

## Description of *Brevipalpus spaticus* spec. nov. from Olive Trees in Greece (Acari: Tenuipalpidae)<sup>1</sup>

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### ABSTRACT

The female and deutonymph of *Brevipalpus spaticus* spec. nov. (Acari: Tenuipalpidae) are described and illustrated.

### Introduction

A total of 13 tenuipalpid species have been recorded from various parts of the world collected on olive trees. Twelve of these species have been found in the Mediterranean region (Hatzinikolis 1986), of which four species, namely *B. atalantae* (Hatzinikolis, 1978), *B. macedonicus* (Hatzinikolis, 1983), *B. chalcidicus* (Hatzinikolis, 1988), *B. hellenicus* (Hatzinikolis and Koloivos, 1985), were first described from Greece. *B. spaticus* (Acari: Tenuipalpidae) is the fifth new species of *Brevipalpus* from olives trees in that country.

### Description

*Brevipalpus spaticus* spec. nov. (All measurements are given in micrometers ( $\mu\text{m}$ )).

#### FEMALE

Dorsum (Fig. 1). Body length 290, including rostrum 364; width 158. Rostral shield broad, reaching to middle of trochanter I, deeply notched medially with one long median and three short lateral lobes on each side. Propodosoma with reticulations only mediolaterally. Hysterosoma with reticulations forming two U-shaped figures, first one located anteriorly to third pair of

dorsocentral setae. Body setae lanceolate. Propodosomal body setae measure 12, 12 and 20 respectively. Dorsocentral setae measure 8, 5 and 4 respectively. Humeral setae 16 long. Dorsolateral setae measure 8, 8, 8, 7, 5 and 4 respectively.

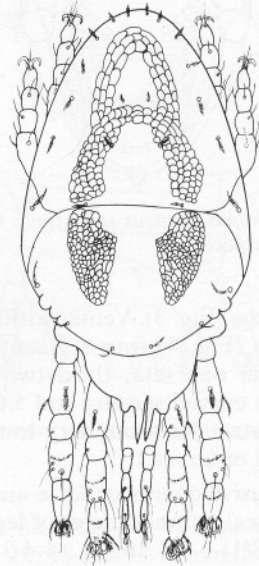


FIG. 1. *Brevipalpus spaticus* spec. nov., holotype, female, dorsal aspect.

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Venter (Fig. 2). Ventral propodosoma smooth, slightly lineated along outer margin of coxae II. Ventral propodosomal setae 59 long. Metapodosoma with reticulations anterior to legs III. Area between coxae IV and anterior margin of ventral shield with few reticulations. Anterior and posterior medioventral metapodosomal setae measure 28 and 56, respectively. Ventral, genital and anal plates smooth. Ventral and genital plates with one and two pairs of simple setae, respectively. Anal plate with two pairs of setae, of which the longer pair is lanceolate serrate while the other one is simple.

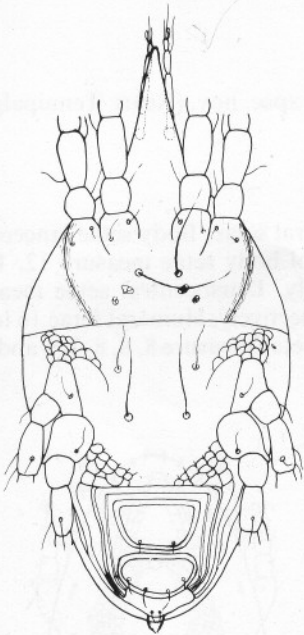


FIG. 2. *Brevipalpus spaticus* spec. nov., holotype, female, ventral aspect.

Gnathosoma (Fig. 3). Venter with one pair of setae. Palpus (Fig. 4) four-segmented; second segment bears one seta, third two setae and fourth with a curved sensory rod 5.6 long, and two tactile setae. Rostrum very long reaching proximal end of tarsus I.

Legs. Inclusive counts of setae and solenidia (in parentheses) on podomeres of legs I-IV are: Tarsi 8(1)-8(1)-5-5; tibiae 4-4-3-3; genua 3-3-1-1; femora 4-3-2-2; trochanters 1-1-1-0; coxae 2-2-1-1. Tarsi I (Fig. 5) and II each with one rod-like solenidion dorsodistally; solenidia

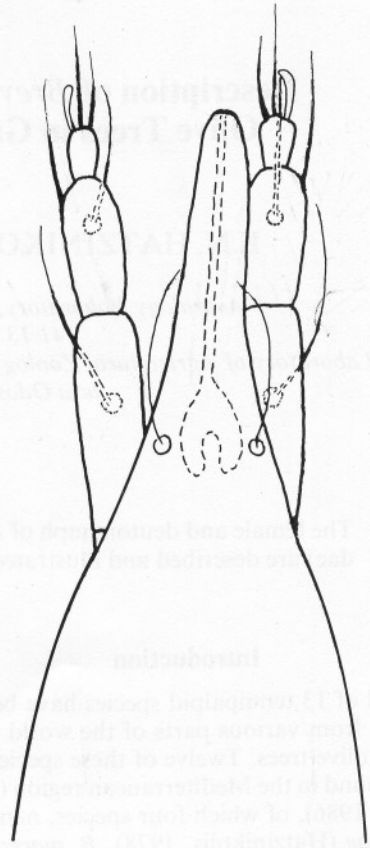


FIG. 3. *Brevipalpus spaticus* spec. nov., holotype, female, gnathosoma.

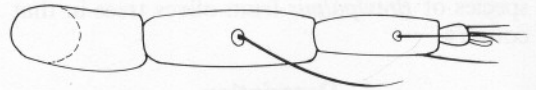


FIG. 4. *Brevipalpus spaticus* spec. nov., holotype, female, palpus.

measure 7 and 6 respectively. Femur I (Fig. 6) and II (Fig. 7) with distal setae narrowly lanceolate and shorter ( $2/3$  and  $5/6$  in length, respectively) than dorsal setae.

DEUTONYMPH (Fig. 8).

Body length, including rostrum 239, width 118. Hysterosomal setae similar to those of female. Propodosomal, humeral, second and third pairs of dorsolateral setae less lanceolate-serrate, than dorsocentrals and 1st, 5th and 6th dorsolaterals. Fourth pair of dorsolateral setae very large. Propodosomal setae 9, 13 and 44 in len-

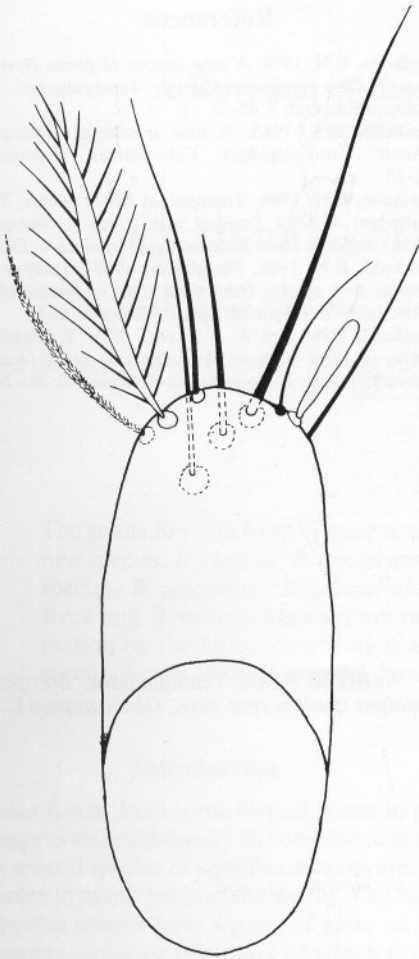


FIG. 5. *Brevipalpus spaticus* spec. nov., holotype, female, tarsus I.

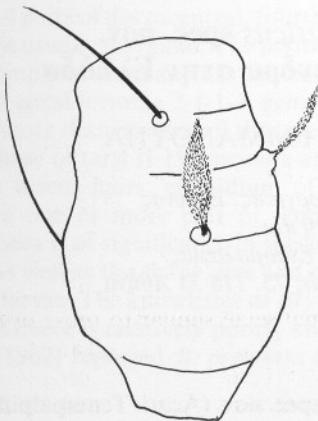


FIG. 6. *Brevipalpus spaticus* spec. nov., holotype, female, femur I.

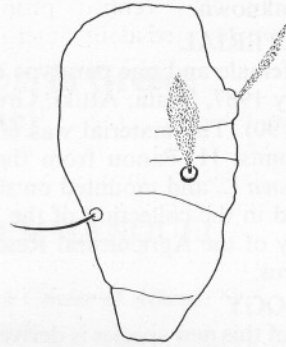


FIG. 7. *Brevipalpus spaticus* spec. nov., holotype, female, femur II.

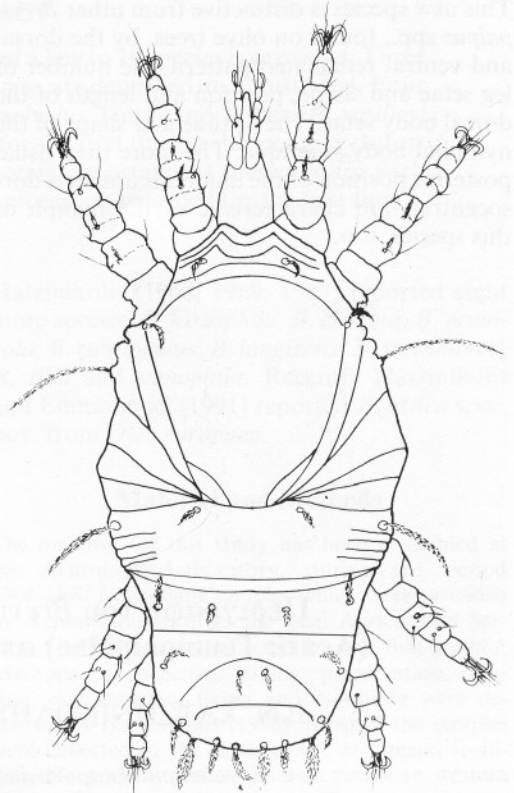


FIG. 8. *Brevipalpus spaticus* spec. nov., deutonymph, dorsal aspect.

gth. Humeral 32. Dorsolateral hysterosomal setae 12, 9, 10, 10, 18 and 12 in length. Dorsocentral setae 8, 4 and 5 in length. The outline and shape of the body is unique in that it is angulate. The striation pattern is also characteristic.

MALE: Unknown.

#### TYPE MATERIAL

Holotype female and one paratype deutonymph, 22 May 1987, Spata, Attiki, Greece (Code Number 3/90). The material was collected by the agronomist H. Panou from the trunk of *Olea europaea* L. and mounted on slide, which is deposited in the collection of the Acarology Laboratory of the Agricultural Research Centre of Athens.

#### ETYMOLOGY

The name of this new species is derived from the region Spata in Attiki.

#### Remarks

This new species is distinctive from other *Brevipalpus* spp., found on olive trees, by the dorsal and ventral reticulated pattern, the number of leg setae and shape, position and length of the dorsal body setae. The outline and shape of the nymphal body is unique. The more than usual posterior position of the humerals and first dorso-centrals are characteristic of the nymph of this species, too.

#### References

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KEY WORDS: Acari, Tenuipalpidae, *Brevipalpus*, *Brevipalpus spaticus* spec. nov., *Olea europaea* L.

### Περιγραφή του *Brevipalpus spaticus* spec. nov. (Acarina: Tenuipalpidae) από ελαιόδενδρα στην Ελλάδα

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#### ΠΕΡΙΛΗΨΗ

Το θηλυκό και η δευτερονύμφη του *Brevipalpus spaticus* spec. nov. (Acarina: Tenuipalpidae) περιγράφονται και σχεδιάζονται. Το είδος τούτο βρέθηκε σε κορμό ελαιοδένδρων στην περιοχή Σπάτων Αττικής.