



## ***Saetheria* Jackson from the Sino-Indian Region (Diptera: Chironomidae)**

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### **Abstract**

The two previously known Sino-Indian species of the genus *Saetheria* Jackson are reviewed. Three new species, *S. glabra* sp. n., *S. digitata* sp. n. and *S. separata* sp. n. are described and illustrated as males. The males of *S. tylus* (Townes) from Japan are re-examined. A key to known males of *Saetheria* is provided.

**Key words:** Chironomidae, *Saetheria*, new species, key, Sino-Indian Region

### **Introduction**

The genus *Saetheria* was erected by Jackson (1977) including three species, *S. tylus* (Townes, 1945), *S. reissi* Jackson, 1977 and *S. sp.1* (larva and pupa). The type species is *Harnischia* (*Cladopelma*) *tylus* Townes, 1945.

To date, the genus contains 3 species in the northern hemisphere, 1 Holarctic, *S. tylus*, 1 Palaearctic, *S. reissi* (Cranston & Martin 1989, Zorina 2000, Makarchenko *et al.* 2005, Kobayashi 2007) and 1 Nearctic, *S. hirta* Sæther, 1983 (Oliver *et al.* 1990).

Zorina (2000) recorded *S. tylus* from the south of the Russian Far East. Makarchenko *et al.* (2005) listed *S. reissi* and *S. tamanipparai* (Sasa) from the Russian Far East. Sasa (1983) described *Paracladopelma tamanipparai* Sasa from Japan, which was placed in the genus *Parachironomus* by Ashe & Cranston (1990), Sasa & Kikuchi (1995), Sasa (1998) and Sæther *et al.* (2000). Yan *et al.* (2008) examined the type material of *Paracladopelma tamanipparai*. It should be kept in the genus *Paracladopelma* Harnisch.

Kobayashi (2007) regarded *Paracladopelma nagaraelongata* Sasa, 1989, *P. kisopediformis* Sasa *et* Kondo, 1993 and *Parachironomus taishoabeus* Sasa *et* Tanaka, 2001 as junior synonyms of *Saetheria tylus*. He also found one larva of *S. tylus* and summarized 10 previous larval records. Reiss (1980) recorded *S. reissi* from North Korea.

Although the immatures of *Saetheria* are relatively easy to separate from *Paracladopelma* the adult males are not. The males supposedly are separable on the basis of the shape of the anal tergite bands which are strongly Y-shaped in *Saetheria*, but absent or forming a shallow Y-shape or a T-shape in *Paracladopelma*. This separation possibly may not hold so the assignment of the new species to *Saetheria* cannot be regarded as definitive.

### **Material and methods**

The bound of the Sino-Indian region follows Banarescu (1992), and includes whole Oriental region and a part of the southeast Palaearctic region in traditional zoogeographic delimitation.

The terminology follows Sæther (1980) with the additions and corrections given by Sæther (1990). The material examined was mounted on slides in Canada balsam following the procedure outlined by Sæther (1969). Measurements are given as ranges followed by a mean when more than two specimens were measured, followed by the number measured (n) in parentheses.