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Previous volumes (2010-2018): 250 € / year (4 issues)
Acarologia, CBGP, CS 30016, 34988 MONTFERRIER-sur-LEZ Cedex, France
ISSN 0044-586X (print), ISSN 2107-7207 (electronic)

The digitalization of Acarologia papers prior to 2000 was supported by Agropolis Fondation under the reference ID 1500-024 through the « Investissements d’avenir » programme (Labex Agro: ANR-10-LABX-0001-01)

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CTENOBELBA APATOMORPHA N. SP.
(ACARI, ORIBATIDA, CTENOBELBIDAE)
FROM THE IBERIAN PENINSULA

BY J. C. ITURRONDOBEITIA *, M. I. SALOÑA *, C. ANDRÉS* and A. I. CABALLERO*

SUMMARY: A new species of the family Ctenobelbidae Grandjean, Ctenobelba apatomorpha n. sp., is described. Its main diagnostic characters are the length of the sensillus, which ranges between 80 and 100 µm, presenting a long stalk (about 2/5 the length of the sensillus) and 8 to 13 branches of equal length (15 µm). This new taxon was previously recorded in 1970, by Pérez-Iñigo, as Ctenobelba pectinigera. Morphological differences separating these two taxa and the similar European species, Ctenobelba brevipilosa Mahunka, 1964 and Ctenobelba csiszarae Mahunka, 1977 are discussed. Ctenobelba fenestrata Pérez-Iñigo Jr, 1990 is synonymized with Ctenobelba pectinigera Berlese, 1908.

RESUMEN: En el presente trabajo se describe una nueva especie perteneciente a la familia Ctenobelbidae Grandjean, 1965: Ctenobelba apatomorpha n. sp. Su principal carácter diagnóstico es, con respecto a otras especies afines, su sensilo, cuya longitud oscila en un rango de 80 a 100 µm, presentando un tallo largo (aprox. 2/5 de la longitud total del sensilo) así como, de 8 a 13 ramas de similar longitud (15 µm). Este nuevo taxón ya fue citado en el año 1970 por Pérez-Iñigo como Ctenobelba pectinigera. En consecuencia, discutimos y valoramos las diferencias morfológicas que separan a ambas especies y a otras especies europeas próximas, Ctenobelba brevipilosa Mahunka, 1964 y Ctenobelba csiszarae Mahunka, 1977, además de revisar las citas previas existentes. Por último, se propone la sinonimia de Ctenobelba fenestrata Pérez-Iñigo Jr, 1990 en Ctenobelba pectinigera Berlese, 1908.

RÉSUMÉ: Nous décrivons une nouvelle espèce de Ctenobelbidae, Ctenobelba apatomorpha n. sp. Son principal caractère, comparé aux autres espèces semblables, est le sensillus dont la longueur varie de 80 à 100 µm, et qui présente une tige longue (environ les 2/5e de la longueur du sensillus) avec de 8 à 13 branches de longueurs tout à fait semblables (15 µm). Ce nouveau taxon a déjà été cité en 1970 par Pérez-Iñigo sous le nom Ctenobelba pectinigera. Par conséquent, nous étudions et discutons toutes les différences entre les deux taxons et d'autres espèces européennes similaires, comme Ctenobelba brevipilosa Mahunka, 1964 et Ctenobelba csiszarae Mahunka, 1977, mises à part la révision des données préexistantes. Finalement, nous mettons en synonymie Ctenobelba fenestrata Pérez-Iñigo Jr, 1990 avec Ctenobelba pectinigera Berlese, 1908.

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The present paper describes a new species of Ctenobelba. It was found as a result of the study of several specimens of the family Ctenobelbidae Grandjean, 1965, from samples collected in Vizcaya and Alava and from material provided by Dr C. Pérez-Inigo.

This new species, was recorded for the first time in the Iberian Peninsula as Ctenobelba pectinigera by Pérez-Inigo (1970), being confused with this species due to their similarity. Nevertheless, the differences between them are considered to be sufficient to separate them. We therefore describe this new species and compare it with closely related species. The name proposed for the new species, apatomorpha, means 'form that induces confusion', due to the resemblance between it and Ctenobelba pectinigera.

Ctenobelba apatomorpha n. sp.
(= Ctenobelba pectinigera sensu Pérez-Inigo, 1970)

Diagnosis: Rostrum nose-like, elongated, usually with a small tooth along the sides. Sensillus length 80–100 \( \mu \text{m} \). Sensillus presents a long stalk (about 2/5 total length of sensillus) and 8–13 branches of similar length (15 \( \mu \text{m} \). Prodorsal and notogastral setae smooth, the latter rather long (40–45 \( \mu \text{m} \). Size: Length 440–480 \( \mu \text{m} \), width 230–250 \( \mu \text{m} \).

Prodorsum (Fig. 1A): Rostrum nose-like, elongated, usually with a small tooth along the sides (Fig. 1C), presenting smooth and arched rostral setae, placed slightly anterior margin of the rostrum, insertion points well separated. Lamellar setae long and smooth, generally straight; interlamellar setae slightly shorter, smooth and arched. Prodorsum with long, parallel lamellar ribs, most apparent, originating at level of bothridia, interrupted at level of interlamellar setae, projecting towards insertions of lamellar setae. However, these lamellar ribs sometimes seem to originate next to the interlamellar setae, not reaching to bothridia, as occurs in the holotype (Fig. 1). A reticulate area is present between the interlamellar setae, reaching base of lamellae. Sensillus (Fig. 1B) 80–100 \( \mu \text{m} \) long, consisting of a long stalk (about 2/5 length of sensillus), and an undifferentiated head bearing 8–13 branches along external margin, all of similar length (15 \( \mu \text{m} \)). This length is slightly larger than the distance between them.

Notogaster (Fig. 1A): Notogaster with a pair of dorsally slightly developed apophyses on the anterior margin, projecting against the bothridia as a strongly sclerotized protuberance. Ten pairs of smooth setae (average length 30 \( \mu \text{m} \)) are present. Lyrifissures in evident, arranged obliquely under setae te.

Ventral region: Epimeral formula (3-1-3-3), setae smooth and of medium length. Epimeres III and IV fused, with border obscure. Sejugal furrow ventrally with enantiophysis, the larger, posterior one bearing seta 3c. Number of genital setae typically 6 pairs: 2 anal, 2 adgenital and 3 adanal. Setae ad1 postanal, whereas ad3 and even lyrifissures 1ad are adanal.

Material studied: 19 specimens of the new species have been studied, 3 of which were provided by Dr C. Pérez-Inigo Quintana, preserved in semi-permanent preparations in Hoyers liquid. The rest of the material is from samples taken in the summer and autumn of 1989, in the province of Alava, and in the spring of 1992, in the province of Biscay. The three specimens sent by Dr Pérez-Inigo, taken in a locality called Los Molinos (Madrid) in 1953, have been designated as the types and are deposited in the Museo de Ciencias Naturales, Madrid.

The samples, localities and number of specimens assigned to the new species are as follows:

T17. – (3 ex.), Los Molinos (Madrid), Pérez-Inigo leg., 5 May 1953 (holotype and two paratypes).

DISCUSSION

The genus Ctenobelba was first revised by Mahunka (1964), who described two new species—Ctenobelba brevipilosa and Ctenobelba serrata—and provided a brief key for 5 species, including Ctenobelba pectinigera Berlese, 1908. A more extensive revision
FIG. 1: Ctenobelba apatomorpha n. sp.
A. - Dorsal view without legs. B. - Sensillus. C. - Rostrum.
1) **Ctenobelba pectinigera** (Berlese, 1908): Holotype, Florence.
2) **Ctenobelba fenestrata** Pérez-Iñigo Jr, 1990: Material kindly sent by Dr Pérez-Iñigo, containing two preparations: 3 specimens found in Los Molinos, Madrid and 7 specimens from Monte de Agua, Tenerife. In addition, he sent two more preparations, labelled as *Ctenobelba fenestrata*, the paratype from Arguis (sample P3) and 4 specimens from the type-locality, La Almunia del Romeral (P15).
3) **Ctenobelba pectinigera**: Two specimens from the region of Remoulins (SE France), kindly sent by Dr Subías.
4) **Ctenobelba brevipilosa** Mahunka, 1964: Two paratypes (Budapest Museum).
5) **Ctenobelba csiszarae** Mahunka, 1977 (Budapest Museum).
6) **Ctenobelba pectinigera**: 3 specimens from the Basque Country, Vizcaya.

Undoubtedly, the species nearest to *C. apatomorpha* n. sp., in terms of morphology, are *Ctenobelba csiszarae* Mahunka, 1977 and *Ctenobelba brevipilosa* Mahunka, 1964. Based on the original descriptions of these species and our examination of two paratypes of *C. brevipilosa*, provided by Dr Mahunka, as well as specimens of *C. csiszarae*, several characters were found to clearly separate these two Hungarian species from *C. apatomorpha*. The body length is 320–354 μm in *C. csiszarae* and the notogaster width is 186–202 μm, less than that of *C. apatomorpha*. The dimensions of the specimens sent to us by Mahunka are 370–410 × 200–220 μm. Its sensillus presents 9 or 10 branches. The length of the notogastral setae of this species ranges between 30 and 40 μm.

Concerning *C. brevipilosa*, the dimensions of the two paratypes examined by us are 470 × 280 μm, falling within the ranges of 461–490 × 270–343 μm reported by Mahunka. The sensillus also presents very short branches, which are even greater in number, varying from 10 and 16. In one of the paratypes examined by us, the number of branches is 14. Finally, the notogastral setae are considerably shorter, with a length of 15 μm.

We also compared the new species with *Ctenobelba perezinigoi* Moraza, 1984, which is also known from...
FIG. 2: Ctenobelba pectinigera Berlese, 1908.
the Iberian Peninsula. These species are difficult to confuse, since C. perezinigoi has the prodorsal and notogastral setae barbed, whereas they are completely smooth in the new species. C. perezinigoi is also slightly larger, with dimensions of $526 \times 296 \mu m$ (recorded by Moraza) and $475 \times 215 \mu m$ (observed by Dr Saloña). However, the sensillus is very similar to that of C. pectinigera, showing a similar number of branches, the first of which is longer than the others.

As a final comparison, we should mention that Pérez-Iñigo Jr (1990) has recently described a new species, Ctenobelba fenestrata, which, according to the original description and the material that we have studied, is identical to C. pectinigera. We therefore synonymize these two species here.

**Acknowledgements**

We wish to express our sincere thanks to Dr Luis Santos Subías and Dr Antonio Arillo (Universidad Complutense, Madrid), to Dr Carlos Pérez-Iñigo Quintana (Museo Nacional de Ciencias Naturales, Madrid) and to Dr Sandor Mahunka (Budapest Museum of Natural History) for having sent us the material used for this study. Finally, we are very grateful to Dr Marissa Castagnoli and Dr Roberto Nanelly, in charge of the Berlese collection (Istituto Sperimentale per la Zoologia Agraria, Florence), for their collaboration in the revision of the holotype of Ctenobelba pectinigera Berlese.

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