

A new species of Bryobiinae (Acari: Tetranychidae) from *Thymus capitatus* (L.) in Greece

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(With 11 figures)

Abstract

The female of *Bryobia kassioticus* sp. n. (Acari, Tetranychidae), collected from *Thymus capitatus* (L.) in Greece, is described and illustrated.

Introduction

During studies undertaken by the authors on Greek Bryobiinae, several species were found to be new to science (Hatzinikolis & Emmanouel 1990, 1991, 1993, 1996a, b; Hatzinikolis & Panou 1996a, b, c, 1997). The present paper deals with *Bryobia kassioticus* sp. n., collected from *Thymus capitatus* (L.) at Kassos island, Co. Dodekanissa, Greece.

Materials and Methods

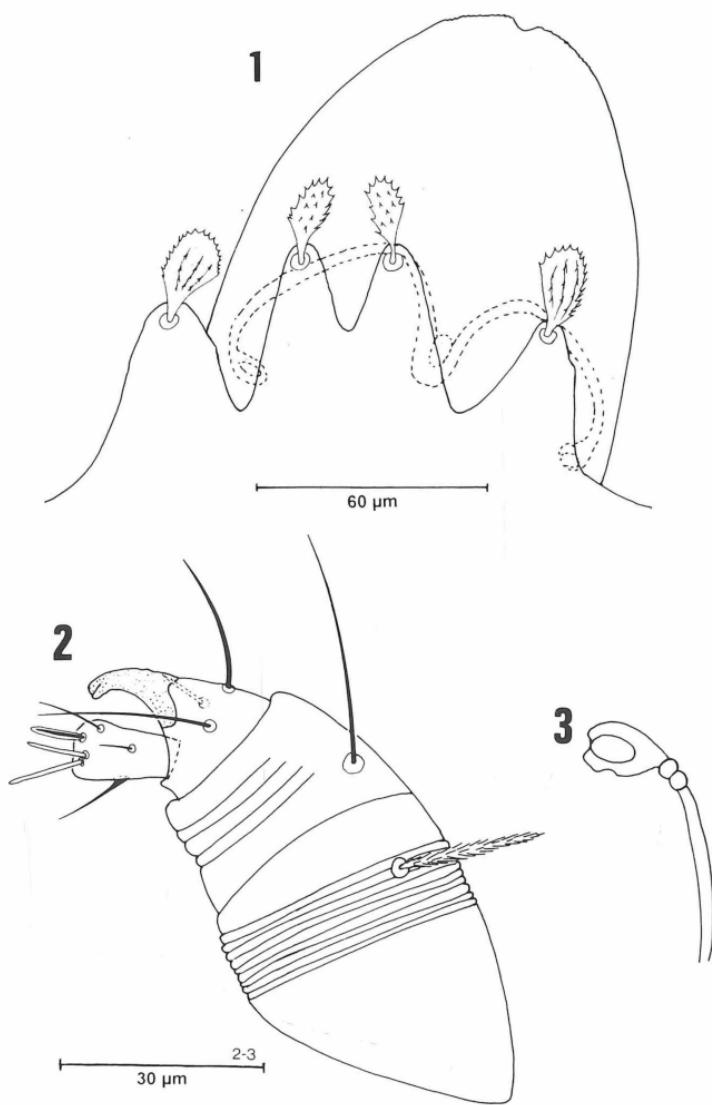
Methods of collecting, mounting etc. are described by Hatzinikolis (1982). For the description of the new species the terminology of Grandjean (1934, 1939) and Oudemans (1928) is followed. All measurements are given in micrometers (μm).

Description of new species

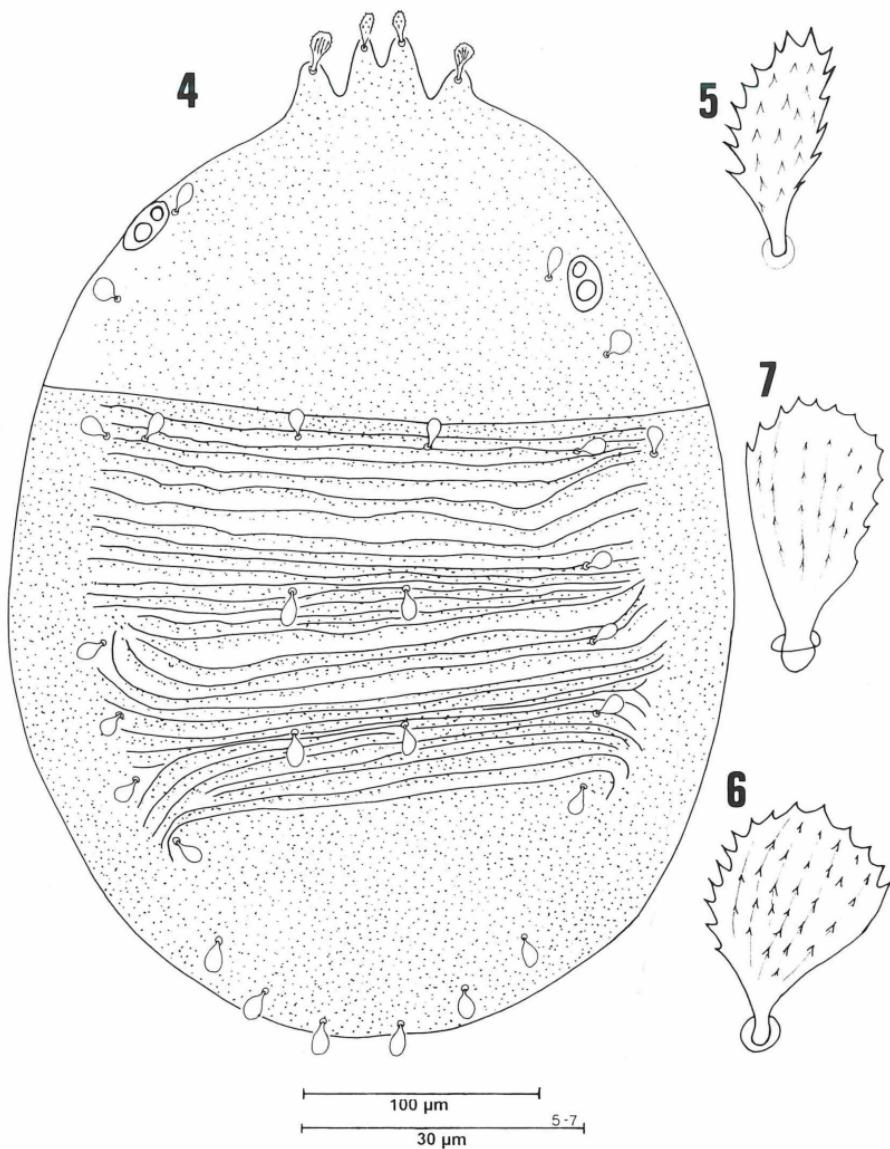
Bryobia kassioticus sp. n.

FEMALE (Figs 1-11) - Dimensions of holotype (measurement in parenthesis of the paratype): length of body (including gnathosoma) 787 (762), length (excluding gnathosoma) 723 (715), width 577(548). Length of legs (femur, genu, tibia, tarsus): I 647 (642); femur 257 (250), genu 92 (87), tibia 196 (191), tarsus 196 (189); II 300 (289); III 302 (289); IV 379 (370). The shape of the body is wide ellipsoid.

Gnathosoma - Stylophore fine undulate distally and notched anteriorly (Fig. 1), 178 long and 105 wide; palpal claw bidentate (Fig. 2); palptarsus not longer than the claw 15 long, slender at the base (10) and thick at the top (12), with 3 normal setae,



Figs 1-3. *Bryobia kassioticus* sp. n. (female): 1 - propodosomal lobes, 2 - palp, 3 - peritreme ending.



Figs 4-7. *Bryobia kassioticus* sp. n. (female): 4 - dorsum, 5 - first propodosomal seta (v_1), 6 - second propodosomal seta (v_2), 7 - dorsal body seta.

a pad-like solenidion 10 long and 3 eupathidia 13, 11 and 8 in length; seta on palp-femur slender, pilose, elongate (tapering distally); peritreme simple anastomosing, 15 long and 14 wide, as depicted in Fig. 3.

D o r s u m (Fig. 4) - Prodorsal margins without anterior angulations; propodosomal lobes strongly developed and somewhat cone-shaped; incisions between propodosomal lobes less or more triangular with deep incisions (Fig. 1); the horizontal line joining the tips of the setae on the exterior lobes extending until the basis of the setae of the interior lobes; first pair of propodosomal setae (v_1) spatulate, serrate, 18 long and 9 wide (Fig. 5); second pair of propodosomal setae (v_2) palmate, serrate, 22 long and 16 wide (Fig. 6); rest of dorsal setae more or less spatulate, serrate (Fig. 7), 23-26 long and 13-17 wide, except sc_2 which are palmate, 20(19) long and 18(16) wide. The respective distance between the bases of dorsocentral setae c_1-d_1 , and d_1-e_1 is 115 (110) and 94(90), while between c_1-c_1 , d_1-d_1 , and e_1-e_1 is 89(85), 67(66) and 60(60). Dorsal integument of propodosoma granulate; that of hysterosoma granulate with irregularly transverse striae up to e_3 setae (Fig. 4).

L e g s - Leg setae and solenidia (in parentheses) as follows: coxae 2-1-1-1; trochanters 1-1-1-1; femora 23-11-5-5; genua 8-5-6-6; tibiae 15(1)-9-9-9; tarsi 21(3)+2duplic.-11(1)+1duplic.-11+1duplic.-11(1). Femur I with two long setae; associated tactile setae on leg III (Fig. 8) about 5/6 of solenidia, 26 and 31 respectively; not associated tactile setae on leg IV (Fig. 9) about subequal in length with the solenidion (26); true claws slender, uncinate, bearing the I leg (Fig. 10) with one pair and the II, III and IV with two pairs of tenant hairs (Fig. 11, 8, 9) respectively; empodium I pad-like (Fig. 10), 1/5 the length of true claws, with one pair of tenant hairs; empodia II and III pad-like, narrowed distally, about half the length of true claws, each provided with 3 and 4 pairs of tenant hairs (Figs 11, 8) respectively; empodium IV also pad-like, narrowed distally, about 2/3 the length of true claws with 6 pairs of tenant hairs (Fig. 9).

MALE AND IMMATURE STAGES - Unknown.

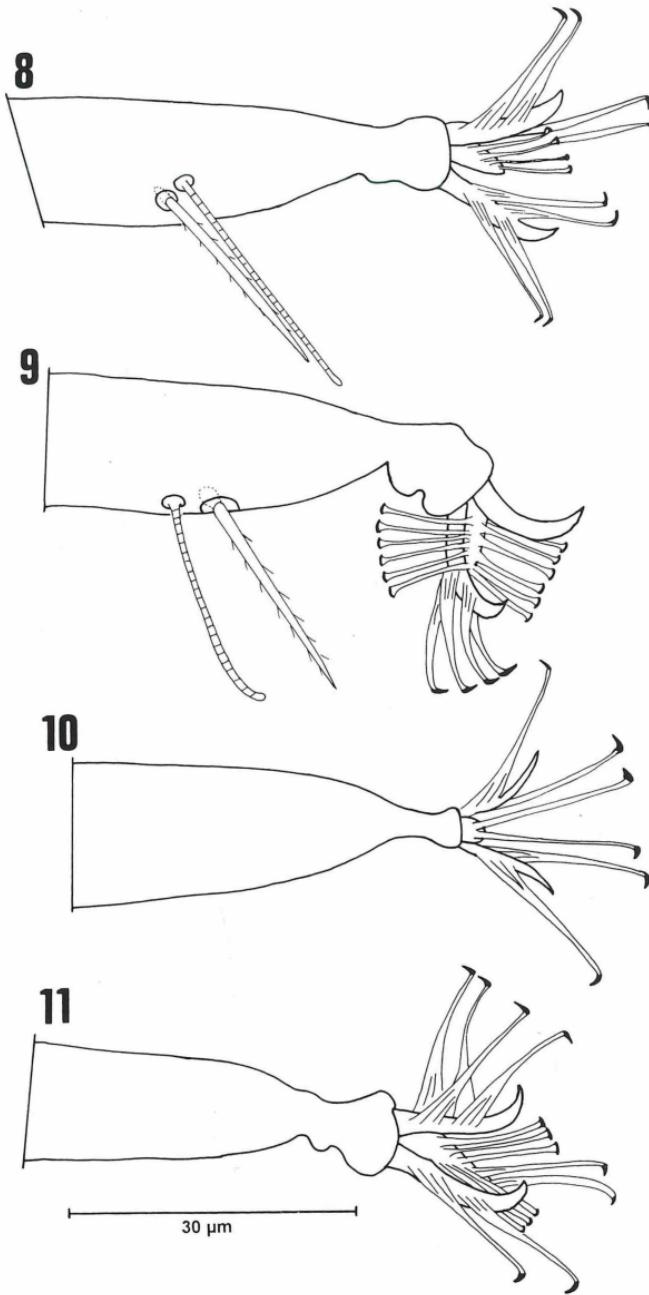
TYPE MATERIAL - Holotype female, 16 March 1994, island Kassos, Co. Dodekanissa, Greece (Code No 3/94), deposited in the Collection of the Acarology Laboratory of the Agricultural Research Centre of Athens, Greece. The material was collected by Dr. N. Emmanuel, from *Thymus capitatus* (L.). A female paratype with the aforementioned data is deposited in the Zoological Museum Hamburg, Germany (Reg. No. A 37/97).

ETYMOLOGY - The specific name of this new species derives from the island Kassos, Co. Dodekanissa, Greece, where this species was found.

DIAGNOSIS - *Bryobia kassioticus* sp. n. is closely related to *B. rubriocolus* (Scheuten, 1857) (after Mathys 1957 and Meyer 1974), in having similar propodosomal lobes, dorsal body setae, prodorsal margin and prodorsal projection with tooth-like structures. The main differences are given in Table 1.

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Figs 8-11. *Bryobia kassioticus* sp. n. (female): 8 - extremity of tarsus III with duplex seta and apotele, 9 - extremity of tarsus IV with duplex seta and apotele, 10 - extremity of tarsus I and apotele, 11 - extremity of tarsus II and apotele.

Table 1

<i>Bryobia rubrioculus</i> (Scheutten, 1957)	<i>Bryobia kassioticus</i> sp. n.
1. Propodosoma striated	1. Propodosoma not striated
2. Hysterosoma not striated	2. Hysterosoma not striated behind laterals c_3
3. Inner and outer lobes with one or more spine-like structures	3. Only outer lobes with one blunt tooth-like structure
4. Peritreme ending with more bulbs elongate distally	4. Peritreme ending simply with one pearl-like lobe distally
5. Peritreme ending directed exteriorly of the body	5. Peritreme ending directed interiorly of the body
6. The number of setae on tarsi I: 17-20	6. The number of setae on tarsi I: 23
7. One pair of tenent hairs on each claw II, III, IV	7. Two pairs of tenent hairs on each claw II, III, IV
8. Horizontal line joining the tips of the setae on the exterior lobes passes beyond the middle of the setae of the interior lobes	8. Horizontal line joining the tips of the setae on the exterior lobes extending until the basis of the setae of the interior lobes
9. Empodial pads on tarsi II, III and IV are nearly as long as the claws	9. Empodial pads on tarsi II and III - IV are half and two third of the length of the claws

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