

Description of *Hystripalpus chalkidicus* New Species from Olive Trees in Greece (Acari: Tenuipalpidae)¹

E.N. HATZINIKOLIS

*Acarology Laboratory, Agricultural Research Centre of Athens
Gr-151 23 Nea Philothei-Marousi, Greece*

ABSTRACT

The female and deutonyph of *Hystripalpus chalkidicus*, new species, are described and illustrated. The species was found on an olive tree in Chalkidiki, Greece.

Introduction

According to the classification of Mitrofanov (1973) the tenuipalpid species described here belongs to the genus *Hystripalpus*. It is the fourth new species of that genus found on olive trees in Greece (Hatzinikolis 1978, 1983, Hatzinikolis and Colovos in press). The terminology used in the taxonomic description is that of Baker (1949), Pritchard and Baker (1958) and Meyer (1979). All measurements are given in μm .

Description

Hystripalpus chalkidicus n. sp.

FEMALE

Dimensions and colour. Body length 342, including rostrum 370; width 174; colour red vive.

Dorsum (Fig. 1). Rostral shield smooth with deep, narrow notch, having one relatively long median and two short lateral lobes on each side. Several curved striae between first pair of propodosomal setae. Dorsal integument re-

ticulate; median reticulations on hysterosoma with elements or areolae bigger than those on propodosoma; lateral part of hysterosoma mostly smooth but with a few longitudinal striae here and there. Lanceolate - serrate body setae vary in length. Prosomal body setae 7, 12, and 12 in length. Dorsolateral hysterosomal setae 11, 12, 13, 10 and 8 in length. Humeral setae 11. Dorsocentral setae 14, 12 and 11 in length.

Venter (Fig. 2). Ventral prosoma with a few reticulate decorations posterior to coxae II. Metapodosoma with reticulations anterior to legs III. Area between legs IV and anterior margin of ventral shield with a well developed reticulation pattern. Ventral propodosomal setae 65. Anterior and posterior medioventral metapodosomal setae 24 and 62, respectively. Ventral and genital plates with one and two pairs of simple setae, respectively. Annal plate with two pairs of setae, of which one is lanceolate - serrate. Ventral and genital plates with a few curved transverse striations. Anal shield smooth.

Gnathosoma (Fig. 3). Venter with one pair of setae. Palpus (Fig. 4) four - segmented; second segment bears one seta, the third two setae and the fourth with a curved sensory rod 6 in length and two tactile setae. Rostrum reaches the proximal end of tibia I.

Legs. Inclusive counts of setae and solenidia

¹Received for publication May 30, 1985.

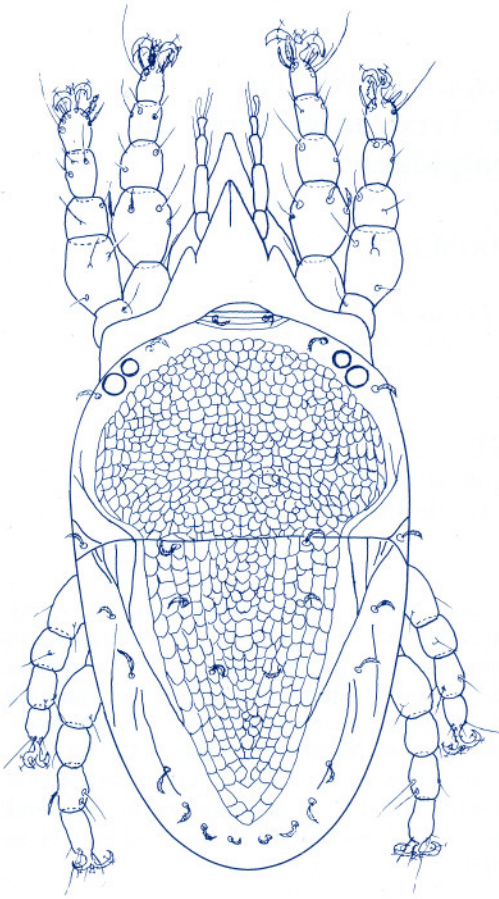


FIG. 1. *Hystripalpus chalkidicus*, n. sp., holotype, female, dorsal aspect.

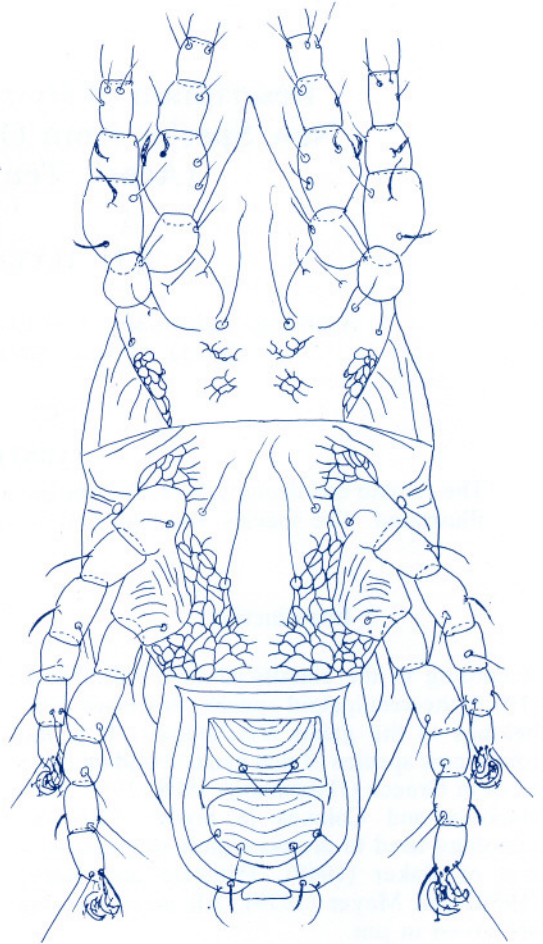


FIG. 2. *Hystripalpus chalkidicus*, n. sp., holotype, female, ventral aspect.

(in parentheses) on the podomeres of legs I-II are: tarsi 7(1)-7(1)-5-5; tibiae 5-5-3-3; genua 3-3-1-1; femora 4-3-2-1; trochanters 1-1-1-0; coxae 2-2-1-1. Tarsi I and II (Figs 5 and 6) each with one rod-like solenidion dorsodistally; solenidia measure 5 and 6, respectively. Femur I (Fig. 7) with inner distal seta less lanceolate and shorter ($\frac{3}{4}$ in length) than inner dorsal seta. Femur II (Fig. 8) with inner and dorsal setae lanceolate measuring 13 and 18, respectively.

NYMPHA (Fig. 9)

Body length, including rostrum 290, width 132. The number, arrangement and shape of the dorsal body setae are similar to those of the female. Prosomal setae 9, 25 and 36 in length.

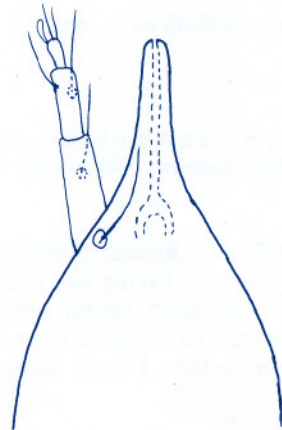


FIG. 3. *Hystripalpus chalkidicus*, n. sp., holotype, female, gnathosoma.



FIG. 4. *Hystripalpus chalkidicus*, n. sp., holotype, female, palpus.



FIG. 6. *Hystripalpus chalkidicus*, n. sp., holotype, female, tarsus II.

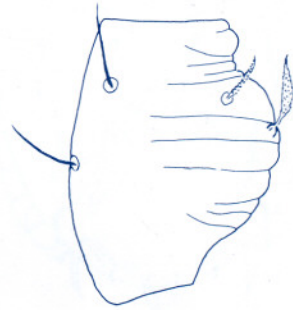


FIG. 7. *Hystripalpus chalkidicus*, n. sp., holotype, female, femur I.

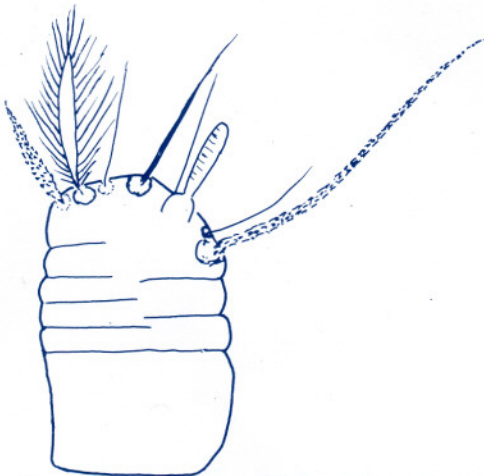


FIG. 5. *Hystripalpus chalkidicus*, n. sp., holotype, female, tarsus I.

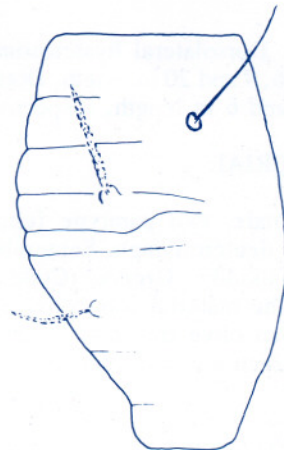


FIG. 8. *Hystripalpus chalkidicus*, n. sp., holotype, female, femur II.

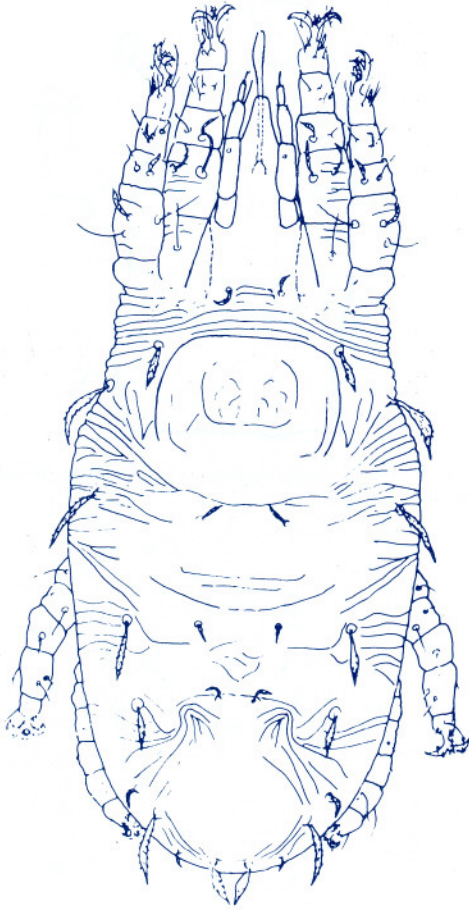


FIG. 9. *Hystripalpus chalkidicus*, n. sp., deuteronymph, dorsal aspect.

Humeral 38. Dorsolateral hysterosomal setae 32, 30, 14, 36, 9 and 20 in length. Dorsocentral setae 10, 6 and 6 in length, respectively.

TYPE MATERIAL

Holotype female, two paratype females and one paratype deuteronymph, September 1966, Ormylia, Chalkidiki, Greece (Code Number 189/1966). The material was collected by the author from an olive tree and is mounted on four slides which are deposited in the author's collection.

RELATION TO HOST

The mites were found on young shoots.

ETYMOLOGY

The name of this new species is derived from Chalkidiki, a region of Macedonia (Greece) where it was discovered.

Remarks

The new species may be distinguished from other *Hystripalpus* mites, found on olive trees, by the dorsal and ventral reticulate pattern and the number of leg setae. There are also differences in the length of the dorsal setae of the nympha.

References

- Baker, E.W. 1949. The genus *Brevipalpus* (Acarina: Pseudoleptidae). Amer. Midl. Nat. 42: 350-402.
- Hatzinikolis, E.N. 1978. A new species of genus *Hystripalpus* on *Olea europaea* (Acarina: Tenuipalpidae). Agricultural Research (Greece, Ministry of Agriculture) 2: 46-52.
- Hatzinikolis, E.N. 1983. A new species of *Hystripalpus* (Acari: Tenuipalpidae). Entomologia Hellenica 1: 71-75.
- Meyer, M.K.P. 1979. A revision of the Tenuipalpidae (Acari) of Africa. Entomology Dep. Agric. techn. Serv. Repub. S. Afr. 50: 1-135.
- Mitrofanov, V.I. 1973. Revision of the subfamily Brevipalpinae (Trombidiformes, Tenuipalpidae). Zool. J. Akad. Nauk. S.S.R. 52: 507-512.
- Pritchard, A.E. and E.W. Baker. 1958. The false spider mites (Acarina: Tenuipalpidae). Univ. Calif. Publ. Ent. 14: 175-274.

KEY WORDS: Acari, Tenuipalpidae, *Brevipalpus*, *Hystripalpus*, *Hystripalpus chalkidicus* Hatzinikolis, Olive tree

**Περιγραφή του Νέου Είδους *Hystripalpus chalkidicus*
(Acari-Tenuipalpidae)**

E.N. ΧΑΤΖΗΝΙΚΟΛΗΣ

*Εργαστήριο Ακαρολογίας
Κέντρο Γεωργικής Ερεύνης Αθηνών
Υπουργείο Γεωργίας*

ΠΕΡΙΛΗΨΗ

Έχει περιγραφεί και σχεδιαστεί το θηλυκό και η δευτερονύμφη του νέου είδους *Hystripalpus chalkidicus*. Το νέο είδος βρέθηκε στις 26 Σεπτέμβρη 1966, πάνω σε νεαρούς βλαστούς ελιάς, στην αγροτική περιοχή Ορμύλια Χαλκιδικής.