

A NEW SPECIES OF THE GENUS
HISTIOSTOMA KRAMER (ACARINA, ASTIGMATA, ANOETIDAE)

BY

ABD EL-TAWAB A. YOUSEF ¹, and SALAMA H. METWALLY ².

SUMMARY

A new species, *Histiostoma cataglyphi* is described.

This species is close to *Histiostoma humiditatis* (Vitzthum) and collected from the nest of *Cataglyphus bicolor*, at Zagazig ; Sharkia governorate.

RÉSUMÉ

Une nouvelle espèce, *Histiostoma cataglyphi* est décrite. Cette espèce est voisine d'*Histiostoma humiditatis* (Vitzthum) qui a été récoltée dans un nid de *Cataglyphus bicolor* à Zagazig dans la province de Sharkia.

INTRODUCTION.

HUGHES and JACKSON (1958) reviewing the family Anoetidae indicated that the trophic forms of the genus *Histiostoma* Kraner may be usually found associated with the decaying organic matter, some of them may be parasites such as *H. berghi* Jensen and *H. murchiei* Hughes and Jackson which destroy the eggs of the horse leech and the earth worm respectively.

The present species was collected during a survey of mites associated with *Cataglyphus bicolor*.

***Histiostoma cataglyphi* n. sp.**

Diagnosis :

This species is close to *Histiostoma humiditatis* (Vitzthum) but differs in having propodosomal dorsum with a distinctly reticulate anterior and a smooth posterior, hysterosoma with reticulate dorsum except a narrow posterior band ; bursa copulatrix elliptical and situated near the posterior body margin ; apodemes well developed ; posterior pair of ring-like structures, ovate ; seta ta 2 and ta 3 of leg absent while seta ta 1 clavate or broadly spatulate ; seta ta 1 of leg II spatulate ; cervical setae longer than inner propodosomatic, anterior and middle anal setae subequal.

Female : Body pear-shaped (Fig. 1 A) colour opaque white yellowish when alive. Gnathosoma conical and basally covered by the rostral shield, chelicerae sub-chelate attenuate, with

1. Plant protection Laboratory National Research Centre, Dokki, Cairo, Egypt.

2. Plant protection Department, Zagazig Faculty of Agriculture, Ain Shams University.

distal part toothed laterally, bearing a simple setae medially and with bulbous basal portion. Palp consists of two segments including a basal large segment, anteriorly recurved forming trowel shaped structure on the mesiad surface, and bearing three setae including the anterior, posterior and a short sub-oral setae ; the second segment minute, oval and bearing no setae. Propodosoma trapezoid, with a pentagonal, reticulated rostral shield, and a posterior trapezoid smooth part ; with four pairs of setae including a pair of simple rostrals, a pair of cervicals, a pair of inner propodosomatic setae and a pair of outer propodosomatic setae, which seem to be fid-like. Hysterosoma nearly elliptical, reticulate except a narrow area posterior to the bursa copulatrix, with eleven pairs of fid-like setae of which three dorsocentrals, five sublaterals, and three dorsolaterals ; a pair of circular oil glands exists between the second dorsocentrals and the fourth dorsosublaterals, bursa copulatrix elliptical and located in the mid distance between the second and third pairs of dorsocentrals. Dorsal hysterosomal setae subequal except the second dorsolaterals, which seems to be the longest and the third dorsocentrals, the shortest.

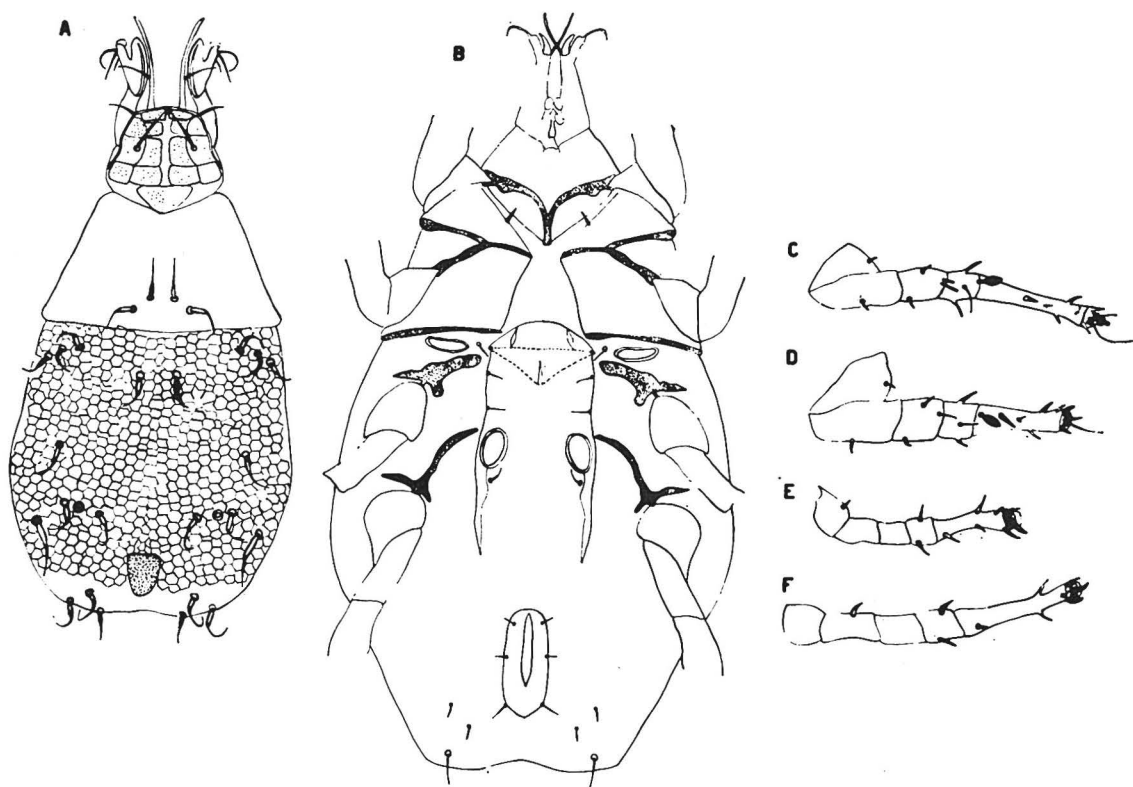


FIG. 1 : *Histiotoma cataglyphi* n. sp.
A, Dorsal aspect, B, Ventral aspect, C, D, E and F, leg I-IV respectively.

Ventrally (Fig. 1 B) apodemes I distinct, arched and extend posteriorly where it unite form obvious sternum ; apodemes II and III extend inwardly and unite together ; apodemes IV extend transversly and seem to be incomplete medially ; apodemes V stout, inwardly divergent into a long anterior part and a short posterior one ; apodemes VII extends anteriorly forming an arched area which nearly approach the posterior pair of ring-like structure, apodemes VI and

VIII lacking. Metapodosoma with a pair of anterior elongate ring-like structure located anterior to apodemes V; a pair of oval ringlike structure, anterior to the ventral metapodosomal setae. Chaetotaxal venter consists of a pair of coxal setae; four pairs of setae, including a pair of paragenitals, two pairs of coxal setae III, a pair of coxal setae IV, three pairs of anal setae including the anterior, the middle and posterior anals, the first two pairs usually minute and shorter than the third; two pairs of adanal setae and a pair of rather long setae. Genital opening ressembled by a faint transverse slit and located between the anterior pair of ring-like structures, while the anus longitudinal.

Legs : (Fig. 1, C, D, E and F) Segments of leg I-V bearing a number of spine-like setae which arranged according to the following formula : trochanter (1-1-1-0) ; femur (1-1-0-1) ; genu (2-2-0-0) ; tibia (2-2-2-2) ; tarsus (7-7-6-6). Genu I with a short and another long rod-like solenidion distally, while each of tarsi I and II bears a clavate sensory rod basally. Moreover a single, simple seta can be seen on each of tibia I, genu and tibia II. Tarsus I terminates in a weak claw, a short and a rather long setae ; tarsus II terminates in a weak claw and a rather long terminal setae, both of tarsus III and IV with weak spine-like claw.

Body length 320.0 μ , width 203.0 μ .

Holotype : female collected from the nest of *Cataglyphus bicolor*, at Zagazig. Sharkia governorate.

Paratype : Four females collected from the same habitat and locality of the holotype.

Allotype : No males were captured, and biological studies indicated that this species seemed to be thelytokous.

REFERENCES

- HUGHES (R. D.) and JACKSON (C. G.), 1958. — A Review of the Anoetidae (Acari). — The Virginia Jour. of Science, 9 (1) : 217.
-