

## ERIOPHYES BARBUJANAE N. SP. (ACARINA : ERIOPHYIDAE) \*

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With 1 figure and 1 plate

**RESUMO.** *Eriophyes barbujanae* sp. n. (Acarina: Eriophyidae). Descobre-se uma espécie de eriofídeo, *Eriophyes barbujanae* sp. n., encontrada sobre barbusano, nome vulgar de *Apollonias barbujana* (Cav.) Bornm., uma laurácea, no Funchal (Ilha da Madeira).

O ácaro provoca uma erinose, bem patente nas folhas, principalmente nas mais jovens; na página superior notam-se elevações arredondadas, a que correspondem na página inferior enfeitrados brancos que depois se tornam amarelados e finalmente castanhos, quando se verifica a morte do erineum. As folhas afectadas podem-se apresentar distorcidas ou enroladas.

Foram também observadas formações de erinose nos caules de rebentos, reconhecidas pelo enfeitrado branco.

This proposed species was found on "barbusano", the common name of *Apollonias barbujana* (Cav.) Bornm. [ = *A. canariensis* (Will) Nees ] a tree of the family Lauraceae, at Funchal (Madeira Island), Portugal.

The genus *Apollonias* has only three species: *A. barbujana* (Cav.) Bornm. from the Canary Islands and the Island of Madeira, *A. ceballosi* Svent. only from the Canary Islands, and *A. arnottii* Nees from India.

Tavares (1903) refers to an eriophyid species as the origin of an erineum of *A. canariensis*. He describes the cecidium as follows: "On the upper side of the leaf one finds very pronounced papulae corresponding to brown-haired depressions on the lower side". However he omits the name of the responsible species.

### *Eriophyes barbujanae* n. sp.

*E. barbujanae* (Fig. 1) differs from *Eriophyes neolinderae* K. (Keifer, 1972) by having the median line present only on rear 1/2. Admedian lines complete, slightly sinuate. First submedian line complete, plain on

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anterior 1/3, running to rear by a granular line, second and third submedian lines granular, present only on rear 1/2. Female coverflap with about 12 longitudinal ribs and without basal granules.

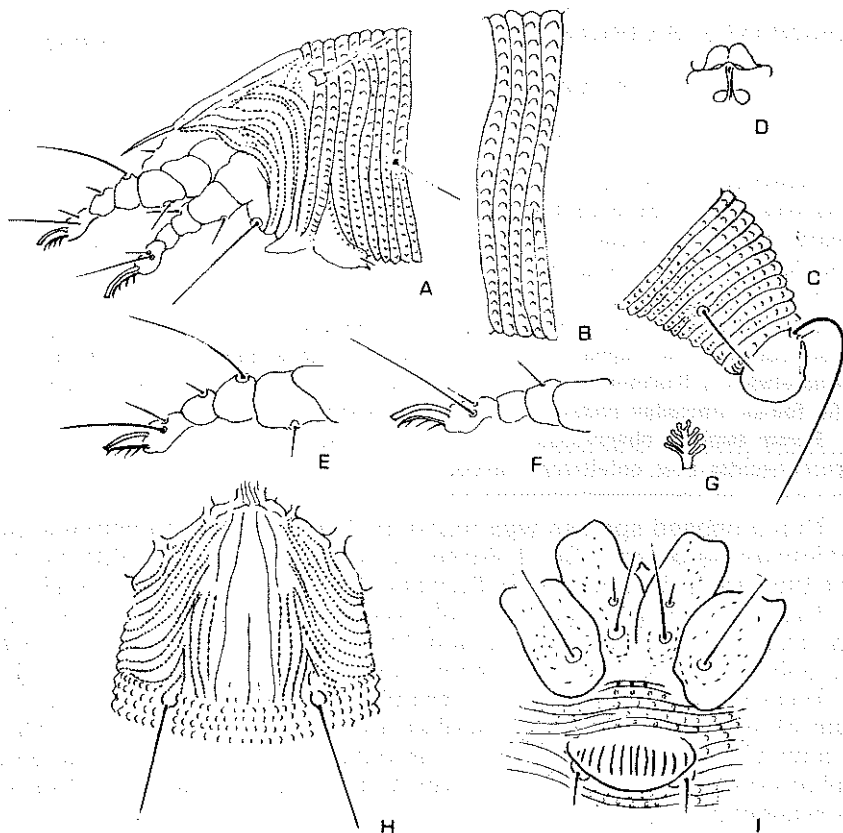


Fig. 1.—*Eriophyes barbujae* n.sp., ♀. A: Anterior side section of mite; B: Lateral skin structures; C: Lateral caudal section of mite; D: Internal female genital structures; E: Foreleg; F: Hindleg; G: Featherclaw; H: Dorsal view of anterior section; I: Female genitalia and coxae.

*Eriophyes neolinderae* K. has a median line of granules, present on rear 1/3 or 1/4, admedian lines also granular, subparallel, submedian lines granular, fairly complete. Female coverflap with scattered basal coarse granules, followed by about 10 short longitudinal ribs.

*Female*

Body 150  $\mu$  to 188  $\mu$  in length, 45  $\mu$  wide, wormlike; colour in life white.

Rostrum 16  $\mu$  long, projecting down, antapical seta 3  $\mu$  long.

Shield 23  $\mu$  long, 27  $\mu$  wide, partially covered with lines of granules; median line full, present on rear 1/2, with some granules at side on rear end; admedian lines complete, rather close at chelicerae base, subparallel, slightly sinuate; first submedian lines complete, subparallel, full on anterior 1/3 of shield, running to rear by a granular line. Sides of shield with six or seven lines of granules, forming partial rings on rear lateral shield area. Dorsal tubercles 17  $\mu$  apart; dorsal setae 12  $\mu$  long, diverging to rear.

Forelegs 20  $\mu$  long, with all segments; tibia 5  $\mu$  long, with 3  $\mu$  seta from about 1/3; tarsus 6  $\mu$  long, claw 5  $\mu$  long, featherclaw 4-rayed. Hindlegs 22  $\mu$  long; tibia 3  $\mu$  long, tarsus 7  $\mu$  long, claw 6  $\mu$  long. Coxae ornamented with some lines of granules; sternal line extending back to between second setiferous coxal tubercles. First coxal setiferous tubercles slightly farther apart than second setiferous tubercles and slightly behind anterior end of sternal lines; second setiferous tubercles well ahead of line across third tubercles.

Thanosome with about 60 rings, entirely microtuberculate. Lateral seta 12  $\mu$  long, on ring 8 behind shield; first ventral seta 14  $\mu$  long, on ring 22; second ventral seta 17  $\mu$  long, on ring 41. Telosome with 6 rings, completely microtuberculate; telosomal seta 11  $\mu$  long. Accessory seta 3  $\mu$  long.

Female genitalia 8  $\mu$  long, 15  $\mu$  wide; coverflap with about 12 longitudinal ribs; seta 6  $\mu$  long.

*Male* — male not seen.

*Holotype* : Female, slide n.º 3174. Estação Agronómica Nacional, Oeiras, Portugal. Collected by Eng.º Agr.º Rui Manuel da Silva Vieira, June 18, 1985.

*Paratypes* : Five paratype slides, n.º 3174a, with 30 females.

*Type locality* : Funchal (Madeira Island), Portugal.

*Type host* : *Apollonias barbuja* (Cav.) Bornm. (*Lauraceae*). Common name "barbusano".

*Relation to the host* : The mite causes patches of felty erineum on the lower surface (Plate 1: A & B) of the leaves, followed by blisterlike swelling on the upper surface. The affected leaves eventually become distorted and curled (Plate 1: C)). The erineum patches are whitish at first, then yellow and finally brown.

Erineum patches were also found on young stems (Plate 1: D).

I am particularly indebted to Eng.º Agrónomo Rui Manuel da Silva Vieira, who by collecting and sending the study material, has demonstrated once more his deep interest in a better knowledge of the Madeira Island's entomofauna.

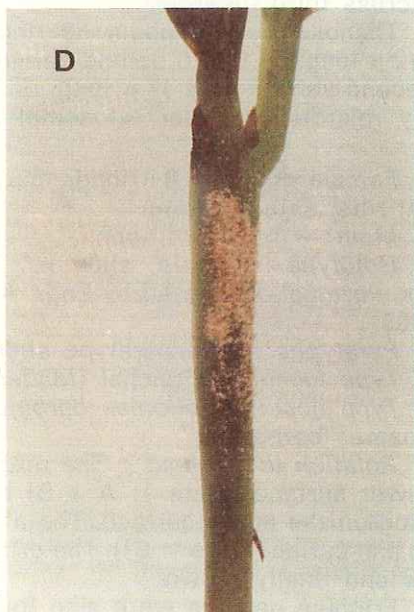


Plate 1. — Symptoms of attack by *Eriophyes barbujanae* n. sp. on leaves and young shoot of *Apollonias barbujana* (Cav.) Bornm.. A: Felty eriophyes on lower surface of leaf with a population of *Eriophyes barbujanae* n. sp.. B: Leaves of *A. barbujana* (left, sound; right, attacked). C: Branch with leaves distorted and curled. D: Eriophyes patch on a young shoot.

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