

Auckland, and three immature females on *Knighthia excelsa* R. Br., in the same locality; collections by E. Collyer. Additional specimens have been collected from the following localities and examined by the present author: *Nothofagus fusca* and *Carpodetus serratus*, Lake Rotoroa, Nelson Lakes National Park; *Pseudopanax crassifolium*, Napier; *Nothofagus* sp., Sherry River, Nelson (E. Collyer); moss on rocks, Kurow, Central Otago; moss on *Nothofagus menziesii*, Governor's Bush, Mount Cook (T. G. Wood).

MATERIAL: Holotype in B.M.N.H.; paratype in D.S.I.R. (forwarded by D. G. M. Manson from Department of Agriculture, Levin, New Zealand). The present author has sent specimens to D.S.I.R., U.S.N.M. and S.A.M.

### Genus ZETZELLIA Oudemans

*Zetzellia* Oudemans, 1927. *Ent. Ber., Amst.* 7(158): 263. Type species: *Zetzellia methlagli* Oudemans, 1927.

*Agistemus* Summers, 1960b. *Proc. ent. Soc. Wash.* 62: 234 (new combination).

RECOGNITION: Propodosomal plate bears three pairs of setae, a pair of eyes and a pair of irregularly shaped postocular bodies. Humeral and intercalary setae borne on individual platelets, two pairs of suranal setae borne on a single plate, arrangement of other hysterosomal setae and plates variable, but setae *c* and *Im* never on separate plates. Two pairs of setae on maxillicoxae. Only one seta on coxa II. One or two pairs of paragenital setae. Palps normal: Tibial claw half to as long as tarsus; latter with terminal sensillum as a trident with short prongs. Chelicerae completely separated.

The definition of the genus (Oudemans, 1927; Summers, 1960b) was broadened by Gonzalez (1965) to include species with a divided median hysterosomal plate (such as *Z. maori* Gonzalez, *Z. mapuchina* Gonzalez), and the same author also clarified the status of the genus by illustrating for the first time the type species, *Z. methlagli* Oudemans. Summers (1960b) erected the genus *Agistemus* for several *Zetzellia*-like species with a large, entire, median hysterosomal plate bearing dorso-lateral setae *la* and *lm* and dorso-median setae *a*, *b* and *c*. *Agistemus* and *Zetzellia* have many features in common and the genera can only be distinguished by the location of setae *la*, which are on the median plate in *Agistemus* and on independent platelets in *Zetzellia*. The arrangement of dorsal plates in *Zetzellia* is very variable, but it is possible to distinguish four groups (Fig. 14 C, D, E, F), typified by *maori*, *australis*, *mali* and *methlagli*, which exhibit a gradual change from three pairs of small median plates to a large integral median plate. *Agistemus* has a fairly uniform arrangement of dorsal plates (Fig. 14 G, H) which appears to be the next step from the *methlagli* group in integration of the median plate. According to Gonzalez (1965) *Agistemus striolatus* Gonzalez and *Zetzellia mali* (Ewing) go through similar ontogenetic changes in organisation of dorsal plates, which in the protonymph stage is similar to the adult stage in *Z. maori*. Studies on *Zetzellia* and *Agistemus* led Gonzalez (1965) to suggest that "—*Agistemus* represents an evolutionary line apparently evolved from the *Zetzellia maori* group of species." Whilst agreeing with this, the present author suggests that this evidence is sufficient to justify enlarging the definition of *Zetzellia* to include all the species hitherto included in *Agistemus*. This arrangement appears to conform to current ideas on the definition of stigmaeid genera, where some genera (such as *Stigmaeus* and *Mediolata*) exhibit considerable variation in arrangements of plates and setae.

DISTRIBUTION: The genus has a world-wide distribution and 37 species are known: One cosmopolitan, two Holarctic, one American, one Southern Hemisphere, six Nearctic, four Palearctic, four Neotropical, six Ethiopian, five Oriental and eight Australian.