

Cyrthermannia ezzati n. sp. and Further Data to the Knowledge of Egyptian Oribatid Fauna

By

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In spite of the data published by several authors (BERLESE, TRÄGARDH, POPP, KÜHNELT, ABD-EL-HAMID, etc.), the Egyptian Oribatid fauna is still very little known. This lack of knowledge is surprising, since a good deal of research work in the Western Mediterranean region (Spain, Balearic Islands, etc.) has been begun long before. Starting from this circumstance, the authors aimed to contribute to the knowledge of soil fauna of the Eastern Mediterranean region at least in part.

The material of the present study was collected by B. M. BAYOUMI and Dr. K. A. EZZAT of the High Institute of Public Health, Alexandria, Egypt. Both regarding the number of species and individuals, the majority of the soil samples was very poor, only two samples were found to contain a high number of individuals.

In the course of the said collection fourteen species were encountered, of which one proved to be new for science and eight (marked with asterisks) were new for the Egyptian fauna. Most of the species are interesting also in zoogeographical respect, since the distribution area of the individual species has significantly increased (e. g. *Rostrozetes foveolatus* SELLNICK 1925; *Odontocepheus elongatus* MICHAEL, 1879, and *Hoplophorella scapellata* AOKI, 1965).

Sampling localities

- A/1: Alexandria: Nursery of ornamental plants. 2. I. 1975.
- A/2: Alexandria: Horticultural Experiment Station, under *Casuarina* trees, near a ditch. 23. V. 1975.
- A/3: Alexandria: Horticultural Experiment Station, under orange trees, 20. VI. 1975.
- A/4: Alexandria: Botanical Garden of the Faculty of Science, compost of *Eucalyptus*. 20. VI. 1975.
- G/1: Giza: Orman Park. 22. VI. 1975.
- W/1: Wadi-El-Natroon: Newly reclaimed land. 23. I. 1975.

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Species list

Phthiracaridae PERTY, 1841

*1. *Hoplophorella scapellata* AOKI, 1965. A/3.

Euphthiracaridae JACOT, 1930

2. *Rhysotritia ardua* C. L. KOCH, 1841. A/3, A/4.

Lohmanniidae BERLESE, 1916

*3. *Lohmannia loebli* MAHUNKA, 1974. G/1.

Nanhermanniidae SELLNICK, 1928

4. *Cyrthermannia ezzati* n. sp. (Fig. 1.).

Measurements: — Length: 590 μ , breadth: 338 μ .

Dorsal aspect: Rostral setae directly arising on apex of rostrum, lamellar setae close to rostral apex and inserted on a double-arched chitinous costula;

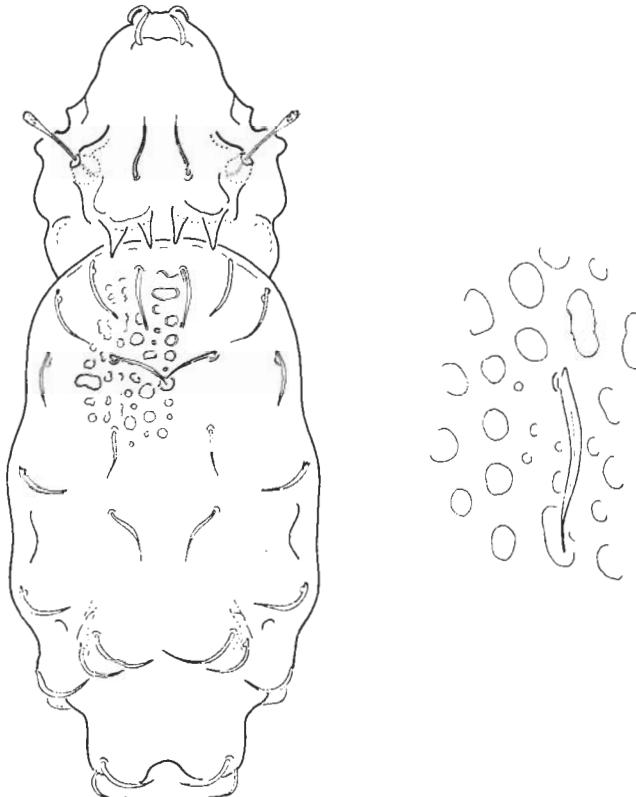


Fig. 1. *Cyrthermannia ezzati* n. sp.

latter long, reaching prodorsal margin. Foveolae of irregular shape and different size, situated laterally, as well as anteromedially on prodorsal surface. From base of prodorsum and towards its central region a pair of elongated foveolae extend. Sensillus long, reaching beyond prodorsal lateral edge. Notogastral surface ornamented with circular foveolae of characteristic different sizes. Fifteen pairs of notogastral hairs are present resembling narrow peach leaves. A pair of tuberculae extend from the posterior end of notogaster, with a deep depression between them. Two pairs of sharp, narrow prodorsal teeth extend from the laterobasal parts of prodorsum.

Ventral aspect: Location and sloping of apodemes rather similar to those of type species of the genus. All epimeral setae, except 1a and 2a, are remarkably long, barbed and well visible. Nine pairs of genital and two pairs of aggenital hairs, all thick and long. Anogenital region of irregular shape, but circular and frequently ornamented with transverse foveolae of different size. Two pairs of ventral pores present. Two pairs of minute anal and three pairs of long adanal setae present, the latter resembling notogastral hairs and being slightly phylliform.

Type material: 1 Ex. (Holotype): 51-HO-76, deposited in the Hungarian Natural History Museum, Budapest. Locality: A/3.

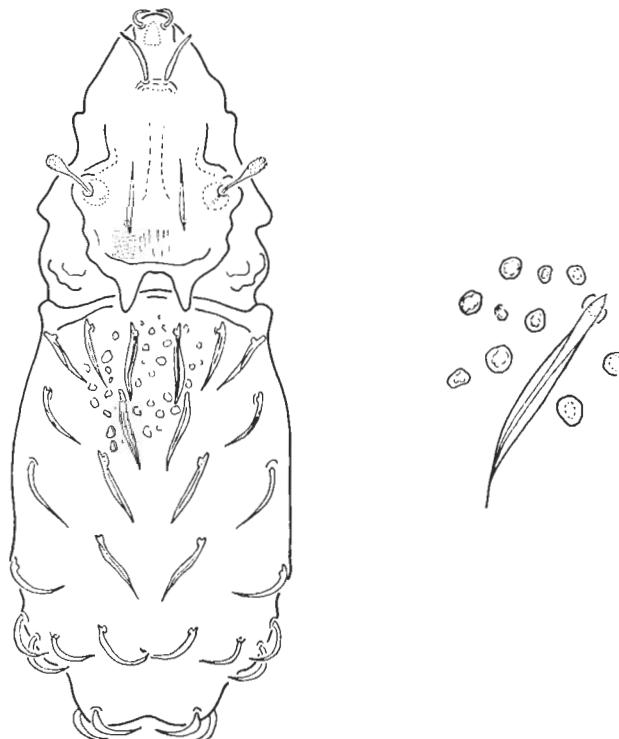


Fig. 2 *Cyrthermannia tuberculata* BALOGH, 1958

R e m a r k s: AOKI (1965) summarized all known *Cyrthermannia* species and submitted a key of identification. However, BALOGH (1970) described a new species (*C. stellata* BALOGH, 1970) from New Guinea. The latter is characterized by having only one pair of prodorsal apophyses. The present new species from Egypt can be easily distinguished from all other members of the genus by having two pairs of sharp, separate prodorsal teeth in addition to the relatively short notogastral hairs. Still, *C. parallela* (AOKI, 1961) also has 4 prodorsal teeth, but with minute notogastral hairs. The number of genital setae serves a good character for separating the two species. It is 9 for the new species (only 7 in *C. parallela*); also the number of notogastral hairs is 15 for the new species (only 14 in *C. parallela*). We give a more detailed description for the type species of the genus, i. e. *C. tuberculata* BALOGH, 1958, as follows.

We dedicate the new species to Dr. K. A. EZZAT, who collected the material.
Cyrthermannia tuberculata BALOGH, 1958 (Fig. 2.)

As seen in fig. 3, the lamellar setae arise far from the rostral apex. Lamellar setae here are longer than that of the Egyptian species. Sensillus comparatively short, its thickened part much wider than that of the new species. One pair of large, fused prodorsal teeth present. Notogastral foveolae much smaller, of irregular shape, and internally serrated. Fifteen pairs of bar-shaped notogastral hairs present. These are much wider and longer than those of the present new species. Nine pairs of genital, two pairs of aggenital, two pairs of anal, and three pairs of adanal hairs are present. Their length and the relative distance between them are approximately in accordance with *C. ezzati* n. sp.

Liacaridae SELLNICK, 1928

- * 5. *Dorycranous acutus* (PSCHORN-WALCHER, 1951). A/4.

Carabodidae C. L. KOCH, 1837

- * 6. *Odontocephalus elongatus* (MICHAEL, 1879). A/4.

Oppiidae GRANDJEAN, 1954

- * 7. *Oppia fasciata* (PAOLI, 1908). A/4.

8. *Oppia ornata* (OUDEMANS, 1900). W/1.

Suctobelbidae GRANDJEAN, 1954

- * 9. *Suctobelbella subtrigona* (OUDEMANS, 1916). A/4.

Passalozetidae GRANDJEAN, 1954

- *10. *Passalozetes africanus* GRANDJEAN, 1932. A/3.

Haplozetidae GRANDJEAN, 1936

11. *Xylobates capucinus* BERLESE, 1908. A/1, A/3.

12. *Xylobates lophotrichus* BERLESE, 1904. A/2.

- *13. *Rosrozetes foveolatus* SELLNICK, 1925. A/2.

Oribatellidae JACOT, 1925

14. *Plakoribates multicuspidus* POPP, 1960. G/1.

ZUSAMMENFASSUNG

Cyrthermannia ezzati n. sp, und weitere Angaben zur Kenntnis der Oribatidenfauna von Ägypten

Anhand der Aufsammlungen von B. M. BAYOUMI und K. A. EZZAT zählen die Verfasser 14 Oribatidenarten auf, von denen eine Art für die Wissenschaft, 8 weitere Arten für die Fauna von Ägypten neu sind. Die neue Spezies, *Cyrthermannia ezzati* n. sp. unterscheidet sich durch zwei Paar Prodorsalzähne und die kurzen Notogastralborsten von sämtlichen Repräsentanten des Genus.,

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