

A NEW GENUS OF ORIBATID MITE
FROM ASCENSION ISLAND
(ACARI: ORIBATIDA)

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Cordylobates is established as a new genus of oribatid mite, with *fragilis* as the sole species, from lava fields on Ascension Island in the Atlantic Ocean.

Key words: mite, Ascension Island, Oribatida, Ceratozetoidea, terrestrial

INTRODUCTION

PHILIP and MYRTLE ASHMOLE collected many interesting invertebrates from a number of barren lava and cave sites on Ascension Island in 1990. A number of these were oribatid mites, including species of *Lucoppia*, of *Incabates*, and of *Lasiobelba*. The most striking of these taxa proved to be a new genus of ceratozetoid mite which is here described.

The new genus is similar in general appearance to *Humerobates* SELLNICK, 1928 and *Baloghobates* HAMMER, 1967. It differs from both these genera by virtue of its long lamellar cusps and the fact that the genal teeth are fused to the rostrum (i.e. there is no genal indentation). In common with *Baloghobates* (but unlike *Humerobates*) there is no evidence of prolamellae between the anterior extremities of the lamellae and the rostrum. The most conspicuous features of the new genus are the integumental mounds between the cusps and anterodorsally on the notogaster. These mounds are more shallow on the male which is also smaller than the female.

The familial position of the new genus is problematic since it is so closely related both to *Humerobates* (Humerobatidae) and *Baloghobates* (currently placed in the Ceratozetidae). BALOGH and BALOGH (1992) have recently synonymised *Baloghobates* and *Africoribates* a step which seems premature before the systematic position of *Baloghobates* is more closely appraised. The validity of assigning *Humerobates* to a separate family may also need to be reassessed. In the meantime, and perhaps temporarily, the new genus may be accommodated in the family Ceratozetidae.

TAXONOMY

Cordylobates gen. n.

Type species: *Cordylobates fragilis* sp. n.

Diagnosis. Rostrum furrowed medially with lateral ridges; translamella represented by a very faint line; cusps long (1/3 the length of lamellae) and with a conspicuous mound between them; turtorium conspicuous, terminating in a flattened, curved ridge; sensilli short, clavate; pteromorphae moveable and deflected ventrally; notogaster with a fingerprint-like sculpture and mounded anterodorsally; notochaetae number 10 pairs, largely conspicuous and faintly setose; areae porosae number 4 pairs, somewhat irregular in outline; epimeral setal formula 3-1-4-1; genital setae number 6 pairs, aggenital setae 1 pair, anal setae 2 pairs, adanal setae 3 pairs; pore close to anal field and adanal in position; preanal sclerite long and conspicuous; legs tridactylous, genua I and II each with a sharply pointed projection ventrodorsally.

Etymology. "Cordylus" is Greek for "bump" or "swelling" and refers to the distinctive mounds found between the cusps and anterodorsally on the notogaster.

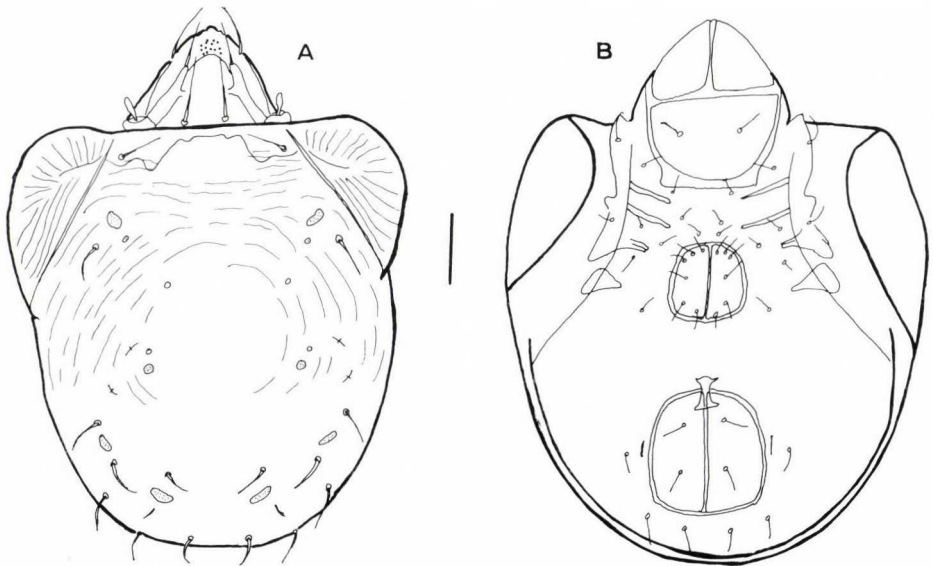
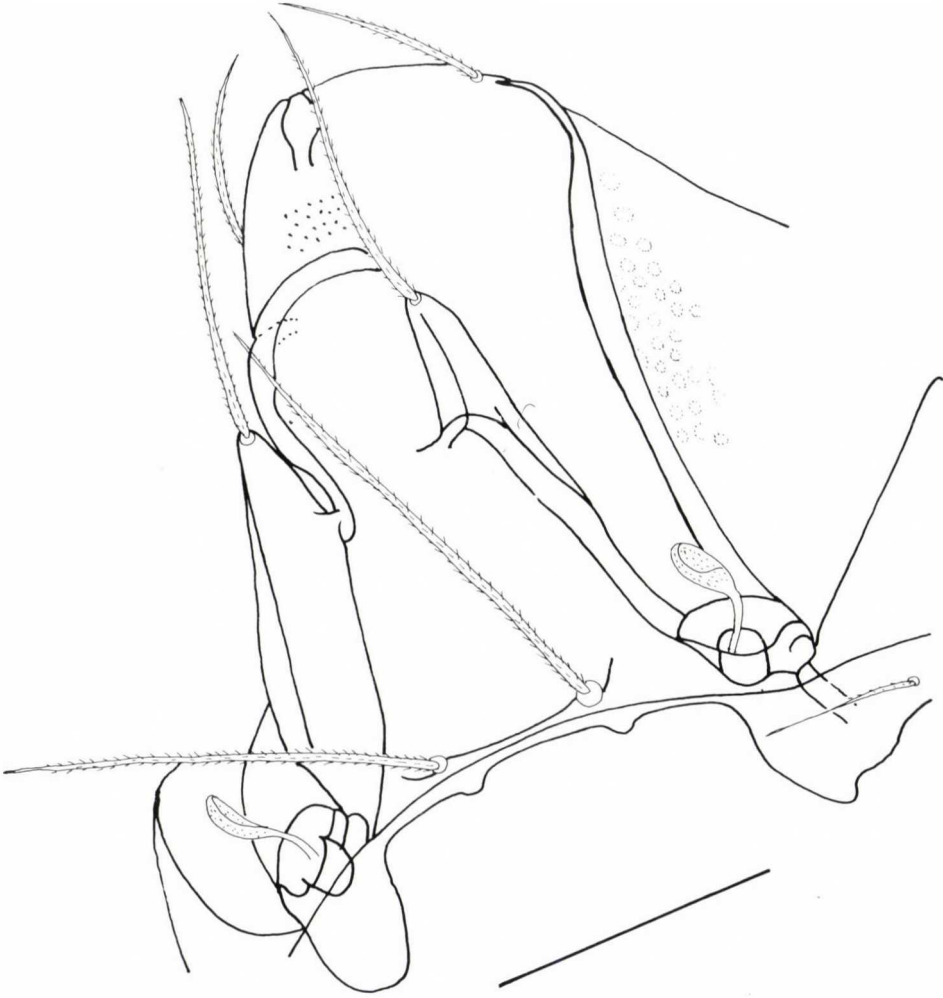


Fig. 1. *Cordylobates fragilis* gen. n., sp. n., general facies: A = dorsal view, B = ventral view (scale bar: 100 μ m)

Fig. 2. *Cordylobates fragilis* gen. n., sp. n.: oblique view of prodorsum of holotype (scale bar: 100 μ m)



***Cordylobates fragilis* sp. n.**

(Figs 1–4)

Dimensions. Mean length of females 1047 μ m (range 920–1130) (n=3); mean length of males 768 μ m (range 700–850) (n=5).

Prodorsum. Smooth or lightly granulate in places, granules more dense in region between prodorsal protuberance and rostrum, some areolar patches laterally; rostrum somewhat furrowed medially with lateral ridges on each side of furrow; genal teeth fused with rostrum (i.e. no genal in-

dentation); rostral setae inserted laterally, curved inwardly, extending beyond the rostrum and finely setose along their whole length. Surface of prodorsum conspicuously bulging between the lamellar cusps, the bulge rising to a peak anteriorly from the translamellar region. Lamellae extending from the bothridial region for $2/3$ the length of the prodorsum; cusps prominent and about $1/3$ the length of lamellae; lamellar setae extending just beyond rostrum and finely setose; translamella represented by a very faint line which becomes conspicuously thick at its attachment to the cuspal bases; no prolamellae between lamellae and rostrum. Interlamellar setae long, conspicuous and finely setose, extending just beyond the cuspal tips and inserted just anterior of the anterior edge of the notogaster. Tutoria conspicuous, terminating in a flattened, curved ridge just posterior of the bases of the rostral setae. Bothridia shallow cups situated just anterior of the anterior edge of the notogaster; sensilli short, pedicel and capitulum about equal in length, capitulum clavate, membranous and covered in small setulae.

Notogaster. Pteromorphae typically humerobatid in relative size and shape, deflected ventrally, moveable and striated. Hysterosoma globular with a fingerprint-like striation on the notogastral integument and a bulge anteromedially. Notochaetae fine, generally conspicuous, slightly setose and numbering 10 pairs. Areae porosae number 4 pairs, somewhat irregular in outline.

Venter. Genital setae fine, slightly setose and numbering 6 pairs distributed 3-1-2 (on one male paratype there are 7 setae on one genital shield). Aggenital, anal and adanal setae similar in form to genital and numbering, 1, 2 and 3 pairs respectively. Pore close to frame of anal field and adanal in position. Apodemata typically humerobatid; epimeral setal formula 3-1-4-1. Long pre-anal sclerite present.

Appendages. Legs tridactylous, all claws equivalent in size and often minutely denticulate dorsally. Trochantera and femora III and IV each with a ventral carina; genua I and II each with a

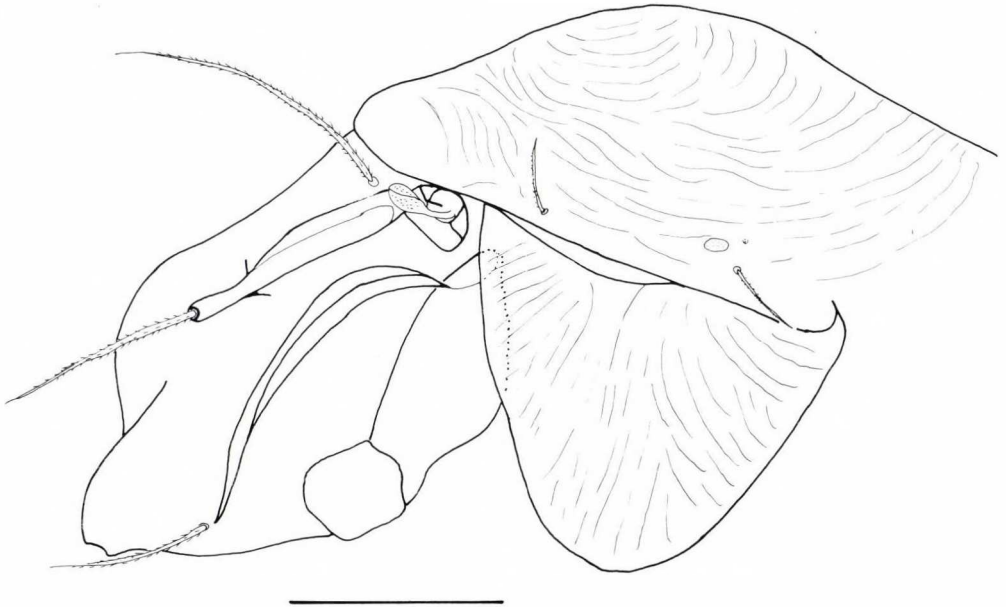
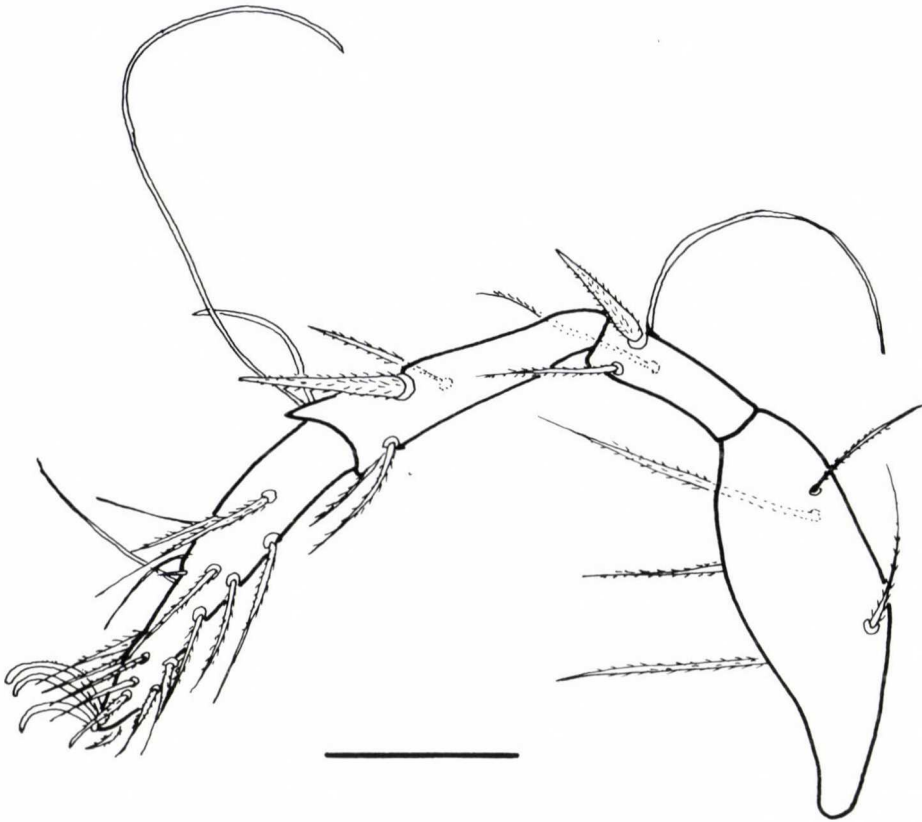


Fig. 3. *Cordylobates fragilis* gen. n., sp. n.: lateral view of proterosoma of female (scale bar: 100 μm)

Fig. 4. *Cordylobates fragilis* gen. n., sp. n.: leg I (scale bar: 50 μ m)



sharply pointed projection ventrodistally; genua and tibiae of legs I, II and III each with an especially broad, dagger-like, blunt, setose seta laterally (similar setae of tibiae are narrower and with somewhat filamentous tips). Ovipositor terminating in 3 elongate lobes each bearing 4 setae.

Material examined. On lava outcrops near Packer's Hole, Lava Lake, and Letterbox (with sparse growths of lichen, grass tufts and algae), Ascension Island. Collected between 18th and 30th March 1990 by PHILIP and MYRTLE ASHMOLE, University of Edinburgh. Holotype male (from Packer's Hole), 3 paratype males and 2 paratype females at the Natural History Museum, London; 1 paratype male and 1 paratype female in the Canadian National Collection, Centre for Land and Biological Resources Research, Ottawa, Canada.

Etymology. The specific epithet refers to the apparent extreme fragility of the specimens as well as to that of their precarious habitat.

Remarks. Several of the specimens have masses of amorphous material in their guts which might be the remains of lichen. However, their diet also seems to be composed of pollen which has presumably been serendipitously blown onto their otherwise rather barren habitat.

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