

Genus APOSTIGMAEUS Grandjean

Apostigmaeus Grandjean, 1944. *Archs. Sci. phys. nat.* 26: 105. Type species: *Apostigmaeus navicella* Grandjean, 1944.

RECOGNITION: The genus is characterised by the palp-tarsus which bears terminally four independent sensillae (eupathids) (Fig. 8 D) as opposed to the two sensillae of other genera, in which one sensillum is modified in the form of a spike, fork or trident. The dorsal plating is confined to an elongate propodosomal plate bearing only setae *ae* and *be* and no eyes, and individual plates around the other setae except for the suranals which are borne on a single or a paired plate (Fig. 8 E). The anal and genital covers are distinct but have a common opening (Fig. 8 F). There are three pairs of anal setae, three pairs of genital setae and four pairs of paragenital setae.

DISTRIBUTION: Two species are known: *A. navicella* Grandjean which is known from the Palaearctic, Ethiopian and Australian regions, and *A. pacificus* Summers from the Oriental, Australian and Neotropical regions.

Apostigmaeus navicella Grandjean (Fig. 8 D, E, F)

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DISTINGUISHING FEATURES: The New Zealand specimens examined show minor differences from Grandjean's (1944) specimens: no observable platelets around the bases of setae *a*, *b* and *c* (Fig. 8 E); slightly smaller size (mean length of 10 specimens = 460); length of *pg*₂ equals *pg*₂-*pg*₃ rather than slightly more than half this length (Fig. 8 F). The numbers of setae on the legs and palp, the relative lengths of dorsal setae and the shape and reticulate ornamentation of the propodosomal plate are identical to the description given by Grandjean.

COLLECTION DATA: Twelve females from bark of *Eucalyptus* sp., Nelson, 17.xi.63 (T. G. Wood).

Genus MECOGNATHA n.gen. (feminine)

Description: Superficially resembling certain members of the Eupalopsellidae (see Summers, 1960a). Single, large propodosomal plate (P) bearing three pairs of setae and two pairs of eyes, the posterior pair of eyes not globose but peg-like with narrow base equal to about half the height. Metapodosomal plate (MP) bearing four pairs of setae including humerals *he*; zonal plate (Z) with two pairs of setae, intercalary plate (I) with one pair of setae and suranal plate (SA) with two pairs of setae; these plates occupy the whole width of the dorsum, but as the body narrows posteriorly MP is wider than Z which is wider than I which is wider than SA. Legs and gnathosoma elongate. Palp-femur, -genua and -tibia four or more times longer than broad; tibial claw represented by a simple seta and accessory seta by a small tubercle; palp-tarsus less than twice as long as broad, with normal complement of setae including a very short trifid terminal sensillum. Chelicerae long, equal to about half the body length. Setae *n* on maxillicoxae and intercoxal setae flagelliform. No intercoxal or paragenital plates. Chaetotaxy of legs as described for type species. Empodium a short rod with three Y-shaped, capitate raylets, nearly three times as long as the axial rod; stem of the Y very short. Males with ω and $\omega\delta$ on all tarsal podomeres.

RECOGNITION AND AFFINITIES: The extreme elongation of the palps and chelicerae, the reduction of the palp-tibial claw to a simple seta and the tubercle-like accessory seta, and the peg-like posterior pair of eyes are unique among the Stigmaeidae, and indicate a close affinity to the Eupalopsellidae. Stigmaeidae and Eupalopsellidae can only be distinguished by the nature of the empodium, which in Eupalopsellidae consists of raylets arising independently from a median knob between the claws (Summers, 1960a). In *Mecognatha* the axial rod characteristic of the stigmaeid empodium is very much reduced in length and the raylets arise close together on this short rod and in addition the common stem of each pair of