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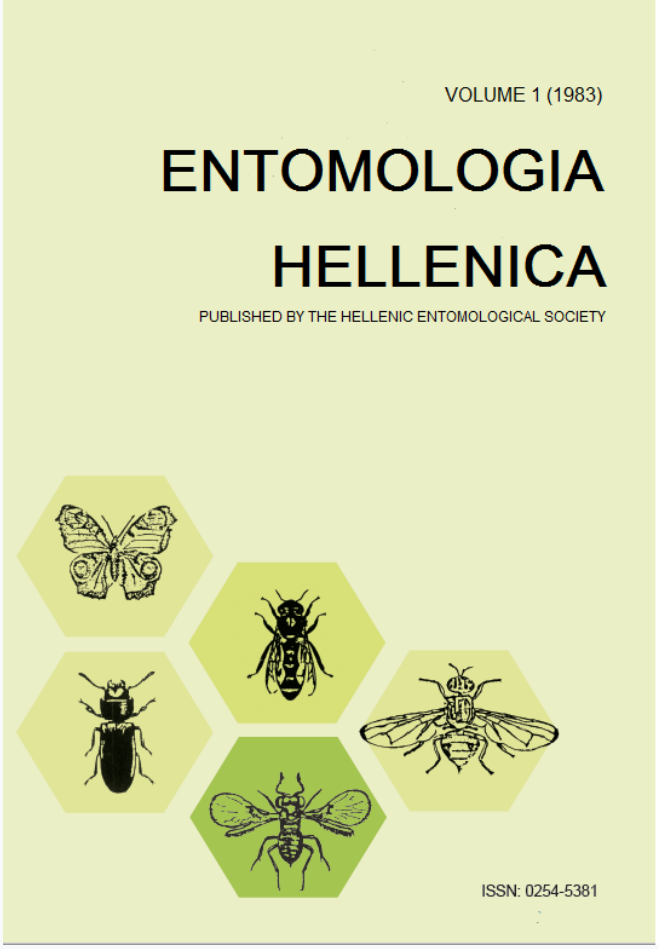

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A New Species of *Hystripalpus* (Acari: Tenuipalpidae)[1]

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ABSTRACT

The female, male, deuteronymph and larva of *Hystripalpus macedonicus*, new species, are described and illustrated. This mite was found on tender shoots and leaves of the olive-tree in Macedonia, Greece. Some information on the distribution and the feeding habits of the genus *Hystripalpus* on olive-tree is also given.

Introduction

Mitrofanov (1973) in his revision of Brevipalpinae classified in four genera the species previously included in the genus of *Brevipalpus* Donnadieu 1875 as follows: 1) *Brevipalpus* Donnadieu 1875, 2) *Hystripalpus* Mitrofanov 1973, 3) *Brachypalpus* Mitrofanov 1973 and 4) *Tauripalpus* Livschitz and Mitrofanov 1973. According to this classification, the Tenuipalpidae species described here belong to the genus *Hystripalpus* and it is the third new species of that genus found on olive tree in Greece (Hatzinikolis and Colovos 1981). The terminology of Baker (1949) and Pritchard and Baker (1958) is used for the taxonomic description. All measurements are given in μm.

Description

Hystripalpus macedonicus n. sp.

The female and male of the new species are distinguished from other *Hystripalpus* mites found on olive trees [*H. oleae* (Baker 1949), *H. olearius* (Sayed 1950), *H. olivicola* Pegazzano and Castagnoli 1972, *H. atalantae* Hatzinikolis 1978, *H. rotai* Castagnoli and Pegazzano 1979, *H. hellenicus* Hatzinikolis and Colovos 1981] by the reticulate pattern (dorsal and ventral) and the number of leg setae. There are also differences in the length of some dorsal setae in the nymph.

FEMALE

Dorsum (Fig. 1). Body length 323, including rostrum 369, width 178, colour red orange. Rostrum reaching end of genu I. Terminal segment of palpus with a curved sensory rod 7.5 in length and with two tactile setae (Fig. 1a). Rostral shield with four curved striae. Prosoma and hysterosoma with large reticulate decoration centraly and without striae or decoration laterally. Opisthosoma with four parallel curved striae. Idiosomal setae lanceolate (Fig. 1c). Prosomal setae 11, 17 and 19 in length. Dorsolateral hysterosomal setae 16.5, 15, 16, 14, 14 and 14 in length. Humeral setae 16. Notocentral setae 15, 14 and 14 in length.

Venter (Fig. 2). Prosoma with a few striae and reticulate decoration posteriorly of coxae II. Hysterosoma with reticulate decoration laterally between the ventral separation and legs III. Ventral plate partially decorated; genital plate smooth.

Legs. Tarsus I and II with a rodlike solenidion (Fig. 1b) 9 and 8 in length, respectively, with strongly developed claws. The arrangement of legs' setae as follows: Tarsi 9-9-5-5,

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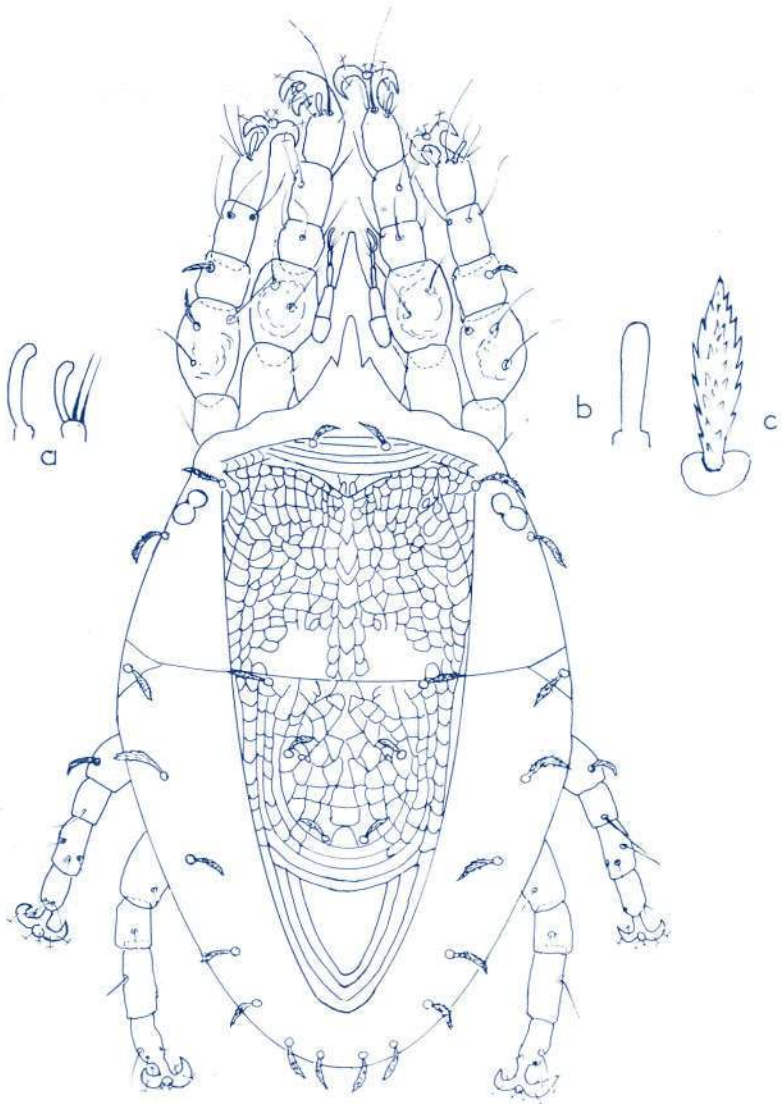

FIG. 1. *Hystripalpus macedonicus*, n. sp., holotype, female, dorsal aspect; (a) solenidion and tactile setae of palpus; (b) solenidion of tarsi I and II; (c) idiosomal seta.

tibiae 5-3-3-1, genua 3-1-1-1, femora 3-3-2-1, trochanters 1-1-1-0 and coxae 2-2-1-1.

MALE

D o r s u m (Fig. 3). Body length 292, including rostrum 328, width 139, colour red orange. Rostrum reaching second half of genu I. Palpus with sensory rod curved 7.9 in length. Rostral shield smooth. Prosoma and hysterosoma with reticulate decoration. Opisthosoma with curved striae decoration. Idiosomal setae lanceolate. Prosomal setae 13, 26 and 26 in length. Hymerales 26. Dorsolateral hysterosomal setae 24, 24, 13, 18, 12 and 12 in length. Dorsocentral setae 17, 15 and 11 in length.

L e g s . Tarsus I with a rodlike solenidion

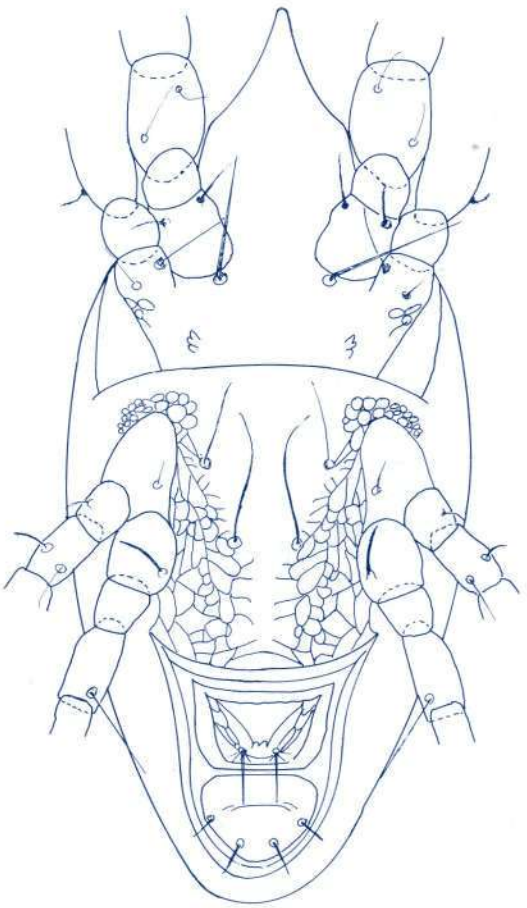

FIG. 2. *Hystripalpus macedonicus*, n. sp., holotype, female, ventral aspect.

measuring 9.8, tarsus II with two solenidia (Fig. 3a) measuring 10 and 6, respectively. The arrangement of the setae similar to that of the female, except of tarsus II which has an extra solenidion.

DEUTERONYMPH

Dorsum (Fig. 4). Body length 231, width 128. Prosomal setae 10, 22 and 30 in length. Humeral 28. Dorsolateral hysterosomal setae 25, 12, 7.5, 35, 8 and 30 in length. Dorsocentral setae 8,6 and 5.2 in length.

LARVA

Dorsum (Fig. 5). Body length 181, width 97. Prosomal setae 8,12 and 25 in length. Humeral 24. Length of the first four dorsolateral hysterosomal setae 12, 8, 9 and 16 respectively, while the fifth one is filiform and the sixth is 16. Dorsocentral setae 9,6 and 5 in length.

TYPE MATERIAL

Female holotype and male allotype with a number of females, males, nymphs and a larva paratypes are deposited in the author's collection on 3 slide mounts.

TYPE LOCALITY

October 3, 1966, Vrasna, Thessaloniki, Macedonia, Greece.

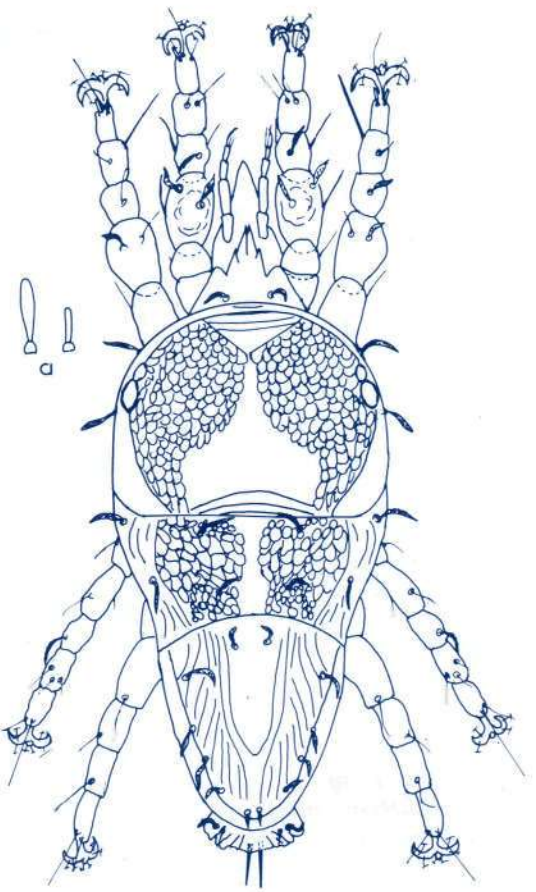

FIG. 3. *Hystripalpus macedonicus*, n. sp., male, dorsal aspect; (a) solenidia of tarsi II.

FIG. 4. *Hystripalpus macedonicus*, n. sp., deuteronymph, dorsal aspect.

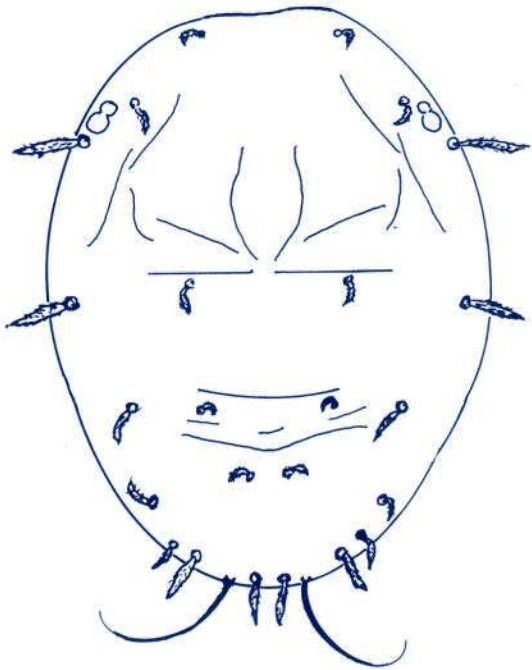

FIG. 5. *Hystripalpus macedonicus*, n. sp., larva, dorsal aspect.

ETYMOLOGY

This new species is named after Macedonia a major region of Greece where it was discovered.

Remarks

Apart the n. sp. *H. macedonicus* six other species of *Hystripalpus* have been recorded on olive-trees in the Mediterranean area (Hatzinikolis and Colovos 1981). The distribution of those species has as follows: 1) *H. oleae* in Greece, Marocco and Portugal, 2) *H. olearius* in Greece, Italy, Libya, Russia and Turkey, 3) *H. olivicola* in Greece, Italy and Portugal, 4) *H. rotai* in Italy, 5) *H. atalantae* in Greece and 6) *H. helienicus* in Greece. From the species recorded from Greece: *H. atalantae* (Hatzinikolis 1978), *H. hellenicus* (Hatzinikolis and Colovos 1981) and *H. macedonicus* were collected only from coastal areas, while the others were also found in many other areas of the country.

The exact role and the feeding habits of the Tenuipalpid mites found on olive-trees is not known. The only work on the subject is that of Pegazzano and Castagnoli (1972) who studied the life-cycle of *H. olivicola* in Italy. Those scientists believe that *Hystripalpus* species of olive-trees are predominantly bark-living. From our preliminary observations it is apparent however, that the Greek Tenuipalpid species of olive-trees are distributed in all green parts of the tree, including the fruits.

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KEY WORDS: *Brevipalpus*, *Hystripalpus*, Tenuipalpidae, Olive mites, *Hystripalpus macedonicus* Hatz.

Ένα Νέο Είδος στο γένος *Hystripalpus* (Acarina: Tenuipalpidae)

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ΠΕΡΙΛΗΨΗ

Έχει περιγραφεί και σχεδιαστεί το θηλυκό, αρσενικό,δευτερονύμφη και προνύμφη, του νέου είδους *Hystripalpus macedonicus*.Το νέο είδος βρέθηκε στις 3 Οκτώβρη 1966, πάνω σε νεαρούς βλαστους και φύλλα ελιάς, στην αγροτική περιοχή του χωριού Βρασνά της Θεσσαλονίκης,Μακεδονίας και του δόθηκε το όνομα της περιοχής όπου βρέθηκε.

Το *H. macedonicus* μετά τα *H. atalantae* και *H. hellenicus* είναι το τρίτο νέο είδος του γένους, που έχει βρεθεί πάνω στα ελαιόδεντρα στη χώρα μας.

Επτά είδη των *Hystripalpus* έχουν αναφερθεί πάνω στα ελαιόδενδρα αποκλειστικά στις περιοχές της Μεσογείου. Η εξάπλωση αυτών είναι η ακόλουθη: 1) *H. oleae* στην Ελλάδα, Μαρόκο και Πορτογαλία, 2) *H. olearius* στην Ελλάδα, Ιταλία, Λιβύη, Ρωσία και Τουρκία, 3) *H. olivicola* στην Ελλάδα, Ιταλία και Πορτογαλία, 4) *H. rotai* στην Ιταλία, 5) *H. atalantae* στην Ελλάδα, 6) *H. helenicus* στην Ελλάδα και 7) *H. macedonicus* στην Ελλάδα.