

A SPECIES OF *EUWANDESIA* (ACARI : HYDRACHNELLAE)
FROM NEW ZEALAND

BY

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The genus *Euwandesia* was first described by ANDRÉ and NAUDO (1962). It was originally considered to be a subgenus of *Wandesia* Schechtel (Hydryphantidae : Wandsiinae), to which it bears a close superficial resemblance, but the presence of genital flaps covering the acetabula and the form of the palps show that its relationship to *Wandesia* is fairly distant. BESCH (1964) placed *Euwandesia* in the subfamily Ankelothyasinae (Hydryphantidae). He considered that the apparent similarities between the two genera are due to convergent evolution consequent on occupation of the same kind of environment.

To date two species of *Euwandesia* have been described, *E. sensitiva* ANDRÉ and NAUDO (1962) from Argentina and *E. vietsiella* Besch (1964) from southern Chile. Like the species described below, both are inhabitants of interstitial groundwaters.

The new species from New Zealand has been taken from interstitial waters in sands along the Ashley and Waiau Rivers, in the South Island. It was obtained by digging a pit in a bank of coarse sand. When the groundwater was reached the sand was excavated for another 2 cm, removed, and washed in a bucket. The washings, as well as some of the water seeping into the pit, were filtered through a net of 55 μ mesh.

In both localities the new mite occurred together with several different crustaceans belonging to the Copepoda and Stygocaridacea (SCHMINKE and NOODT, 1968). The sample from the Ashley River also contained a female of the mite *Stygomomonium torquipes* Hopkins.

***Euwandesia tenebrio* n. sp.¹**

Fig. 1 a-e.

Material. Holotype male, dated 3.II.1967. Dominion Museum, Wellington, New Zealand; Catalogue No. DM 4/367. Allotype female, dated as above. Dominion Museum; Catalogue No. DM 4/368. Paratypes held by authors.

Description of male. Body soft, elongate, vermiform. Colour greyish white. Pair of small, black, anterior eye-spots. Skin soft, finely papillated. Body length 1605 μ , greatest width 420 μ . Small, very thinly sclerotised oval dorsal plate near anterior border of frontal region,

1. From the Latin *tenebrio* : one who shuns light.

Acarologia, t. XII, fasc. 2, 1970.

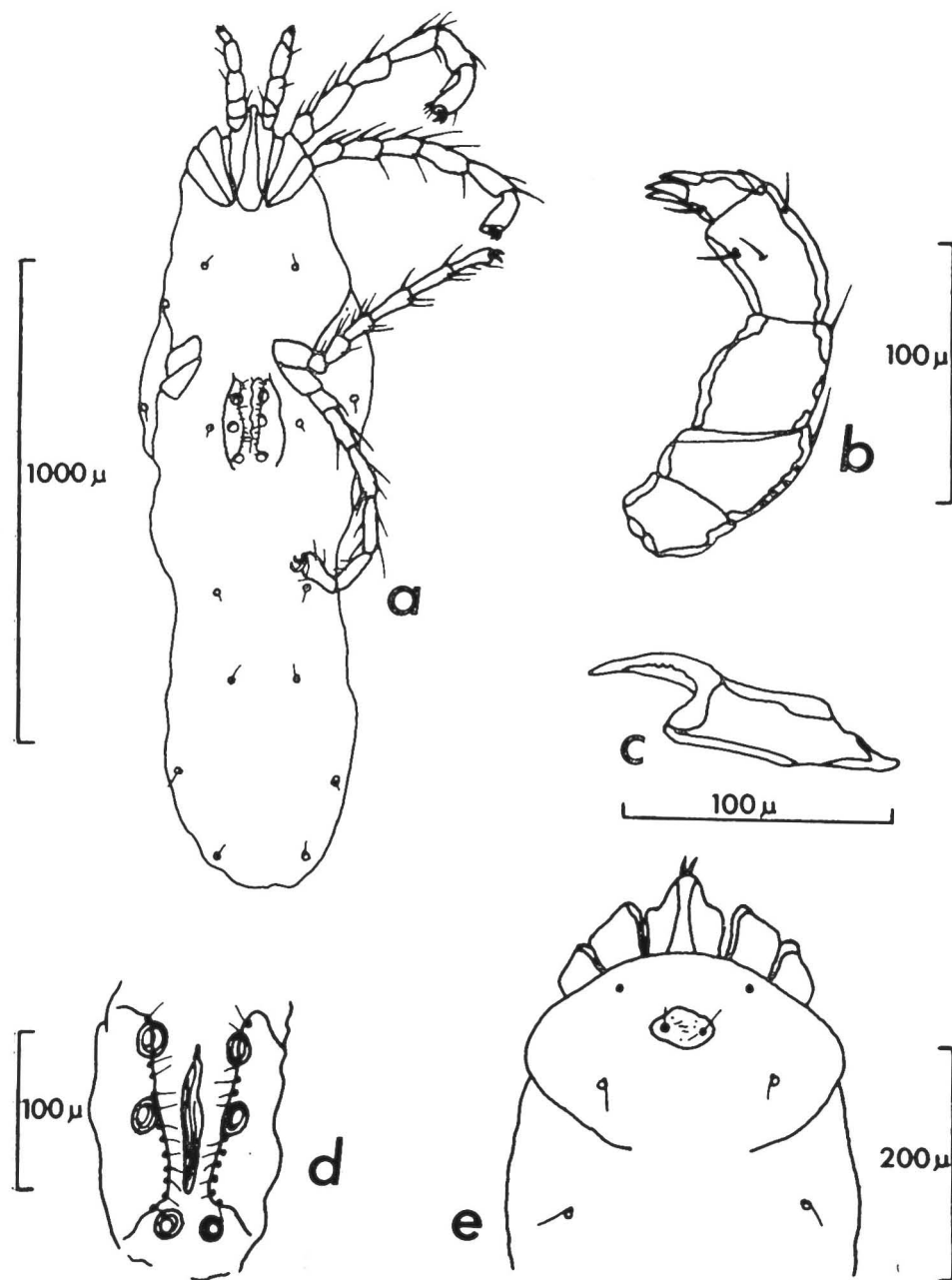


FIG. 1 : *Euwandesia tenebrio* n. sp.

a. — Ventral surface of male; b. — Palp of female; c. — Mandible of female;
d. — External genitalia of female; e. — Propodosoma of female.

52 μ from side to side and 31 μ from front to back ; circular pit on each side of plate carrying a sensory hair. Rows of small glandular papillae on body arranged as seven pairs dorsally, four pairs laterally, and five pairs ventrally ; each papilla with a short hair. Epimera arranged in four blocks ; anterior pair of blocks, consisting of Ep. I and II, lying against each side of capitulum, each epimeron long and narrow, projecting antero-laterally ; posterior pair of blocks widely spaced, distant from anterior pair, consisting each of Ep. III and IV ; Ep. III quadrangular, Ep. IV triangular. External genital area 135 μ long, lying just forward of centre of ventral surface, its anterior end flanked by Ep. III and IV ; three cupshaped acetabula on each side of genital cleft, covered by two thin, membranous flaps whose free borders carry a row of short hairs ; penis skeleton long and narrow. Capitulum long and narrow with short rostrum ; length 195 μ . Mandible short, squat, with powerful, curved, serrated claw. Palp short and thick with few spines ; short dorsal spine projecting from distal end of P. IV ; P. V ending in three strong claws ; dorsal lengths of palp segments, P. I 28 μ , P. II 52 μ , P. III 36 μ , P. IV 64 μ , P. V 36 μ . Legs rather short, sparsely spined ; I-Leg-6 and II-Leg-6 expanded distally, tipped with short, strong spines and with a row of fine hairs on dorsal edge ; III-Leg and IV-Leg more slender ; claws without subsidiary clawlets.

Description of female. Similar to the male in all respects except for lack of penis. Body length 1,950 μ , greatest width 420 μ .

Type locality. Ashley River, Canterbury, New Zealand, map reference in New Zealand Department of Lands and Survey NZMS 1 : map S 67, ref. 569982. Two males and two females collected 3.11.1967 from a depth of 45 cm in coarse sand 150 cm from the water's edge ; temperature at depth of collection 10.5°C.

Other locality. Waiau River, Canterbury, New Zealand, map reference in NZMS 1 : map S 54, ref. 149718. Two females collected 1.11.67 from a depth of 80 cm in coarse sand and 900 cm from the water's edge ; temperature at depth of collection 13.0°C.

Remarks. *E. tenebrio* appears to be very similar to *E. sensitiva* and *E. vietsiella* except for the P. V, which carries only three claws (four in the other two species), and the dorsal plate on the propodosoma, which is larger and wider in the New Zealand species.

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SUMMARY.

A new species of *Euwandesia* (Hydryphantidae : Ankelothyasinae) is described from river sands in New Zealand. It is a member of the interstitial fauna.

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