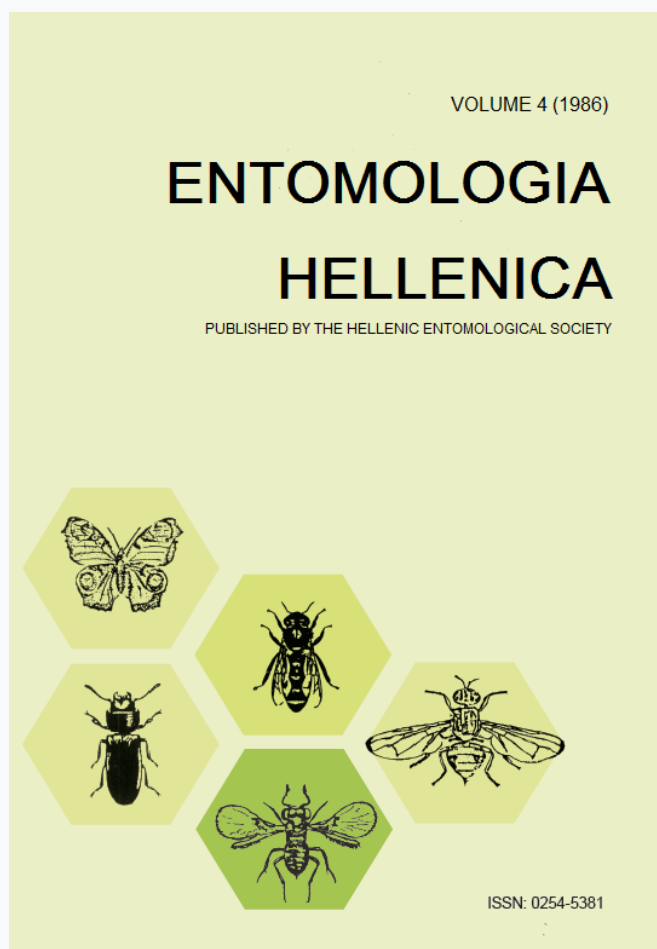


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## The genus *Brevipalpus* in Greece (Acari: Tenuipalpidae)

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## The Genus *Brevipalpus* in Greece (Acari: Tenuipalpidae)<sup>1</sup>

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### ABSTRACT

The genus *Brevipalpus* from Greece is revised and a key to 18 species is provided, with illustrations of the nymphs. Twelve species were formerly recorded: *B. atalantae* (Hatzinikolis), *B. californicus* (Banks), *B. chalkidicus* (Hatzinikolis), *B. hellenicus* (Hatzinikolis and Kolovos), *B. lewisi* McGregor, *B. macedonicus* (Hatzinikolis), *B. obovatus* Donnadieu, *B. oleae* Baker, *B. olearius* Sayed, *B. olivicola* (Pegazzano and Castagnoli), *B. phoenicis* (Geijskes) and *B. russulus* (Boisduval). The following six species are now recorded for the first time from Greece: *B. cuneatus* (Canestrini and Fanzago), *B. essigi* Baker, *B. lilium* Baker, *B. mallorquensis* Pritchard and Baker, *B. pini* Baker and *B. sayedi* Baker. A review of hosts, distribution and economic importance is presented for each species.

### Introduction

*Brevipalpus* Donnadieu, 1875 is a large genus of mites which contains a number of species of economic importance which attack a wide range of host plants and have a world-wide distribution. The mites may be recognized by a four-segmented palpus and the absence of dorso-sublateral setae. Nymphs may differ significantly in the shape of the dorsal body setae, which are often of great significance in species determination. The fauna of *Brevipalpus* in Greece is poorly known. Our knowledge on Greek Brevipalpid mites is confined to those species reported from olive trees (Hatzinikolis 1978, 1983, 1985 and Hatzinikolis and Kolovos 1985). Bouchelos et al. (1965) reported *B. phoenicis* from orange trees, later, Hatzinikolis (1970, 1982) reported *B. obovatus* from quince trees, *B. russulus* from *Echinocactus*, and *B. californicus* and *B. lewisi* from citrus.

### Materials and Methods

The material for this study was collected at the Lycovrysi Acarology Laboratory, during the period 1966-85, from plant samples which were received from Agricultural Institutions, local Agricultural Services, individuals, or were collected by the author. Methods of collecting, killing, preservation, clearing, pigmentation, fixing and mounting were described by Hatzinikolis (1982). Most of the samples were collected in eastern mainland Greece, including Macedonia and Thrace, and to a lesser extent in western Greece and the Islands. The great majority of samples were taken from cultivated fruit trees, vegetables, ornamental plants, fodder, grapes and crops cultivated for the food processing industry. A limited number of samples was also taken from cereals, forest trees and various indigenous plants. All the material is deposited in the collection of the Acarology Laboratory of the Agricultural Research Centre, Athens.

### Results

The present investigation of the genus *Brevipalpus* in Greece deals with the following 18 species: *B. atalantae*, *B. californicus*, *B. chal-*

<sup>1</sup>Received for publication November 24, 1986.

*kidicus*, *B. cuneatus*, *B. essigi*, *B. hellenicus*, *B. lewisi*, *B. lilium*, *B. macedonicus*, *B. mal-lorquensis*, *B. obovatus*, *B. oleae*, *B. olearius*, *B. olivicola*, *B. phoenicis*, *B. pini*, *B. russufus* and *B. sayedi*. The symptoms induced by these mites are briefly described and their host range is also included under each species. A key based on females and nymphs is provided. Illustrations of nymphs (dorsal view showing setae) to facilitate the separation of the species of *Brevipalpus* in Greece are given (Figs. 1-18).

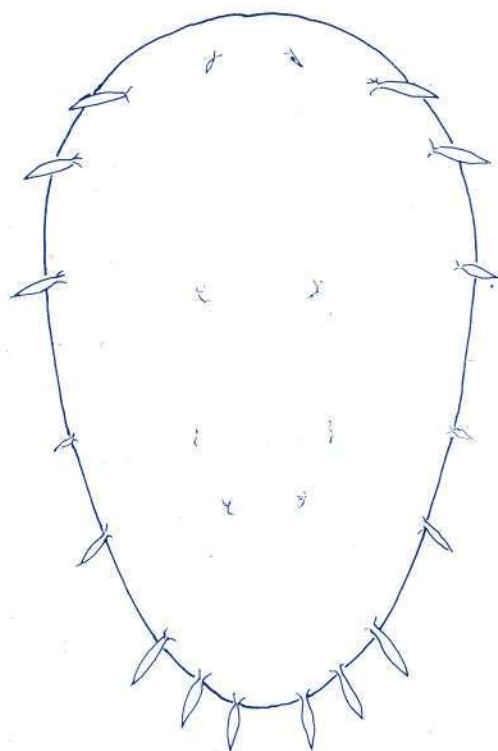


FIG. 1. *B. obovatus*, nymph, dorsal view showing setae.

#### a. Key to species based on females and nymphs

1. Hysterosoma with five pairs of dorsolaterals ..... 2
  - Hysterosoma with six pairs of dorsolaterals ..... 3
2. Tarsus II with a single sensory rod. Nymphs 3, 4, 5 dorsolateral setae long; 2 middle; 1 small ..... *obovatus*
  - Tarsus II with two sensory rods. Nymphs 3, 4, 5 dorsolateral setae long; 1, 2 small ..... *phoenicis*

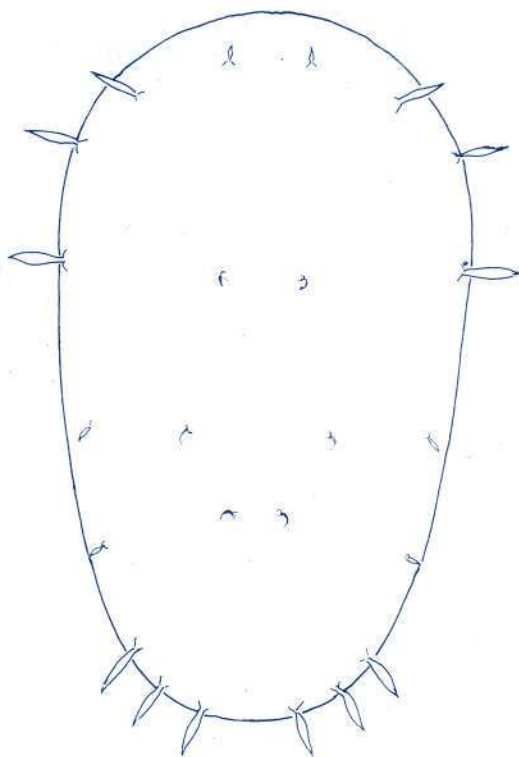
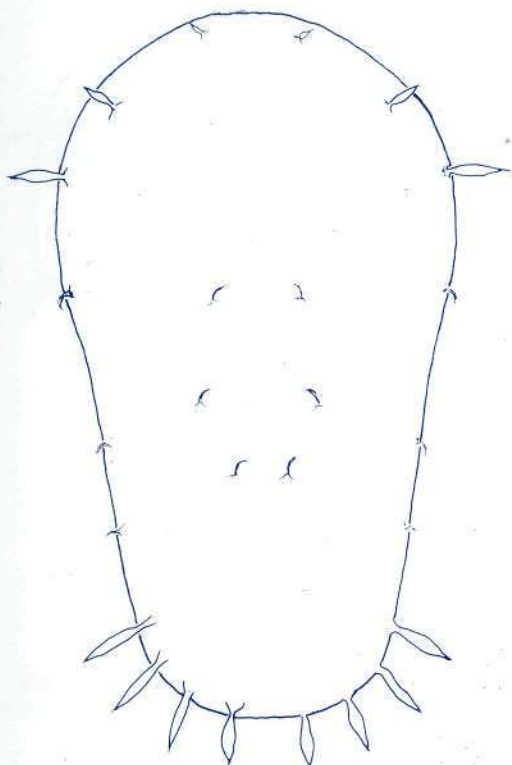
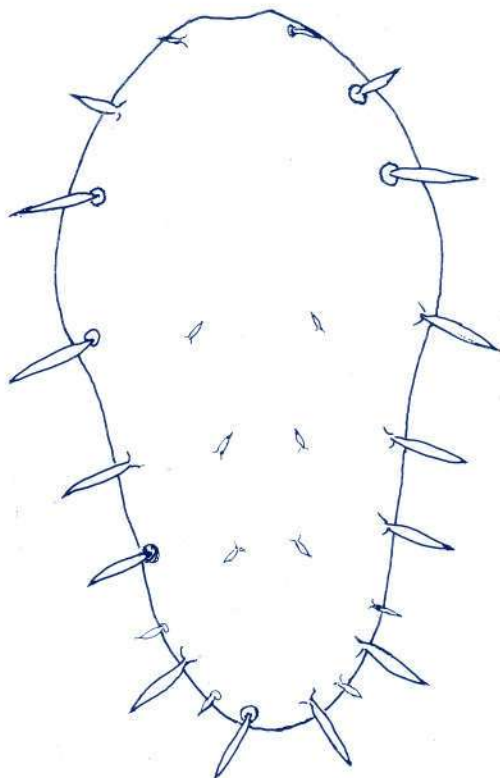
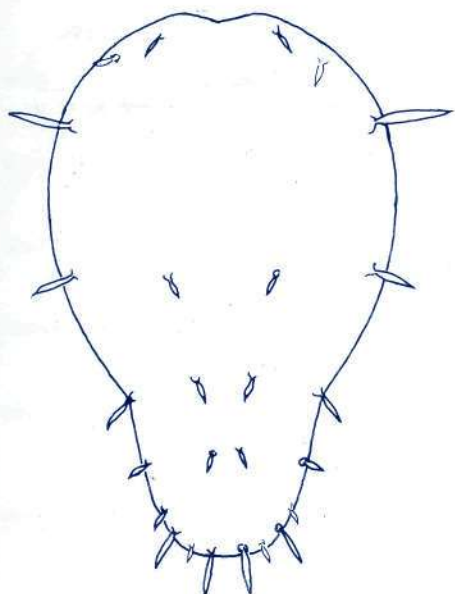


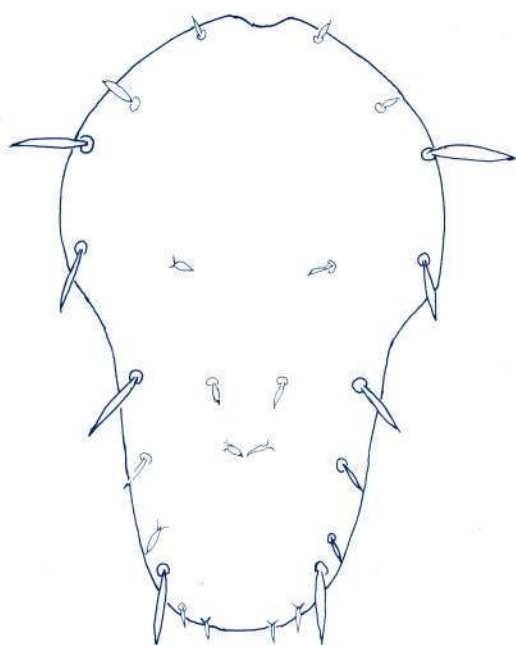
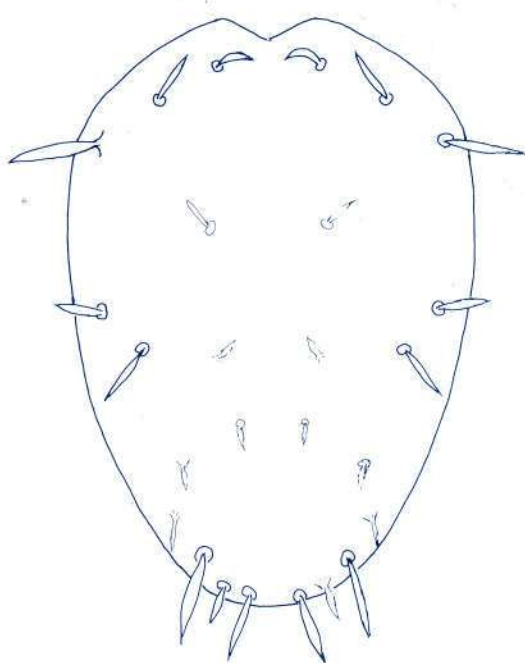
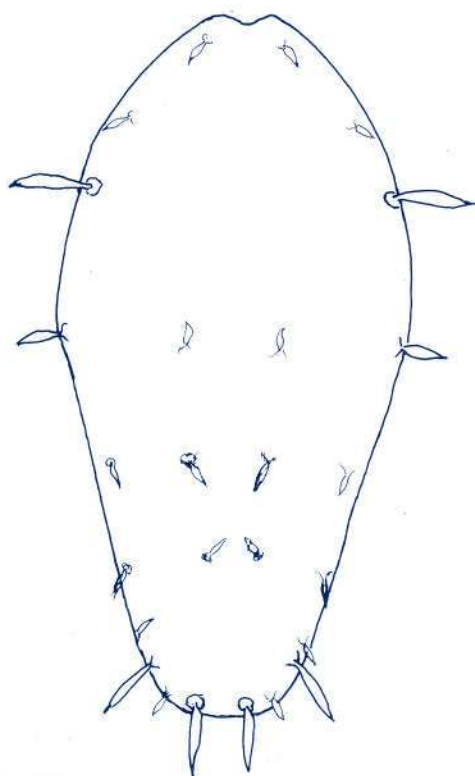
FIG. 2. *B. phoenicis*, nymph, dorsal view showing setae.

3. Tarsus II with a single sensory rod ..... 4
  - Tarsus II with two sensory rods. Nymphs 3, 4, 5, 6 dorsolateral setae long; 1, 2 small ..... *californicus*
4. Rostrum extending beyond distal end of femur I ..... 5
  - Rostrum not extending beyond distal end of femur I ..... 9
5. Rostrum reaching middle of genu I. Propodosoma with reticulation mediolaterally, smooth mediodorsally; body setae broadly lanceolate. Nymphs 1, 4, 6 dorsolateral setae long; 2, 3, 5 small ..... *olivicola*
  - Rostrum reaching distal part of genu I. Propodosoma with irregular coalesced areolae; body setae subclavate. Nymphs with 1, 2, 4, 6 dorsolateral setae long; 3, 5 small ..... *olearius*
6. Rostrum reaching distal end of genu I ..... 7
  - Rostrum reaching distal end of tibia I. Propodosoma and hysterosoma with pores. Nymphs with 1 and 4 dorsolateral setae long; 2, 3, 5, 6 small ..... *atalantae*
7. Propodosoma with reticulation but



FIG. 3. *B. californicus*, nymph, dorsal view showing setae.FIG. 5. *B. olcarius*, nymph, dorsal view showing setae.FIG. 4. *B. olivicola*, nymph, dorsal view showing setae.

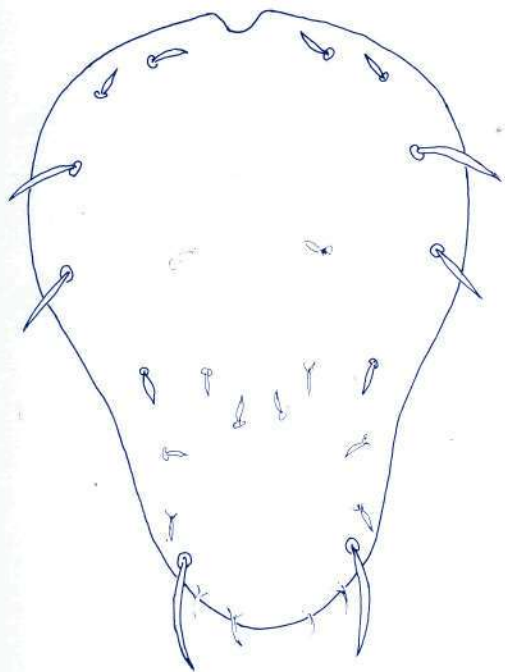
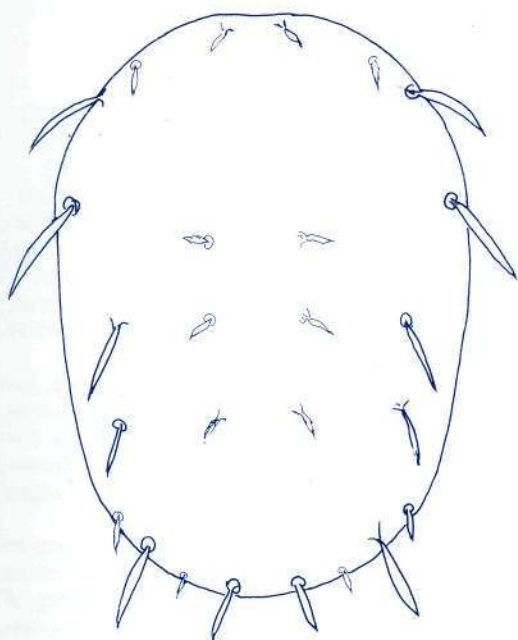
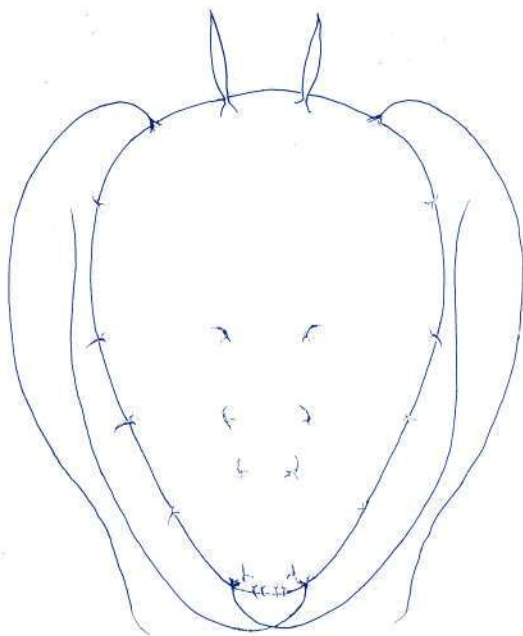
- smooth mediodorsally; body setae lanceolate tapering.
- Nymphs with 4, 6 dorsolateral setae long; 1, 2, 4 small ..... *oleae*
- Propodosoma with reticulation but with areolae posteriorly; body setae lanceolate. Nymphs with 1, 4, 6 dorsolateral setae long; 2, 3, 5 small ..... *macedonicus*
8. Hysterosoma with pores; Propodosoma with reticulation elements of different shapes and sizes. Nymphs with fourth dorsolateral seta long; 1, 2, 3, 5, 6 small ..... *hellenicus*
- Hysterosoma without pores. Propodosoma with reticulation elements of similar shapes and sizes. Nymphs with 1, 2, 4 dorsolateral setae long; 3, 6 medium; fifth small ..... *chalkidicus*
9. Podosoma with anterior medioventrals considerably shorter than posterior pair ..... 10
- Podosoma with medioventral setae subequal in length. Nymphs with third dorsolateral seta flagellate; 1, 2, 4, 5, 6 small ..... *cuneatus*
10. Rostral shield with 4 median lobes ..... 11

FIG. 6. *B. atalantae* nymph, dorsal view showing setae.FIG. 8. *B. macedonicus*, nymph, dorsal view showing setae.FIG. 7. *B. oleae*, nymph, dorsal view showing setae.

- Rostral shield with 2 median lobes.  
Nymphs with 1, 2, 4 dorsolateral setae long; 3, 5, 6 small ..... *sayedi*
- 11. Hysterosomal pores present ..... 12
- Hysterosomal pores absent ..... 13
- 12. Propodosoma with an even reticulation pattern mediolaterally. Nymphs with 3rd propodosomal seta long; 1, 2 small ..... *lilium*
- Propodosoma with a very irregular reticulation pattern mediolaterally. Nymphs with 2, 3 propodosomal setae long; 1 small ..... *lewisi*
- 13. Propodosoma with reticulation elements being of equal length and width. Nymphs with 4th dorsolateral seta long; 1, 2, 3, 5, 6 small ..... *essigi*
- Propodosoma with reticulation elements of different shapes and sizes. Nymphs with 3, 4, 5, 6 dorsolateral setae long; 1, 2 small ..... *russulus*
- 14. Hysterosoma with very wide oval area of transverse striae on the posteromedial portion. Nymphs with all dorsolateral setae minute ..... *pini*
- Hysterosoma with narrow, almost triangular, area of transverse striae on the posteromedial portion. Nymphs 4, 6 dorsolateral setae long; 1, 2, 3, 5 small ..... *mallorquensis*

## b. Notes on the species

*Brevipalpus atalantae* (Hatzinikolis)

FIG. 9. *B. hellenicus*, nymph, dorsal view showing setae.FIG. 10. *B. chalkidicus*, nymph, dorsal view showing setae.FIG. 11. *B. cuneatus*, nymph, dorsal view showing setae.

*Hystripalpus atalantae* Hatzinikolis, 1978.

*Brevipalpus atalantae* Hatzinikolis, 1986.

Records: Greece (Attiki, Phthiotis, island Evvia).

Host: *Olea europaea* (olive).

New records: Korinthos, Viotia, Rethimno (Crete) on olive trees.

Relation to host: It is found in large populations on buds and leaves of young shoots. It causes damage to the young stems, inflorescences and fruit.

*Brevipalpus californicus* (Banks)

*Tenuipalpus californicus* Banks, 1904.

*Tenuipalpus australis* Tucker, 1926; Womersley, 1941; Lawrence, 1943. Ney synonymy.

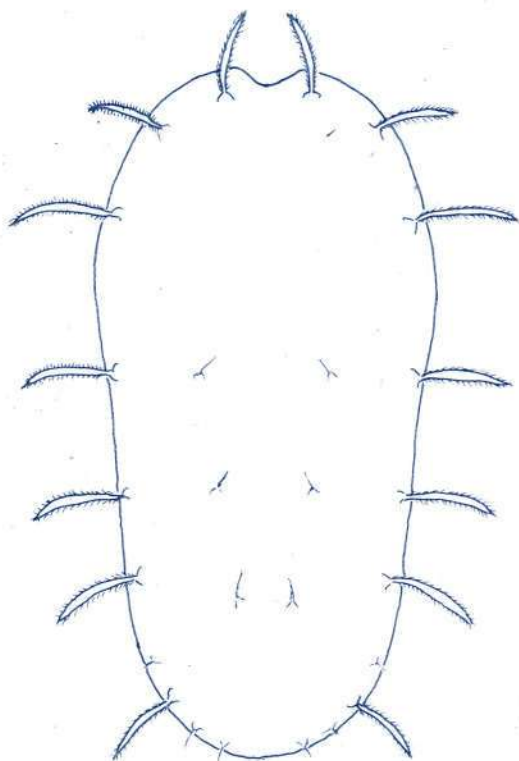
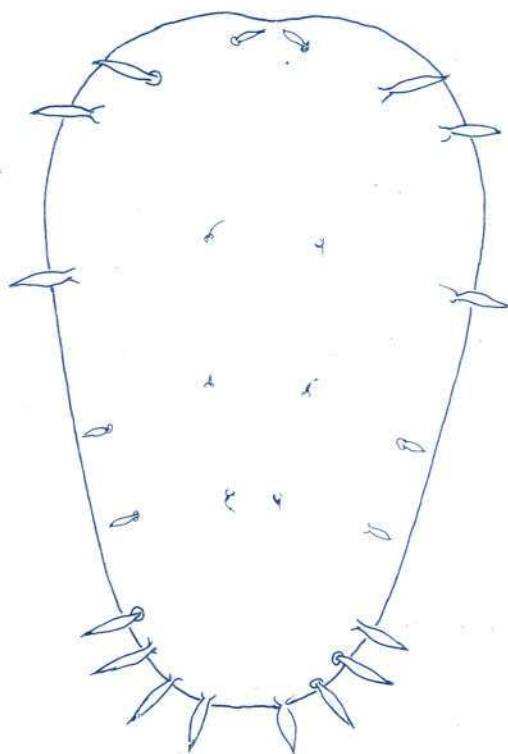
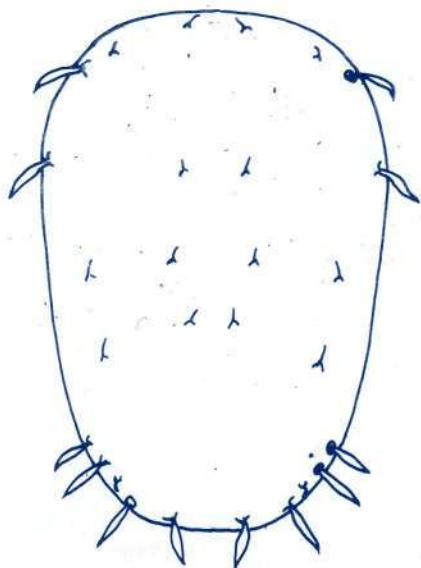
*Tenuipalpus vitis* Womersley, 1940. Ney synonymy.

*Brevipalpus australis* Baker, 1949; Pritchard and Baker, 1952; Attiah, 1956; McGregor, 1956. Ney synonymy.

*Brevipalpus confusus* Baker, 1949; André, 1953. Ney synonymy.

*Brevipalpus californicus* McGregor, 1949; Pritchard and Baker, 1952; McGregor, 1956; Pritchard and Baker, 1958; Baker and Pritchard, 1960; Meyer and Rodrigues, 1966; Livshitz and



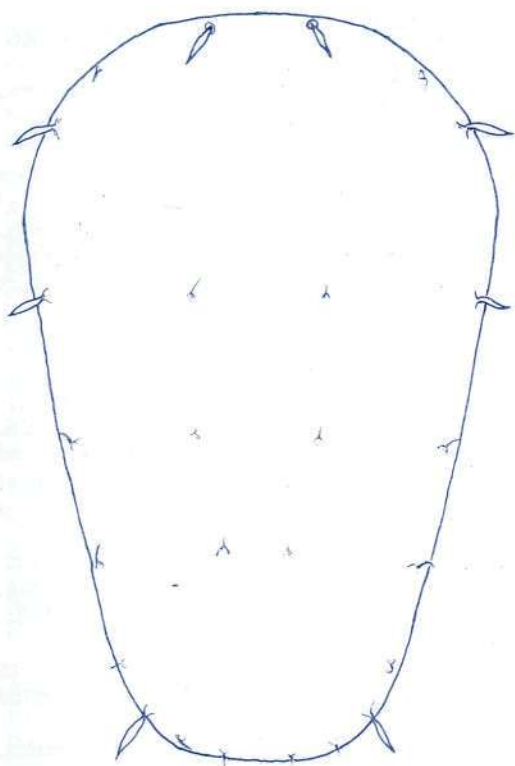
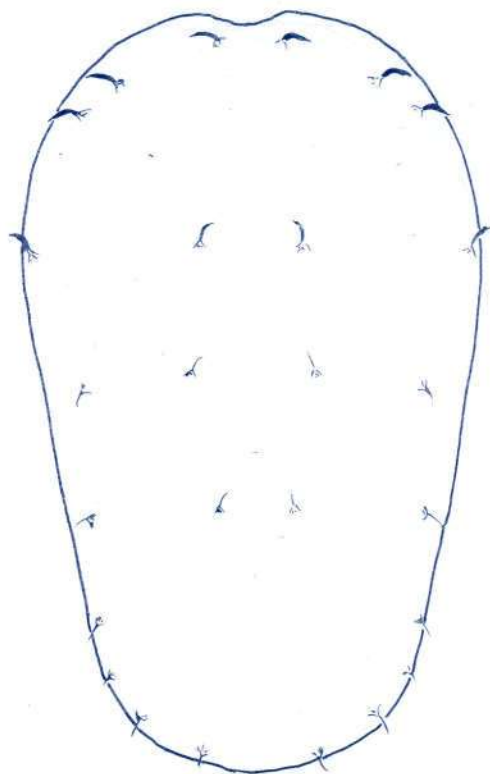
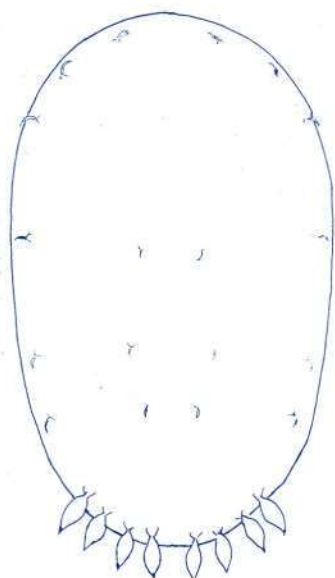
FIG. 12. *B. sayedi*, nymph, dorsal view showing setae.FIG. 14. *B. lewisi*, nymph, dorsal view showing setae.FIG. 13. *B. lilium*, nymph, dorsal view showing setae.

Mitrofanov, 1967; - Rodrigues, 1968; Wafa, 1968-69; Yousef, 1970; Jeppson et al., 1975. *Hystripalpus californicus* Hatzinikolis, 1982. Records: Asia, Africa, Australia, Middle East, Pacific Islands, Greece, France, Israel, Portugal, Spain, Taiwan, Turkey, U.S.S.R., North, Central and South America, West Indies. Hosts: *Citrus*, *Cocos*, *Ficus*, *Malus*, *Prunus*, *Pyrus*, *Solanum*, *Thea*, *Vitis* and a wide variety of ornamental plants.

New records: Arta, Crete, Etoloakarnania, Ionian Islands, Peloponnisos, Preveza, Rodos on *Citrus*: *C. limonium* (lemon), *C. media* (citron), *C. nobilis* (mandarin), *C. sinensis* (orange, sweet citrus) and on *Fuchsia*, *Hydrangea macrophylla*, *Scindapsus aureus*.

Relation to host: It is a serious pest of *Citrus* in Greece, where it causes a silvering of lemon and mandarin fruits and a brown speckling of oranges and sweet oranges. It also causes cellular necroses of the epidermis of *Citrus* fruits.

*Brevipalpus chalkidicus* (Hatzinikolis)

FIG. 15. *B. essigi*, nymph, dorsal view showing setae.FIG. 17. *B. pini*, nymph, dorsal view showing setae.FIG. 16. *B. russulus*, nymph, dorsal view showing setae.

*Hystripalpus chalkidicus* Hatzinikolis, 1985.  
*Brevipalpus chalkidicus* Hatzinikolis, 1986.  
 Record: Greece (Ormilia Chalkidiki).  
 Host: *Olea europaea* (olive).  
 New records: Cavala, Chalkidiki, Thessaloniki  
 on olive trees.  
 Relation to host: The mites are found on young shoots.

*Brevipalpus cuneatus* (Canestrini and Fanzago)

*Caligonus cuneatus* Canestrini and Fanzago, 1876.

*Tenuipalpus cuneatus* Berlese, 1877; Geijskes, 1939.

*Brevipalpus cuneatus* Baker, 1949; Livshitz and Mitrofanov, 1967.

Records: Italy, U.S.S.R.

Host: *Hedera taurica*.

New record: Chalkidiki, Stavros 15 September 1977 on *Hedera helix*.



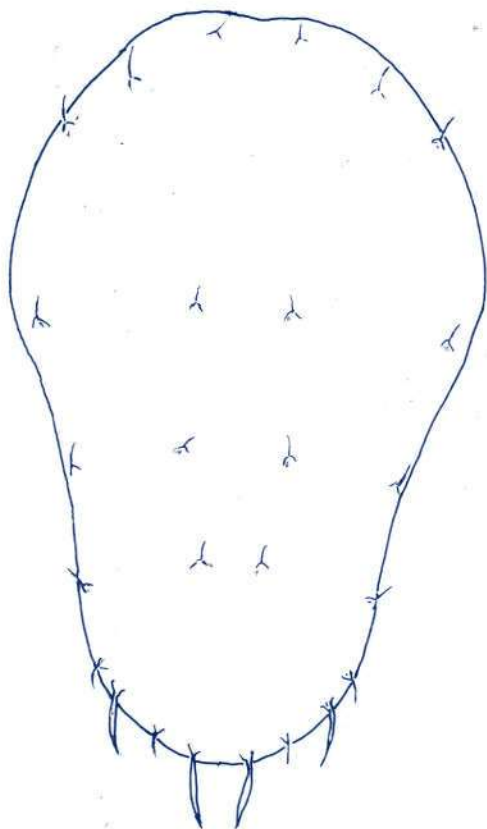


FIG. 18. *B. mallorquensis*, nymph, dorsal view showing setae.

Relation to host: It is found in small populations on both leaf surfaces.

*Brevipalpus essigi* Baker

*Brevipalpus essigi* Baker, 1949; Pritchard and Baker, 1952.

Records: Mexico, U.S.A.

Hosts: Orchidaceae, *Aucuba*, *Buttleja*, *Ficus*, *Fuchsia*, *Howea*, *Kentia*, *Pittosporum*, *Salvia*, *Veronica*.

New records: Attiki, Menidi 20 October 1975 on *Chrysantemum* sp.; Crete, Hania 18 July 1978 on *Ficus carica*; Rodos 2 September 1981 on *Ficus sycomorus*.

Relation to host: It is found in small populations on both leaf surfaces.

*Brevipalpus hellenicus* (Hatzinikolis and Kolovos)

*Hystripalpus hellenicus* Hatzinikolis and Kolovos, 1985.

*Brevipalpus hellenicus* Hatzinikolis, 1986.

Records: Messinia, Phthiotis.

Host: *Olea europaea* (olive).

New records: Attiki, Viotia on *Olea europaea* and Evvia on *Olea sylvestris*.

Relation to host: It is found on young shoots, buds, leaves and fruits of *O. europaea* causing malformations, spots and drying. It only occurs on young shoots of *O. sylvestris*.

*Brevipalpus lewisi* (McGregor)

*Brevipalpus lewisi* McGregor, 1949; Baker, 1949; Pritchard and Baker, 1952; Attiah, 1956; McGregor, 1956; Ehara, 1956; Livshitz and Mitrofanov, 1967; Yousef, 1970; Jeppson et al., 1975.

*Hystripalpus lewisi* Hatzinikolis, 1982.

Records: Algeria, Australia, Bulgaria, Canada, Egypt, France, Greece, Iran, Israel, Japan, Lebanon, Mexico, Taiwan, Turkey, U.S.A., U.S.S.R.

Hosts: *Citrus*, *Juglans*, *Punica granatum*, *Vitis* (grape) and over 40 species of ornamental plants.

New records: Attiki, Chalkidiki, Imathia, Kavala, Peloponnisos, Phthiotis, Pieria, Thessaloniki, Thessalia, Viotia on *Aphelandra squarosa*, *Azalea*, *Begonia radicans*, *Eriobotrya japonica* (loquat), *Ficus carica* (fig), *Juglans redia* (persian walnut), *Justicia adhatoda*, *Morus alba* (mulberry), *Parthenocissus*, *Prunus avium* (cherry), *P. cerasus* (sour-cherry), *P. persica* (peach), *Syringa vulgaris*, *Vitis vinifera* (grape).

Relation to host: It is a serious pest of citrus, grapes and pomegranates in Greece. In citrus, damage appears in the form of scablike scars on the skin of fruit. It produces a brownish discoloration, malformations (lines, mesh) and cracking of the skin of the stems of grapes and pomegranate. Mite damage to grapes also gives delayed rise to berry set and eventually causes drying out.

*Brevipalpus lilium* Baker

*Brevipalpus lilium* Baker, 1949; Pritchard and Baker, 1952.

Records: U.S.A., Hawaii.

Hosts: *Acalypha*, *Allamanda*, *Azalea*, *Cedrela*, *Croton*, *Dipladenia*, *Hibiscus*, *Ixora*, *Jasminum*, *Lagestromia*, *Malus*, *Rhus*, *Rubus*, *Sida*, *Thunbergia*, *Vitex*, *Vitis*, *Lilium*.

New records: Rodos 12 August 1975 on *Hibiscus*, Rethimno (Crete) 18 October 1986 on *Jasminum revolutum* and Chania (Crete) 17 October 1986 on *Ficus carica*.

Relation to host: It is found on both leaf surfaces.

*Brevipalpus macedonicus* (Hatzinikolis)

*Hystripalpus macedonicus* Hatzinikolis, 1983.

*Brevipalpus macedonicus* Hatzinikolis, 1986.

Record: Thessaloniki.

Host: *Olea europaea* (olive).

New records: Chalkidiki, Thessaloniki.

Relation to host: This mite is found on young shoots, buds, leaves and fruits producing malformations and spots.

*Brevipalpus mallorquensis* Pritchard and Baker

*Brevipalpus mallorquensis* Pritchard and Baker, 1958.

Records: Palma, Mallorca, Spain.

Host: *Adenostoma* sp.

New record: Messina 5 September 1983 on *Rubus*.

Relation to host: It is found on both leaf surfaces.

*Brevipalpus obovatus* Donnadieu

*Brevipalpus obovatus* Donnadieu, 1875; Baker, 1949; Reck, 1951; Livshitz and Mitrofanov, 1967; Meyer and Ryke, 1959; Wainstein, 1960; Baker and Pritchard, 1960; Rodrigues, 1968; Wafa, 1968-69.

*Brevipalpus pereger* Donnadieu, 1875; Baker, 1949.

*Tenuipalpus bioculatus* McGregor, 1914; McGregor, 1916.

*Tenuipalpus pseudocuneatus* Blanchard, 1940.

*Brevipalpus inornatus* Baker, 1945; McGregor, 1949; Baker, 1949; Pritchard and Baker, 1952; Morishita, 1954; Attiah, 1956.

*Brevipalpus bioculatus* Reck 1951.

Records: Angola, Argentina, Australia, Azores, Canada, Cyprus, Egypt, France, Greece, India, Iran, Israel, Hawaii, Japan, Kenya, Libya, Malawi, Mozambique, New Zealand, Pakistan, Portugal, South Africa, Spain, Sri Lanka, Thailand, Turkey, Uganda, U.S.A., U.S.S.R., Venezuela, Zimbabwe.

Hosts: It attacks plants of more than 60 genera of ornamentals, *Citrus*, *Pirus* and *Cydonia oblonga*.

New records: Argolis, Attiki, Corinthos, Evvia, Crete, Phthiotis, Thessalia, Viotia, island

Rodos on *Camelia japonica*, *Citrus* (lemon, orange), *Eriobotrya japonica* (loquat), *Gossypium* (cotton), *Hedera helix* (ivy), *Punica granatum* (pomegranate), *Lycopersicum esculentum* (tomato), *Euphorbia pulcherrima*, *Vitis* (grape).

Relation to host: It feeds on the ventral surfaces of the leaves, stems and petioles. It is a serious pest of grapes and citrus in Greece causing yellow or dark spots and necroses on the leaves and fruit. Heavy infestation results in leaf drop.

*Brevipalpus oleae* Baker

*Brevipalpus oleae* Baker, 1949.

Records: Greece, Italy, Morocco, Portugal, Tunisia.

Host: *Olea europaea* (olive).

New records: Attiki, Achaia, Chalkidiki, Etoiakarnania, Evvia, Corinthos, Magnissia, Preveza, Viotia.

Relation to host: It attacks the stems, leaves, inflorescences and fruit of olive trees in Greece.

*Brevipalpus olearius* Sayed

*Brevipalpus olearius* Sayed, 1950; Attiah, 1956.

Records: Egypt, Crimea U.S.S.R., Greece, Italy, Libya, Turkey.

Host: *Olea europaea* (olive).

New records: Chalkidiki, Fokis, Crete, Lakonia, Phthiotis, Rodos, Samos, Skyros, Thessaloniki, Viotia on olive trees.

*Brevipalpus olivicola* (Pegazzano and Castagnoli)

*Hystripalpus olivicola* Pegazzano and Castagnoli, 1972.

*Brevipalpus olivicola* Hatzinikolis, 1986.

Records: Greece, Italy.

Host: *Olea europaea* (olive).

New records: Kerkyra, Messina, Preveza, Thessprotia, Zakynthos on olive trees.

Relation to host: It is found on stems, leaves and small fruits.

*Brevipalpus phoenicis* (Geijskes)

*Tenuipalpus phoenicis* Geijskes, 1939.

*Brevipalpus yothersi* Baker, 1949.

*Brevipalpus mabrideri* Baker, 1949.

*Brevipalpus papayensis* Baker, 1949.

*Brevipalpus phoenicis* Sayed, 1946; Baker, 1949; Pritchard and Baker, 1952; De Leon,



1956; Attiah, 1956; Baker and Pritchard, 1960; Meyer and Rodrigues, 1966; Livshitz and Mitrofanov, 1967; Haramoto, 1969; Chandra and Channabasavanna, 1974; Gongalez, 1975.

Records: Argentina, Australia, Azores, Brazil, Burma, Colombia, Cuba, Dominican Republic, Egypt, Ethiopia, Germany, Greece, France, Hawaii, Netherlands, India, Iran, Italy, Kenya, Lebanon, Madagascar, Malaysia, Mauritius, Mexico, New Zealand, Jamaica, North Africa, Philippines, Portugal, Puerto Rico, Okinawa, Sri Lanka, Sudan, Syria, Taiwan, Tanzania, Thailand, Trinidad, Turkey, U.S.A., U.S.S.R., Venezuela.

Hosts: *Citrus*, *Coffea* (coffee), *Gossypium* (cotton), *Gydonia* (quince), *Ficus*, *Juglans*, *Ipomoea* (sweet potato), *Morus* (mulberry), *Olea* (olive), *Phoenix* (palm), *Prunus*, *Pyrus*, *Camellia* (tea), *Vitis* (grape), and some deciduous and subtropical fruits. It also attacks more than 60 genera of ornamental plants.

New records: Ahaia, Arta, Etoloakarnania, I-lia, Ionian Islands, Messinia, Preveza, on *Citrus* (lemon, mandarin, orange); in Attiki on *Begonia* sp. and in Ahaia on *Gardenia jasminoides* and *Jasminum sambac*.

Relation to host: It is an important pest of citrus in Greece. It infests leaves, twigs, bulbs and fruits. The injured areas become pale and change to a rust brown colour. When infestation is heavy, the leaves become dry and fall.

#### *Brevipalpus pini* Baker

*Brevipalpus pini* Baker, 1949; Pritchard and Baker, 1952.

Record: U.S.A.

Host: *Pinus*.

New records: Attiki, Ekali 12 September 1969 and Skinias 2 September 1971 on *Pinus halepensis*.

#### *Brevipalpus russulus* (Boisduval)

*Acarus russulus* Boisduval, 1867.

*Tenuipalpus cactorum* Oudemans, 1929; Geijskes, 1939.

*Brevipalpus cactorum* Sayed, 1946; André, 1953.

*Brevipalpus russulus* Oudemans, 1938; Baker, 1949; Pritchard and Baker, 1952; Livshitz and Mitrofanov, 1967.

Records: Argentina, Belgium, Brazil, England, France, Germany, Greece, Japan, Netherlands, Mexico, Peru, U.S.A., (California). Hosts: *Cerus*, *Chamaecerus*, *Coryphanta*, *E-*

*chinocactus*, *Echinocereus*, *Ferocactus*, *Lobinia*, *Mammillaria*, *Pilocereus*, *Mesembryanthemum*, *Euphorbia*.

New records: Attiki on *Aporocactus*, *Echinocactus*, *Mammillaria*, *Opuntia*, *Zygocactus*.

Relation to host: Infested plants have a uniform reddish brown colour.

#### *Brevipalpus sayedi* Baker

*Brevipalpus sayedi* Baker, 1949; Pritchard and Baker, 1952; Pritchard and Baker, 1958.

Records: U.S.A. (Florida, Indiana, Maryland).

Hosts: *Carya illionensis* (pecan), *C. cordiformis* (hickory), *C. ovata* (hickory).

New records: Naoussa Imathia 12 August 1973 on *Juglans* (walnut): *J. californica*, *J. nigra*, *J. regia*.

Relation to host: This mite has been found on leaf surfaces.

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KEY WORDS: Acari, Tenuipalpidae, *Brevipalpus*, *Brevipalpus* in Greece, *B. atalantae*, *B. californicus*, *B. chalkidicus*, *B. cuneatus*, *B. essigi*, *B. hellenicus*, *B. lewisi*, *B. lilium*, *B. macedonicus*, *B. mallorquensis*, *B. obovatus*, *B. oleae*, *B. olearius*, *B. olivicola*, *B. phoenicis*, *B. pini*, *B. russulus*, *B. sayedi*

## Το Γένος *Brevipalpus* στην Ελλάδα (Acari: Tenuipalpidae)

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### ΠΕΡΙΛΗΨΗ

Το γένος *Brevipalpus* αναθεωρείται και δίνεται ένα κλειδί για τα 18 ανευρεθέντα στην Ελλάδα είδη, με σχεδίαση των νυμφικών σταδίων. Δώδεκα είδη έχουν αναφερθεί στην Ελλάδα: *B. atalantae* (Hatzinikolis), *B. californicus* (Banks), *B. chalkidicus* (Hatzinikolis), *B. hellenicus* (Hatzinikolis), *B. lewisi* McGregor, *B. macedonicus* (Hatzinikolis), *B. obovatus* Donnadieu, *B. oleae* Baker, *B. oloearius* Sayed, *B. olivicola* (Pegazzano and Castagnoli), *B. phoenicis* (Geijskes), *B. russulus* (Boisduval). Έξι είδη αναφέρονται τώρα για πρώτη φορά στην Ελλάδα: *B. cuneatus* (Canestrini and Fanzago), *B. essigi* Baker, *B. lilium* Baker, *B. mallorquensis* Pritchard and Baker, *B. pini* Baker and *B. sayedi* Baker. Δίνονται στοιχεία της παγκόσμιας εξάπλωσης και ξενιστών των παραπάνω ακάρεων. Επίσης παρουσιάζεται η οικονομική σημασία κάθε είδους ακάρεος για την Ελλάδα.