Identification Key to Campbell Island Freshwater Chironomidae Larvae

McMurtrie, Sinton & Winterbourn (2014)

Pterosis wisei Sublette & Wirth, 1980 INFORMATION SHEET

Classification

Class:	Insecta
Order:	Diptera
Family:	Chironomidae
Subfamily:	Orthocladiinae
Genus:	*Pterosis*
Specific name:	*wisei*
Common name:	midge

Distinguishing Features

- Body pale, yellowish-white; thoracic segments bordered by dark pigment; head yellow, eye black, mentum black (Fig. 1–2); body length up to 4 mm.
- Mentum with two moderately broad, rounded median teeth and four lateral teeth on each side (Fig. 3).
- Antenna 5-segmented with a blade reaching just beyond the antennal tip; length of antenna about equal to the height of the mentum (Fig. 4).
- Final abdominal segment (segment 9) at 45–90° to segment 8 (Fig. 5); when viewed ventrally, the posterior margin of segment 8 forms a circle (Fig. 6).
- Posterior parapods (prolegs) very short with dark hooks (Fig. 5–7).
- Prothoracic parapods weakly developed, fused basally; hooks plentiful and paler than those on posterior parapods (Fig. 2).
- Anal tubules, small, almost spherical (Fig. 5–8).

Comments

Only the adult male and female of this species have been described. Larvae were associated with pupae found in a seep during the 2010-11 Campbell Island Bicentennial Expedition where no other Orthocladiinae were present. Mature male pupae had fully developed external genitalia identical with those described for *P. wisei*.

P. wisei also occurs on the Auckland Islands. Sublette & Wirth (1980) commented that the adults showed characters of *Allometriocnemus* and *Gymnometriocnemis*. Likewise, the Campbell Island larvae resemble those of *Gymnometriocnemis* as depicted by Cranston (1982) in having the posterior parapods and anal segment at right angles to the axis of the body, rather similar mentum and antennae, and fused anterior parapods, although with pale hooks rather than fine setae.

FIGURE 1. *Pterosis wisei* whole animal (animal A)

FIGURE 2. *Pterosis wisei* anterior (animal B)

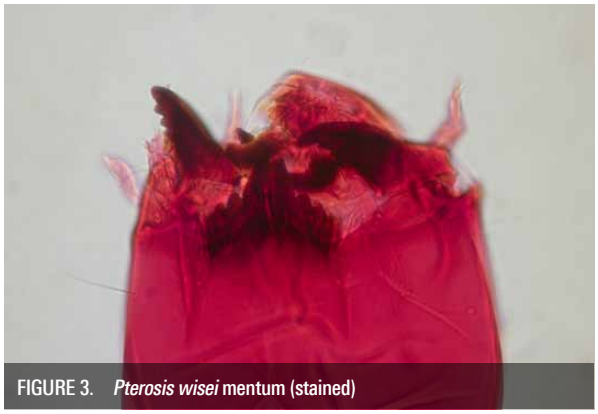

FIGURE 3. *Pterosis wisei* mentum (stained)

FIGURE 4. *Pterosis wisei* antenna (stained)

Original Description

Sublette & Wirth (1980): Larvae not described.

References & Further Reading

Cranston, P.S. 1982. *A key to the larvae of the British Orthocladiinae (Chironomidae)*. Freshwater Biological Association Scientific Publication No. 45. 152pp.

Sublette, J. E. & Wirth, W. W. 1980. The Chironomidae and Ceratopogonidae (Diptera) of New Zealand's subantarctic islands. *New Zealand Journal of Zoology* 7: 299–378.

How to Cite this Information Sheet

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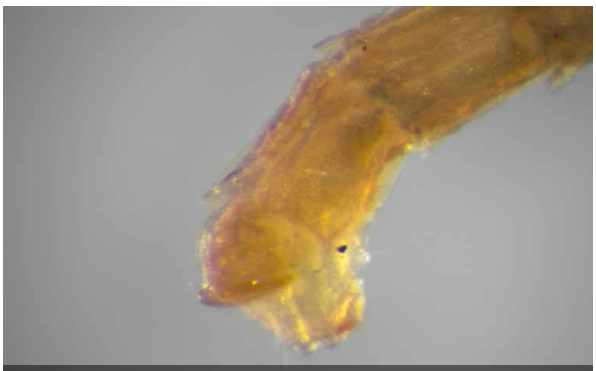

FIGURE 5. *Pterosis wisei* posterior, lateral view (animal A)

FIGURE 6. *Pterosis wisei* posterior, ventral view (animal A)

FIGURE 7. *Pterosis wisei* posterior, slide mounted and stained (animal B)

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Biogeographic Information

Presence/absence on streams, tarns, and a seepage sampled on Campbell Island.

Distribution map based on surveys undertaken by EOS Ecology during the 2010–11 Campbell Island Bicentennial Expedition (www.campbellisland.org.nz). Distribution data © EOS Ecology, 2013.