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-SHORT COMMUNICATION-

First record of *Atelopsalis pacifica* (Acari: Halacaridae) from Turkey

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Abstract

The genus *Atelopsalis* is reported for the first time from Turkey. The material examined in the present study was collected at Kaş (36.157583° N, 29.630333° E) from 30 m depth on the West Coast of Antalya in Turkey. General information on the morphology of a protonymph of male *Atelopsalis pacifica* are described in this paper, with original illustrations.

Keywords:

Atelopsalis, Acari, Halacaridae, Mediterranean Sea, Antalya

Article history:

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Introduction

Halacarid mites are relatively small benthic organisms, the adult body length is less than 1 mm, and live in a wide variety of substrates., They are abundant in algal communities, colonies of hydrozoans, bryozoans, barnacles, mussels, and on and in sediments. They generally live submerged habitats, but a few species are adapted to survive in the splash zone. They present at all latitudes, from polar to tropical regions. Up to now, more than 1000 species have been recorded from all over the world in this family (Bartsch, 2006).

Atelopsalis Trouessart, 1896 is widely distributed and represented with 8 species from all oceans. Small-sized, idiosoma 171-248 µm long, with well-developed idiosomal plates (Pepato et al., 2004; Bartsch, 2006). Little is known about the halacarid species in Turkey.

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During first author's PhD thesis project on halacarids along the Western Mediterranean Sea Coast of Turkey, specimens belonging to the genus of *Atelopsalis* were collected. The genus *Atelopsalis* is reported for the first time in this study from Turkey.

Material and Methods

Three males and a single protonymph of *Atelopsalis pacifica* Bartsch, 1985 were found from Kaş (36.157583° N, 29.630333° E) Antalya, Turkey on soft type of sand bottom at 30 m depth on October 2015. The sediment samples were collected using SCUBA diving and mites were extracted by washing sand in a bowl of water and the suspensions decanted into a 100 µm sieve. The halacarids were sorted under a stereo microscope. The halacarids were cleared in lactic acid and mounted in glycerin jelly. Figures were drawn with aid of a camera lucida (Nikon SMZ 10). The specimens are kept in first author's personal collection (FD-HAL/20-22).

Result

Male: Dorsal and ventral plates are large, ornamented and foveate. The idiosomal measurements of specimens 200 µm long, 125 µm wide. AD 75 µm long, 63 µm wide posteriorly quadrate, bears 3 areolae (1 anterior and 2 posterior). Posterior 2 areolae long, 1-2 pore wide. OC narrow, longer than wide (65/15 µm), tapering posteriorly, each with 2 large corneae and light-brown eye spots. PD 113 µm long, 98 µm wide, having 2 longitudinal costae 1 rosette pore wide. All ventral plates separate. AE bears 2 pairs of areolae, 75 µm long, 110 µm wide, and there is a pair of epimeral vesicles on each plate. Each PE with 1 dorsal and 3 ventral setae. GA 100 µm long, 75 µm wide. GA with 5 pairs of pgs; 3 pair of sgs. GO 28 µm long, 23 µm wide. Spermatopositor large, extending well beyond the anterior margin of GO and anterior pgs (Figure 1 A-C). Gnathosoma short, with rosette pores ventrolaterally, almost as long as wide (37/35 µm). Palps 3 segmented. Basal pair of maxillary setae long. Total palp length is 16 µm (Figure 1 D, E). Leg I much wider than following legs. The surface of telofemur I is ornamented with a spiniform lamella. Chaetotaxy of leg I, 1, 2, 5, 4, 8, 6. Tibia I bears two short mid-segmental spines near its middle length. Telofemur I bears an anterior medial spine-like projection. Tarsus I with 3 dorsal and 3 ventral setae (Figure 1 F).

Protonymph: Idiosoma 155 µm long, 110 µm wide. AD 65 µm long, 55 µm wide. OC have 2 cornea, PD 102 µm long, 63 µm wide and 1 rosette pore wide. GA 50 µm long, 54 µm wide long, anteriorly truncate.

Discussion

The species of *Atelopsalis pacifica* was first time found at 15 m depth, in the shallow subtidal zone of Philippines (Mactan Island) by Bartsch (1985). After that, the species recorded from India (Bay of Bengal) by Sarma & (Chatterjee, 1990) and Western Australia (Rottnest Island and Esperance) by Bartsch (2007). The present study constitutes the fourth record of this species from the world seas and stand as the first report of the genus from the Turkish coastal waters.

Atelopsalis pacifica resembles *A. atlantica* Pepato & Tiago, 2004 in characters: similar ornamentation on AD, PD and AE, a spine like projection on telofemur-I. However, *A. atlantica* bears an areola on OC which is not on *A. pacifica*, and has costae on PD almost twice broader than that found on *A. pacifica*. The species were identified following the description of (Bartsch, 1985),

Sarma & (Chatterjee, 1990 and (Bartsch, 2007). The general morphology of our specimens agree with the studies.

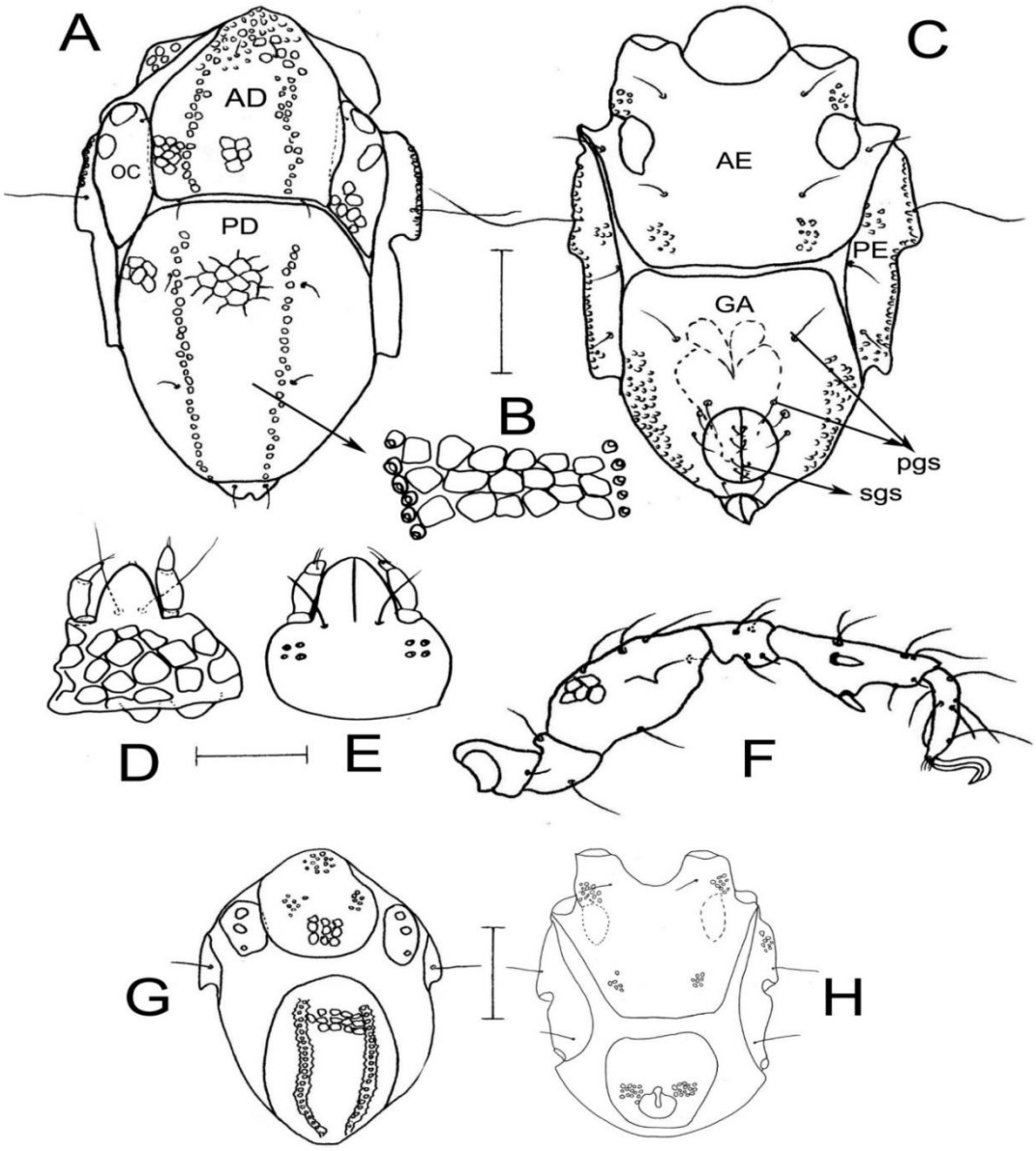

Figure 1. *Atelopsalis pacifica* (Bartsch, 1985), A-Idiosoma, dorsal, male; B-PD plate, detailed, male; C-Idiosoma, ventral, male; D-Gnathosoma, dorsal, male; E-Gnathosoma, ventral, male; F-Leg I, lateral (arrow showing spiniform lamella on telofemura I), male; G-Idiosoma, dorsal, protonymph; H-Idiosoma, ventral, protonymph. Scale bars: 50 μm. (AD, anterior dorsal plate; OC, ocular plate(s); PD, posterior dorsal plate; AE, anterior epimeral plate; PE, posterior epimeral plate; GA, genitoanal plate; pgs, perigenital setae; sgs, subgenital setae)

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