

A DESCRIPTION OF *CHALANDEA PINGUIS* (BRÖLEMANN, 1898)

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INTRODUCTION

A description of *Chalandea pinguis* (Brölemann) based solely on the account in Brölemann (1930) was published in this Bulletin (Barber, 1985) as part of an update on British chilopod species and an account of its distribution in Britain and Europe subsequently (Barber, 1992) but the only figures of the species are those of Brölemann's 1930 account and of his original description (Brölemann, 1898a). The present paper is intended to make a description more widely available using figures based on British specimens by one of the present authors (REJ).

Brölemann's original specimens (named as *Geophilus pinguis*) were from the Pyrenees but it was subsequently reported from Alpes Maritimes and Corsica whilst Minelli in recent years has records from various parts of Italy and (probably) Switzerland. It is known to be widespread in the North Devon area of South West England but has so far not been reported elsewhere from Britain. A summary of these records is given in Barber (1992).

DESCRIPTION

Chalandea pinguis is highly unlikely to be mistaken for any other British (and probably European) geophilomorph because of its extreme shortness compared with its breadth and the small number of trunk segments (35-37), resembling superficially one half of a geophilomorph such as *Haplophilus subterraneus*. Brölemann himself (1898b) wrote "très reconnaissable à son aspect ramassé, qui ne tient pas, comme on pourrait le croire au premier abord, à la contraction de l'animal".

Size: Up to about 20 mm long by 1.6mm broad.

Number of trunk segments: All British specimens seem to correspond to the 35 segments in males and 37 in females of the original description. None resembling the 45-47 segments of some of Brölemann's rare female specimens from Corsica and Alpes Maritimes have been found here.

Coloration: Pale yellowish-brown (pale ochre) but some preserved specimens may be darker or appear to have a pinkish tinge.

Shape: Very short in relation to breadth, strongly contracted anteriorly but trunk barely attenuated and truncated posteriorly. Very distinctive. In life it may be found coiled into a ball with the sternites facing outwards in the way of *Henia vesuviana*.

Head: Small in relation to body, slightly wider than long with rounded antero-lateral and slightly convex posterior borders.

Antennae: Relatively long, three or four times the length of the head and about one tenth of the length of the body. Articles a little longer than broad, of uniform diameter throughout ; terminal article about equal in length to the preceding three together.

Clypeus: Two areas of reduced reticulation just anterior of the labrum. Clypeal difficult to see on the two specimens examined. 4 large post antennal setae in both specimens with 2+3 and 1+0 alongside them.

Labrum: Tripartite with side pieces bearing about 15 (14-16) fimbriae (Brölemann, 1930, quotes "pièces latérales frangées de 8 à 10 lanières grêles") and the mid piece with 3- 4 tuberculous teeth.

Mandibles: Typical geophilid type but without clear ventral ridge or dorsal apophysis.

Maxillae: First maxillae with long palps and 8-9 setae with a small number of microsetae on each of the palpal projections. Tips ciliate. Syncoxae with palps.

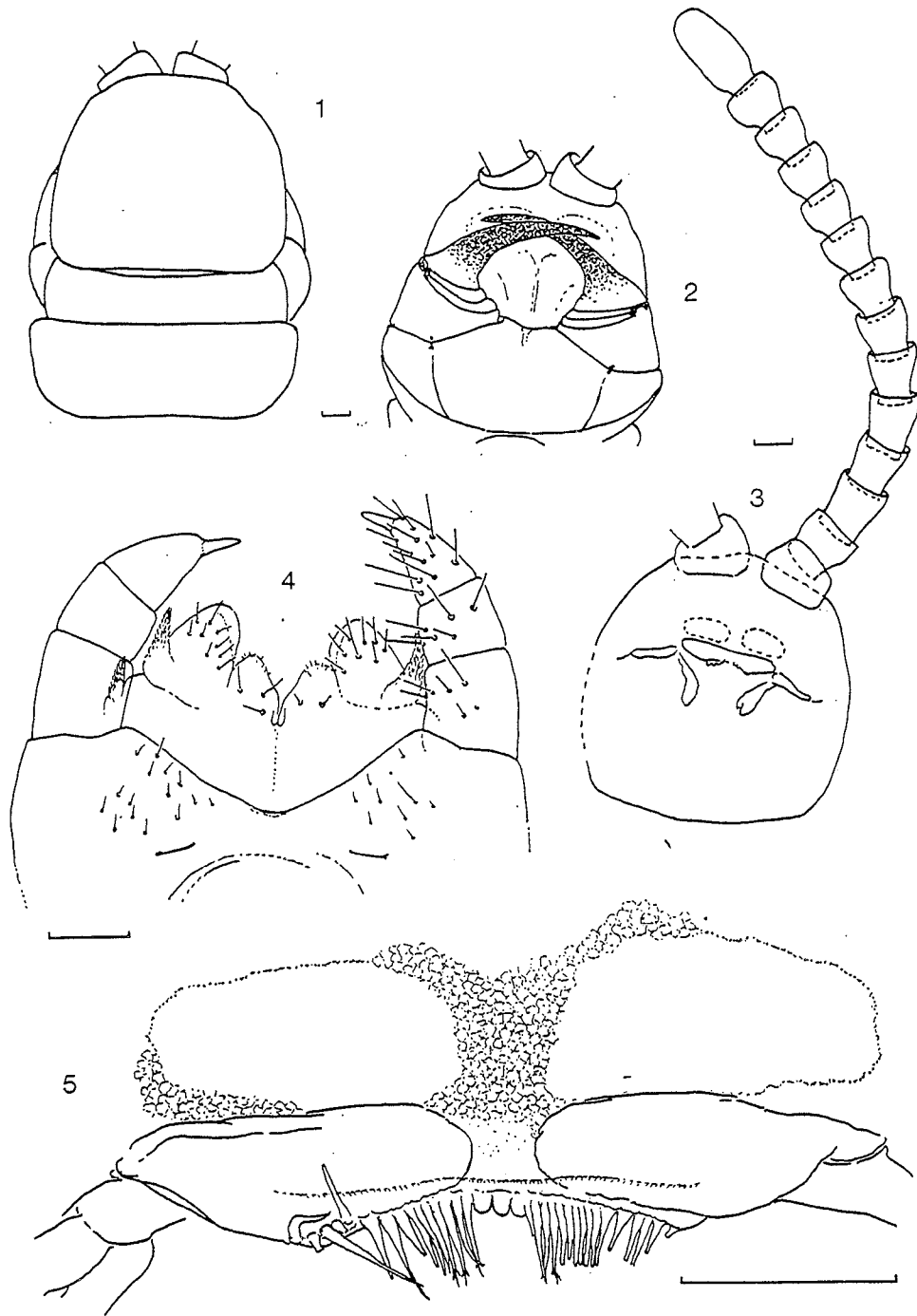
Forcipular segment: Tergite short, about 3-4 times as wide as long , lateral edges converging posteriorly. Coxosternite with complete chitin lines. Articles of poison claws very short; the length of the femoroid is less than three quarters of the width of its base. All articles are unarmed internally. The claw, contracted towards the base, is flattened, long and attenuated towards its point with a smooth concavity. Brölemann (1930) uses the phrase "comprimée en lame de sabre". The poison gland, which appears to be spindle shaped, is located in the femoroid.

Trunk: Pores on all segments except the last forming a narrow band across the posterior of each segment surrounded by a narrow (2 or 3 cells wide) band of areolation. The last two sternites narrowed posteriorly, trapezoidal. A weak carphagus structure is present but is not recognisable on the posterior sternites.

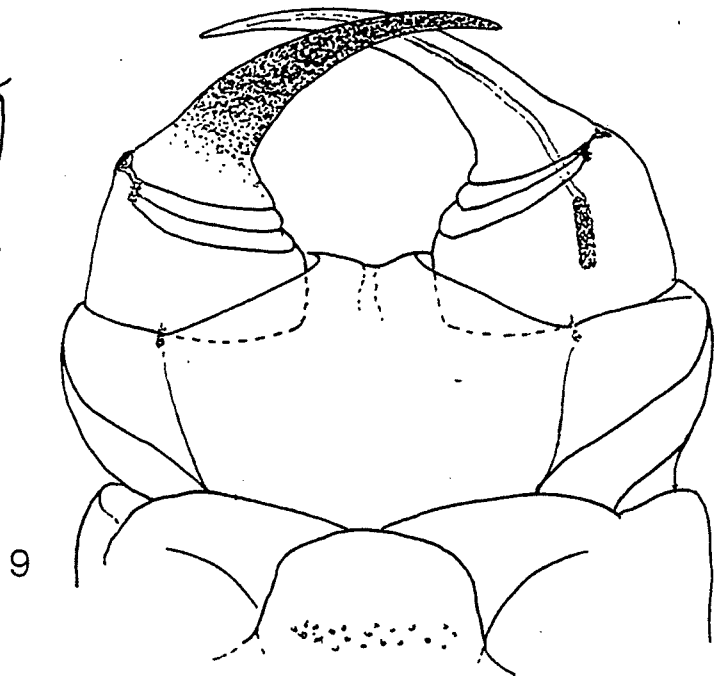
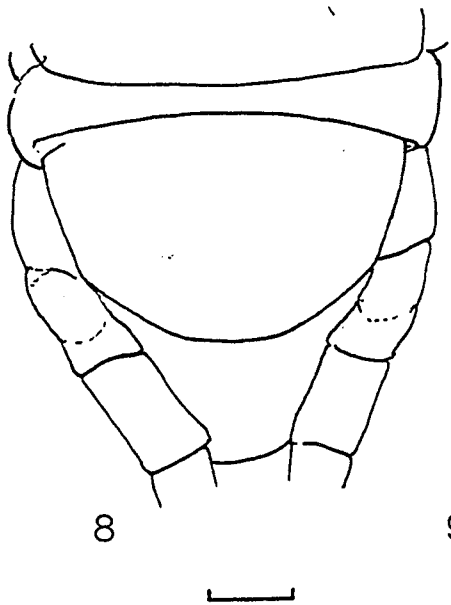
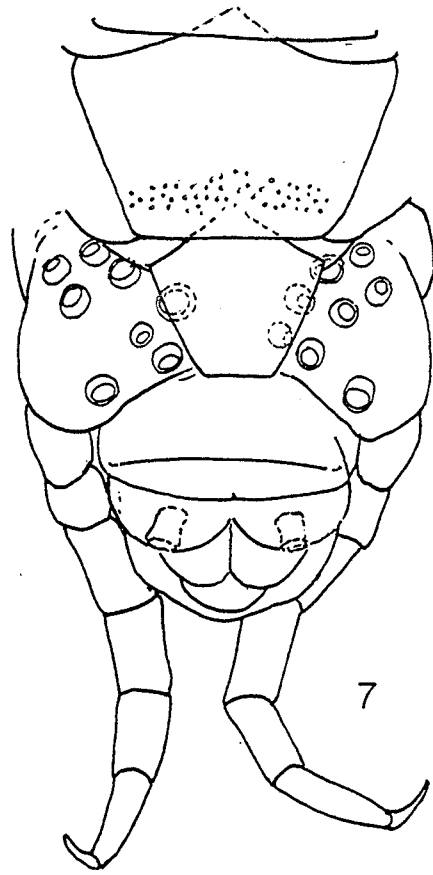
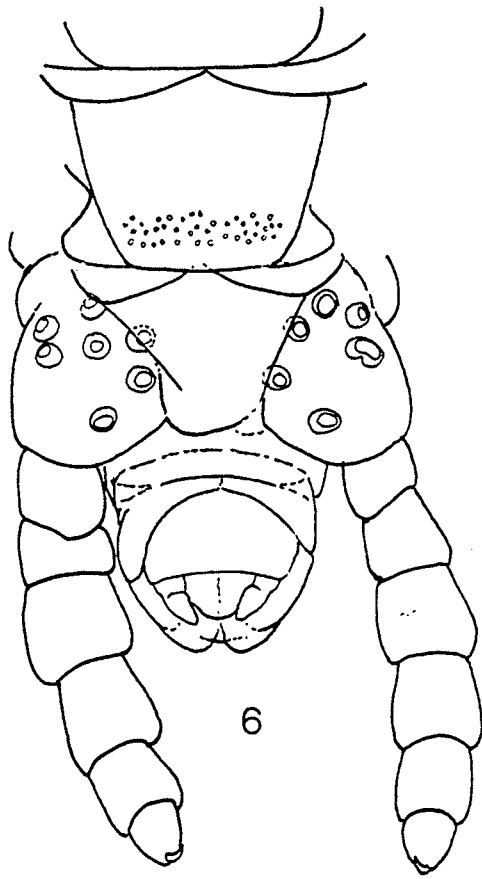
Last trunk segment: Presternite divided, metasternite trapezoidal. Coxae short and swollen, almost globular in the male. 6-10 coxal pores, mostly clearly visible; one more or less isolated pore distally. Telopodites much swollen in the male ; terminal claw clearly developed in female, less so in male. Anal pores present.

Habits: Found in a variety of sites but all British sites so far seem to be associated with deciduous trees. Leaf litter is a common location where it may often be found rolled into a ball with the sternites outside; has been found under bark. May be quite abundant in some sites.

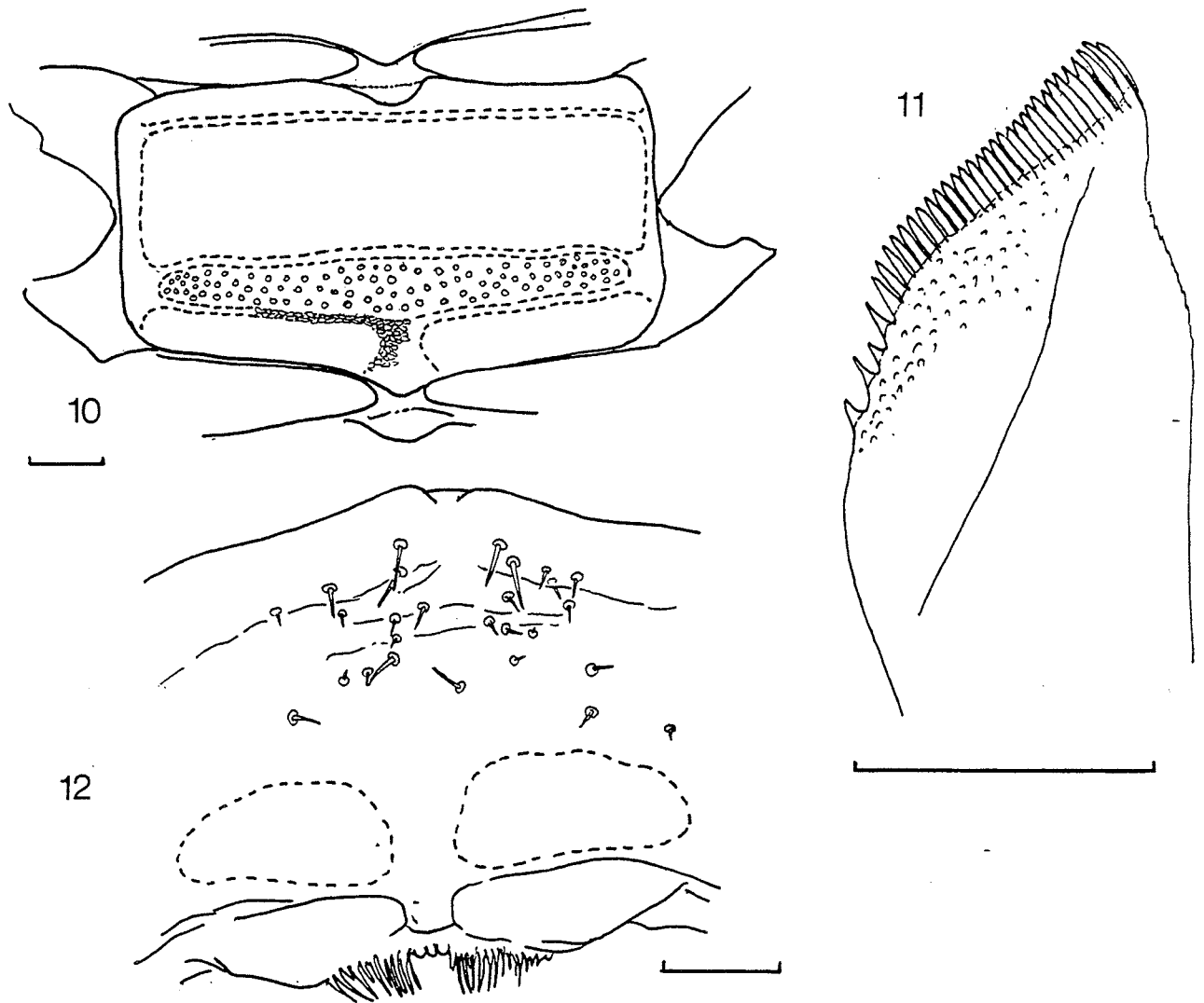
Distribution: Only known in Britain from North Devon (Vice-county 4) where it has been found in 13 locations in 9 10km grid squares between 1970 and 1989. Pyrenees, Alpes Maritimes, Liguria, Lombardy, Cottian Alps, ?Ticino and Corsica.



Figures 1-5. *Chalandea pinguis* Brölemann 1898. Specimens from North Devon.
 1) Head and first two segments, dorsal 2) Head and forcipular segment, ventral. 3)
 Antennae and head capsule. 4) First and second maxillae, ventral. 5) Labrum,
 showing area of reduced reticulation of clypeus. Scale bars = 0.1mm.



Figures 6-9. *Chalandea pinguis* Brölemann 1898. Specimens from North Devon.
 6) Last leg bearing segment, male, ventral. 7) Last leg bearing segment, female, ventral. 8) Last segment, female, dorsal. 9) Forcipules, ventral. Scale bar = 0.1mm



Figures 10-12. *Chalandea pinguis* Brölemann 1898. Specimens from North Devon. 10) 11th segment, ventral, showing posterior band of pores surrounded by ring of areolation and weak carpophagus structure. 11) Mandible. 12) Clypeus showing setae and the two areas of reduced reticulation. Scale bars = 0.1mm.

REFERENCES

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