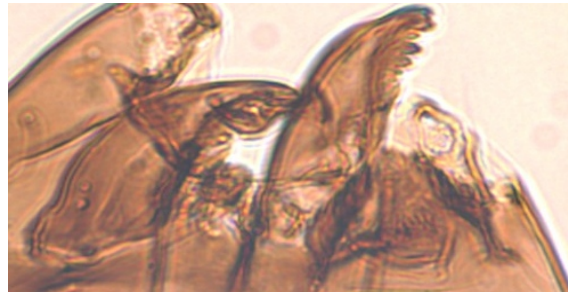
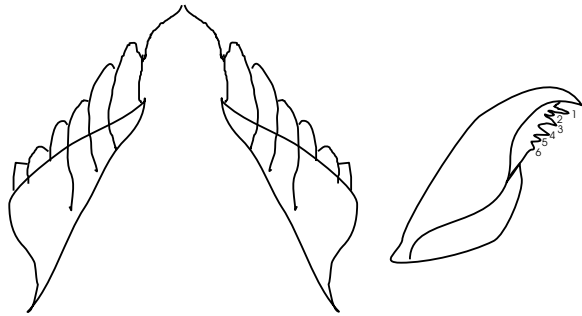


cf. Diamesinae early instar

cf. Diamesinae



**Diagnostic characters:** Single, broad median is sub-trifid (rounded with shoulders), lighter in color than laterals. 6 laterals. The VMP is well developed. Outer portion of VMP is broad and rounded, protruding beyond the mentum teeth. Mandible has no dorsal teeth or surface teeth, single pointed apical tooth and six inner teeth. Inner teeth 1 and 3 equal in length, inner tooth 2, 5, and 6 small, inner tooth 4 in between 3 and 5 in length. Head capsule has an extremely thick post occipital margin.

Similar taxa: Mentum nearly indistinguishable from *Parakiefferiella*, although it has a tiny 6th lateral. VMP is like *Parakiefferiella* VMP. The mandible (not present on any of our *Parakiefferiella* specimens) is quite different from those of Northern Hemisphere *Parakiefferiella* (Brooks et al. 2007). The head capsule post occipital margin is absolutely distinct from that of *Parakiefferiella*.

**Ecology:**

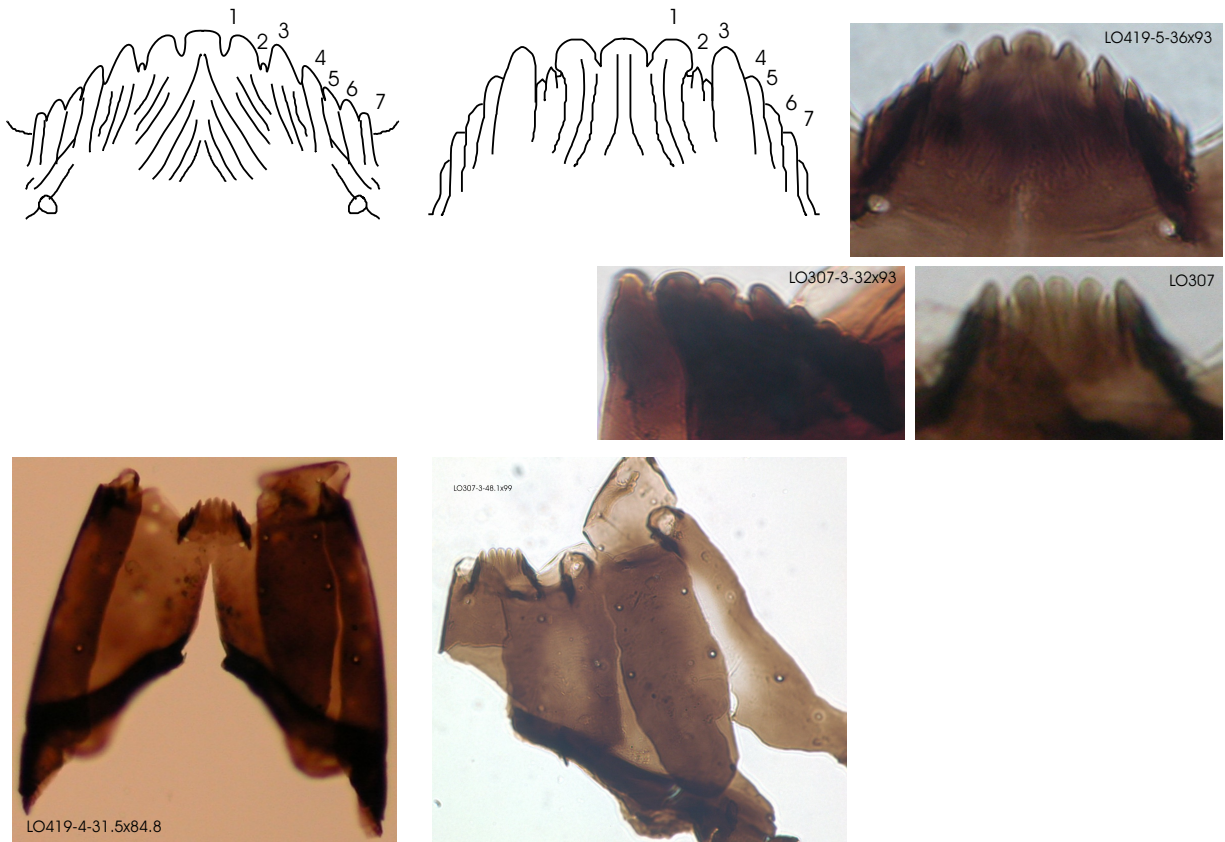
**Subfossil:** Insufficient data.

**Taxonomic references:** Referred to as Orthoclaudiinae species 1/6 by Woodward and Shulmeister 2006.

**Lakes containing taxon:** Recounted Woodward and Shulmeister (2006) sites Harris and Mackenzie.

## Maoridiamesa

## Diamesinae



### Diagnostic characters:

Single broad median, 7 laterals. 1st laterals as tall as median, rounded. 2nd lateral tiny, 3rd lateral large, 4-7 graduate downward in size. Head tends to be dark in color, reddish brown. Broad, dark collar. Large amounts of hair may be present.

### Ecology:

**Subfossil:** Dieffenbacher-Krall et al. (2007) found *Maoridiamesa* in three, high altitude (>1600 m a.s.l.), cold (mean summer temperature < 7.7 °C) sites. Although we found this genus in three lakes associated with either late-season snow pack or rock glaciers, we did not find it in at least 15 other high altitude sites in similar settings. Two of our sites containing the taxon had small inflowing streams and the third did not.

**Organism:** Five species in New Zealand, the endemic *M. glacialis*, *M. harrisi*, *M. insularis*, *M. intermedia*, and *M. stouti*, all inhabiting subalpine/mountain streams (Boothroyd and Forsyth 2007). Milner et al. (2001) found *Maoridiamesa* at most, but not all, sites on rivers downstream of glacier faces. *Maoridiamesa* is frequently associated with running water (Boothroyd 1987, 2000, 2004; Collier et al. 1998; Milner et al. 2001).

Boothroyd (1999b) found *M. stouti* larvae in Waikato free living on large boulders within the wetted area above the water surface, usually on the upstream side of the boulders. He speculated that the larvae may be obligate madicoles, living in the thin film of water flowing over a substrate, including the splash zone, and thin sheets of water flowing over rock faces. The species was found at the boundary of native forest and pastoral lands, in the presence of riparian vegetation with a high degree of light penetration. All life stages were found on boulder surfaces except adults. Larvae attach themselves to boulders using strong silken thread.

**Lakes containing taxon:** Dieffenbacher-Krall et al. (2007) sites 412, 413, 419. Recounted Woodward and Shulmeister (2006) sites Little Sylvester, Harris, Gertrude Saddle/Black.