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TWO PRIMITIVE ORIBATIDS : FIRST RECORD IN IRAQ

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ABSTRACT

Cosmochthonius reticulatus Grandjean. 1947 (Acari : Oribatei : Cosmochthoniidae) and **Rhysotritia ardua ardua** C.L.Koch. 1841 (Acari : Oribate : Euphthiracaridae), are two species of oribatids mites first recorded in Iraq from a woodland in the central part of Iraq.The two species are described and illustrated.

INTRODUCTION

Oribatids mites, as other soil mites.are of great biological importance both in natural and in cultivated soils. Nevertheless, few studies on their taxonomy and biology have been carried out (Haq, 1978; Abdel-Hamid **et al.** 1980; Balogh and Mahunka. 1983). In Iraq. however. no such studies have been done, the only work did mention oribatids indirectly was carried out by Abul-Hab (1984). The present work represented the first taxonomic studies on these mites. Hoping much work will be done in future.

MATERIALS AND METHODS

The two species, were separated from humus and moss collected from one of the Kut's woodlands, using Berlese funnel, then the mites were preservd in 75-80% ethyl alcohol for future investigation .

Specimens were transperent by transferred them to a vial containing a mixture of one volume of 90% ethyl alcohol and one volume of lactic acid. The vial was left open in dustproof cabinets for 3-4 weeks. Hard specimens were diepigmented using warm 30% solution of peroxide (H_2O_2) .

In examination, the open temporary mount used by Balogh (1959, 1963, 1972 and 1983) was followed, after examination, specimens were returned back to 80% ethyl alcohol for final preservation .

The species were identify by the first author using references 4,5 and 6 as keys .

RESULTS

Cosmochthonius reticulatus Grandjean, 1947

Measurement : length : 360-406 um

width of notogaster : 185 um

Prodorsum : (fig. 1) : Reticulate, with small paltes arranged in two horizantal row. All setae plumose, rostral setae long without branches, lamellar setae branched, interlamellar setae with two opposite branches, sensillus with plumose head and unplumosed stalk.

Notogaster : (fig. 1) : With 3 transveres furrows that subdivided it to 4 sheilds, setae plumose, setae c and d orginated nearly from the center of the sheild, whereas setae e and fare orginated in the furrows.

Venteral side : (fig. 1 E&F) : Oval, epimeral setae formula (3:2:3:4), genital plate with 10 pairs setae. Anna and adnal areas with 4 pairs plumose setae each .

Legs : All tridactylous .

Rhysotritia ardua ardua C.L.Koch, 1841

Measurement : length : 710-720 um

width of notogaster : 335 um

Prodorsum : (fig. 2) : Oval, with one lateral keel, bothridium with squma sensillus setiform toothed at apex, interamellar setae longer than lamellar and rostral setae.

Notogaster : (fig. 2) : Oval, compressed from each side, sheild of notogaster mostly closed around leaving a narrow venteral side, 14 pairs of plumose setae .

Venteral side : (fig. 2 C&D) : Very narrow, genital and anal areas seperated by a triangular structure, genital with 7 pairs of plumose setae, anal area with only 5 pairs .

Lgs : I bidactylous ; II-IV tridactylous .

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نوعان من الحلم الخنفسائي يسجلان لاول مرة في العراق

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الخلاصة

سجل النوعان :

Cosmochthonius reticulatus Grandjean, 1974 (Acari : Oribatei : Cosmochthoniidae) و **Rhysotritia ardua ardua** C.L. Koch, 1841 (Acari : Oribatei : Euphthiracaridae)

لاول مرة في العراق ، جمعت النماذج من غابات تقع في وسط العراق. وصفت هذه الانواع لتوضيح اهم الصفات المورفولوجية لهذين النوعين .

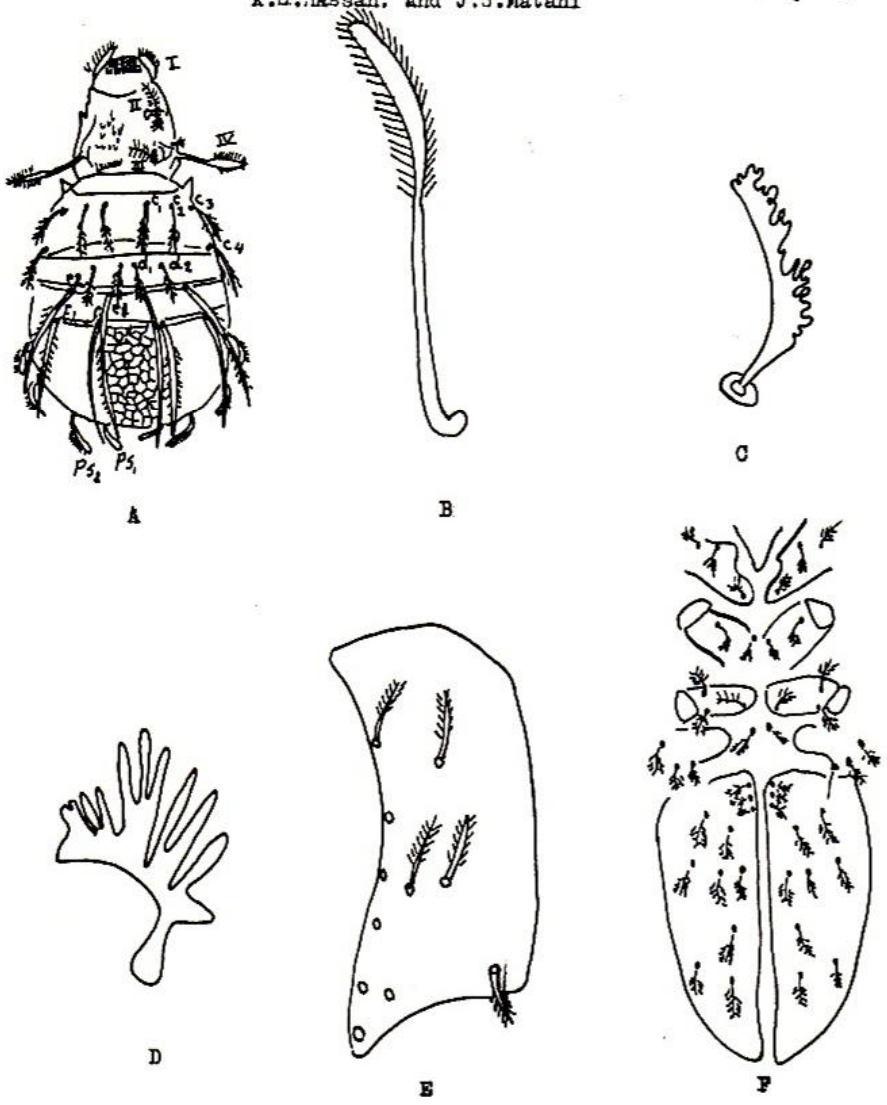
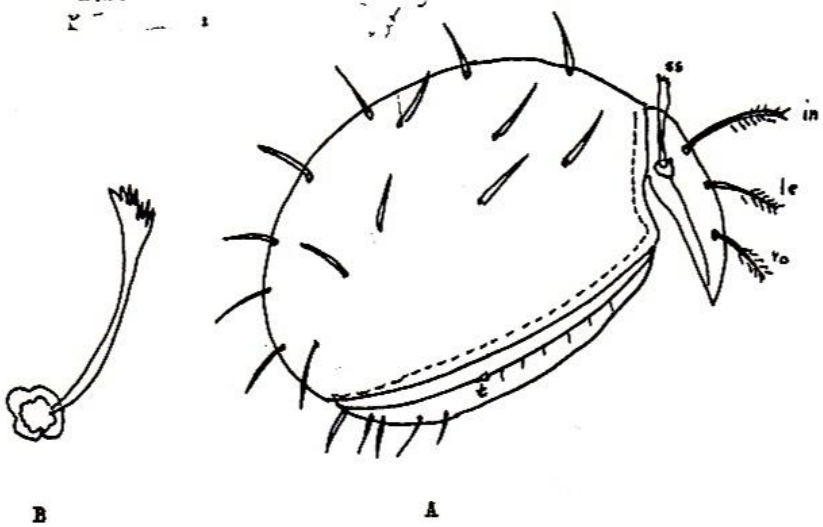
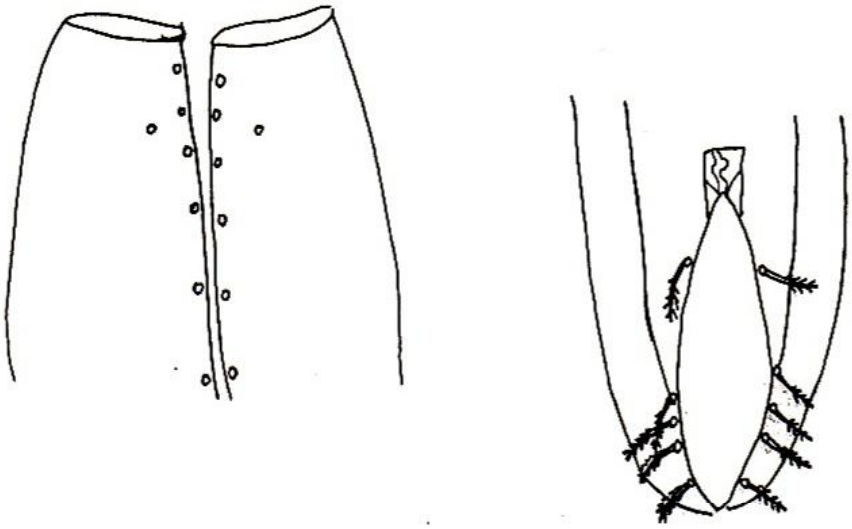


Fig. 1: Cosmochthonius reticulatus Grandjean 1947. A: dorsal side, B: sensillus, C: seta ps, D: seta in, E: genital region, F: Venteral side. I: rostral seta, II: lamellar seta, III: interlamellar seta, IV: sensillus seta.



B A



C D

Fig. 2: Rhysotritia ardua ardua C.L.Koch 1841. A: lateral view, B: sensillus, C: genital region, D: anal region.
re: rostral seta, le: lamellar seta, in: interlamellar seta, ss: sensillus. t: triangular structure.