Aegyptobia villiensis, a New Species of the Family Tenuipalpidae (Acari: Prostigmata) from Greece

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ABSTRACT

The female of Aegyptobia villiensis, new species, is described and illustrated. It was collected from twigs of Pyrus amygdaliformis at Villia Attiki, Greece.

Introduction

During investigations conducted by the junior author on bark inhabiting microarthropod fauna in Attiki several new species were found. One of these was a species belonging to the tenuipalpid genus Aegyptobia and is described and illustrated below.

Materials and Methods

During the period October 1987 to June 1988 when the above mentioned survey was conducted, a total of 288 samples of bark and twigs of various trees were collected. The microarthropods on these samples were extracted by means of a Berlese-Tullgren apparatus and studied taxonomically. The terminology used in the description of the new species of Aegyptobia is after Baker (1949), Pritchard and Baker (1958) and Meyer (1979). All measurements are given in microns.

Description

Aegyptobia villiensis spec. nov.

FEMALE

Body elongated-elliptical, 222 in length (276 including rostrum). Width at level of humerals 129.

Gnathosoma (Fig. 1). Rostrum prominent, broad basally, reaching middle of tarsus I, with one pair of setae (11 in length) ventrally. Second palpal segment with one lanceolate seta, 8 in length; fourth segment with two nude setae

FIG. 1. Aegyptobia villiensis spec. nov., holotype, female, gnathosoma.
(12 and 20 in length) and fifth segment with one eupathidium (8 in length) and two sensory setae (12 and 10 in length) distally.

**Dorsum (Fig. 2)**. Rostral shield smooth, small, slightly bilobed anteriorly. Dorsal integument of propodosoma smooth but mediodorsal area outlined by three oval to subrectangular figures. Hysterosoma with two large and well discernible pores and with a characteristic pattern consisting of rounded, polygonal figures medially, rest of hysterosoma smooth or with transverse and curved striae. All setae strong, slender lanceolate-serrate distributed as follows: 3 pairs of propodosomals (19, 22 and 15 in length), 3 pairs of dorsocentrals (27, 20 and 14), humeral (21), 5 pairs of dorsolaterals and 4 pairs of dorsosublateral all similar in length, 20 and 19 respectively.

**Venter (Fig. 3)**. Area between coxae II and III transversely striated as well as between posterior medioventral setae and ventral shield. Striae laterally and posterolaterally to coxae II curved, becoming progressively longitudinal. Hysterosomal margin smooth with a few striae at posterior part of opisthosoma. Ventral propodosomal setae, anterior and posterior medioventral metapodosomal setae subequal in length, 13 and 15 respectively. Ventral shield smooth, with a pair of slender lanceolate setae, 17 in length. Genital shield with a few striae.

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**FIG. 2. Aegyptobia villiensis** spec. nov., holotype, female, dorsum.

**FIG. 3. Aegyptobia villiensis** spec. nov., holotype, female, venter.
forming an inverted V on rear half and with two pairs of subequal (13) setae. Anal shield smooth with two pairs of minute and a pair of long, slender, lanceolate setae (15 in length).

**Legs.** Inclusive counts of setae and solenidia (in parentheses) on the podomeres of legs I-IV as follows: tarsi I (1) - 8 (1) - 5-5, tibiae 5-5-3-3, genua 3-3-1-0, femora 4-3-2-1, trochanters 1-1-1-1, coxae 2-2-2-1. Genu I and tibia I each with a broadly lanceolate-serrate seta dorsomedially (Fig. 4). Femur I with a similar seta dorsolaterally and a longer broadly lanceolate-serrate seta dorsomedially. Tarsi I and II each with a long solenidion dorsodistally (12 and 10 in length). Trochanter, femur and tibia of leg II each with a broadly lanceolate-serrate seta dorsally. The true claws are uncinate and the empodia padlike.

**MALE. Unknown.**

**TYPE MATERIAL**

Holotype female (Code number 38/89) collected from twigs of *Pyrus amygdaliformis* Vill., Villia Attiki, Greece, 14 March 1988, deposited in the Collection of the Acarology Laboratory, Agricultural Research Centre, Athens.

**ETYMOLOGY**

The name of this new species is derived from Villia, a village in Attiki.

**Remarks**

The genus *Aegyptobia* is known from Africa, Europe, Asia and North America and contains more than 100 species. The following species have been recorded from Greece: *A. populus* Soulioti-Papaoannou, *A. tragardhi* Sayed and *A. sayedi* Yousef (Soulioti-Papaoannou 1985), *A. karystensis* Hatzinikolis, *A. aliartensis* Hatzinikolis and *A. leiahensis* Chaudhri, Akbar and Rosool (Hatzinikolis 1987). *A. villiensis* can readily be distinguished from all known species by the unique propodo- and hysterosomal patterns. Other salient characters are also the large hysterosomal pores posteriorly to the second pair of sublateral setae, the two setae on the fourth palpal segment and the presence of a broad, lanceolate serrate seta on each of femur, genu and tibia I and on femur, tibia and trochanter II. The presence on femur I of a long lanceolate-serrate seta also distinguishes this mite from others.

Despite of the large number of samples taken from the aerial parts of *P. amygdaliformis* Vill. as well as from other trees (*Olea europaea* L.,
Pyrus communis L. and Olea europaea L. sub. oleaster) in 4 localities in Attiki, only the specimens assigned as the holotype was collected. Thus the numbers of this species are probably extremely low in nature on P. amygdaliformis: another possibility is that the mite got accidentally on the latter host from the neighboring vegetation.

References

KEY WORDS: Acari, Tenuipalpidae, Aegyptobia, Aegyptobia villiensis nov. sp., Pyrus amygdaliformis Vill.

Aegyptobia villiensis, 'Ενα Νέο Είδος στην Οικογένεια Tenuipalpidae (Acarii: Prostigmata) από την Ελλάδα

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ΠΕΡΙΛΗΨΗ
Περιγράφεται και σχεδίάζεται ο θηλυκός ενός νέου είδους ακάρου Tenuipalpidae από την Ελλάδα το Aegyptobia villiensis. Το άκαρo αυτό βρέθηκε στις 14 Μαρτίου 1988 σε κλαδισκώς γκορτσιάς, στην περιοχή Βίλλια Αττικής.