sp. SG) and Russia (Chironominae genuinae № 9 Lipina) (Jackson 1977; Kobayashi 2007; Pankratova 1983). Up to present time two species, *S. reissi* and *S. tylus* have been recorded from Russia (Sæther & Spies 2004). During studies of the chironomid fauna in the Russian Far East, the males, pupae and larvae of *S. reissi* was found, and herein is presented. Additionally, the males of *S. tamanipparai* and *S. tylus* are redescribed and figured. *Paracladopelma kisopediformis* Sasa, Kondo, 1993 is designated a new junior synonym of *S. reissi* Jackson, 1977. The keys to males, pupae and larvae of Russian *Saetheria* are given.

**Material and methods**

Material was fixed in 70% ethanol and mounted in Fora-Berlese solution. Morphological terminology and abbreviations follow of Sæther (1980). Male: TL/WL—total length of male over wing length; AR—length of apical flagellomere 13 to length flagellomeres 1–12; VR—length of Cu to length of M; P<sub>1–3</sub>—legs; LR—length of tarsomere 1 to length tibia; SV—length femur plus tibia to tarsomere 1; BV—length of femur, tibia and tarsomere 2–5; BR—longest seta of tarsomere 1 divided by minimum width of tarsomere 1; HR—length of gonocoxite to length of gonostylus. Pupa: ALR—length of anal lobe to its width. Larva: AR—length of basal antennal segment to combined length of remaining segments; R—distance from ring organ to base of basal segment of antenna; ROR—length of basal segment of antenna to distance between base of basal segment and ring organ; VmPR—width ventromental plate to its high; VmPSR—mean width of the two ventromental plates to distance between venteromental plates. The following additional abbreviations are used: PL-male=associated larva, pupa, and
Distribution. *Saetheria tylus* (Townes) is distributed in the Holarctic Region (Sæther & Spies 2004). This species is known from Japan (Kobayashi 2007). In Russian Far East it is recorded from Primorye Territory only.

**Key to the Russian Far East species of the genus *Saetheria* Jackson**

Males
1. Anal point drop-shaped; gonostylus widest in proximal third and gradually narrowed toward apex (Fig. 14) ................................................................. *S. tamanipparai* (Sasa)
   - Anal point spoon-shaped; gonostylus other form ................................................................. 2
2. Superior volsella roughly triangular form, the ventral seta is arranged in middle (Fig. 2); gonostylus narrowed in middle (Fig. 1); TL 3.2–3.8 mm ................................................................. *S. reissi* Jackson
   - Superior volsella an elongated foot-shaped, the ventral seta is arranged in the apical third (Fig. 17); gonostylus narrowed in the proximal third (Fig. 16); TL 2.3–3.2 mm ................................................................. *S. tylus* (Townes)

Pupae
1. Segment I with 1 L seta (Fig. 5); sternite IV with median shagreen .................................................. *S. reissi* Jackson
   - Segment I without L seta, sternite IV without shagreen (according to Jackson 1977: 1353, fig. 30; Sæther 1983: 400, figs 2–4; Pinder & Reiss 1986: 435, fig. 10.70 A–D) ................................................................. *S. tylus* (Townes)

Larvae
1. Premandibular brush well developed; the blade of antenna reaches the apex of the segment 5 (Figs 8, 9) ................................................................. *S. reissi* Jackson
   - Premandibular brush absent; the blade of antenna reaches of middle of the segment 5 (according to Jackson 1977: 1353, fig. 31) ................................................................. *S. tylus* (Townes)

**References**


