Tenuipalpus oliveirai, A NEW SPECIES (ACARI, PROSTIGMATA, TENUIPALPIDAE) FROM BRAZIL[1]

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ABSTRACT. *Tenuipalpus oliveirai*, a new species of tenuipalpid mite from Brazil is described and illustrated.
Key words. *Tenuipalpus*, false spider mite, *Peschiera*.

Tenuipalpus oliveirai, UMA NOVA ESPÉCIE (ACARI, PROSTIGMATA, TENUIPALPIDAE) DO BRASIL

RESUMO: *Tenuipalpus oliveirai*, uma nova espécie de ácaro plano é descrita e ilustrada.
Descritores: *Tenuipalpus*, ácaro plano, leiteiro, *Peschiera*.

INTRODUCTION

In the course of routine observations for mites affecting plants, Prof. Dr. Carlos Amadeu Leite de Oliveira collected a new tenuipalpid mite from a pasture invading shrub, *Peschiera fuchsiaefolia* Miers. (Apocynaceae), a plant locally known as "leiteiro", in Barretos, São Paulo, Brazil, which is herein described and figured.

The nomenclature of the body setae follows that of PRITCHARD & BAKER (1958) and MEYER & SMITH (1979), GRANDJEAN'S (1934, 1939) being given in parentheses.

Tenuipalpus oliveirai new species: FEMALE. (Figures 11 - 14)

Gnathosoma (Figures 12 - 13) with one pair of well developed ventral setae and one pair of minute, capitate eupathidia. Palpus trisegmented, the second segment with a pectinate seta dorsally, the third with an elongate slender eupathidium.

Rostral shield deeply incised medially. Propodosoma with a wide, strongly elevated, mediodorsal area; a mediolateral depression on each side and lateral areas also elevated, lateral margins depressed. First and second propodosomal setae, P_1 and P_2 (v_2 e sc_1) minute, the third, P_3 (sc_2) marginal, strong and pubescent, at least six times as long as the first and second pairs. Striation pattern as figured.

Hysterosomal dorsum with a sublateral groove on each side, inside of which the integument is strongly reticulate, the narrow flattened margin with longitudinal striae. Area above coxae III and IV contiguous with propodosoma and with reticulate pattern. Three pairs of dorsocentral hysterosomal [DC_1 (c_1), DC_2 (d_1), DC_3 (e_1)], humeral [H (c_3)] and first pair of dorsolateral hysterosomal [DL_1 (d_2)] very small, setiform, slightly serrate. Second [DL_2 (e_2)], third [(DL_3 (e_3)], fourth [DL_4 (f_2)] and sixth [($DL_6(h_1)$] dorsolateral hysterosomal setae somewhat lanceolate, with fine serrations, shorter than distances between bases of second and third pairs. Fifth dorsolateral hysterosomals [($DL_5(h_2)$] flagelliform. Hysterosoma with a pair of well developed "pores".

Podosoma with a single pair of short, smooth medioventral setae (IC_3) anteriorly and a pair of long, smooth, medioventrals (IC_4) posteriorly.

Legs. The setae and solenidia (in parentheses) are distributed on the leg segments as follows: coxae 3 - 2 - 1 - 1; trochanters 1 - 1 - 2 - 1; femora 4 - 4 - 2 - 1; genua 3 - 3 - 1 - 0; tibiae 5 - 5 - 3 -3; tarsi 7 (1) - 6 (1) - 3 - 3.

Genitoventral shield (Figure 14) rectangular-elongate, bearing 4 pairs (ag_1, ag_2, g_1, g_2) of long, smooth setae. Anal flaps devoid of setae; two pairs of para-anal setae (h_3 , h_4) present.

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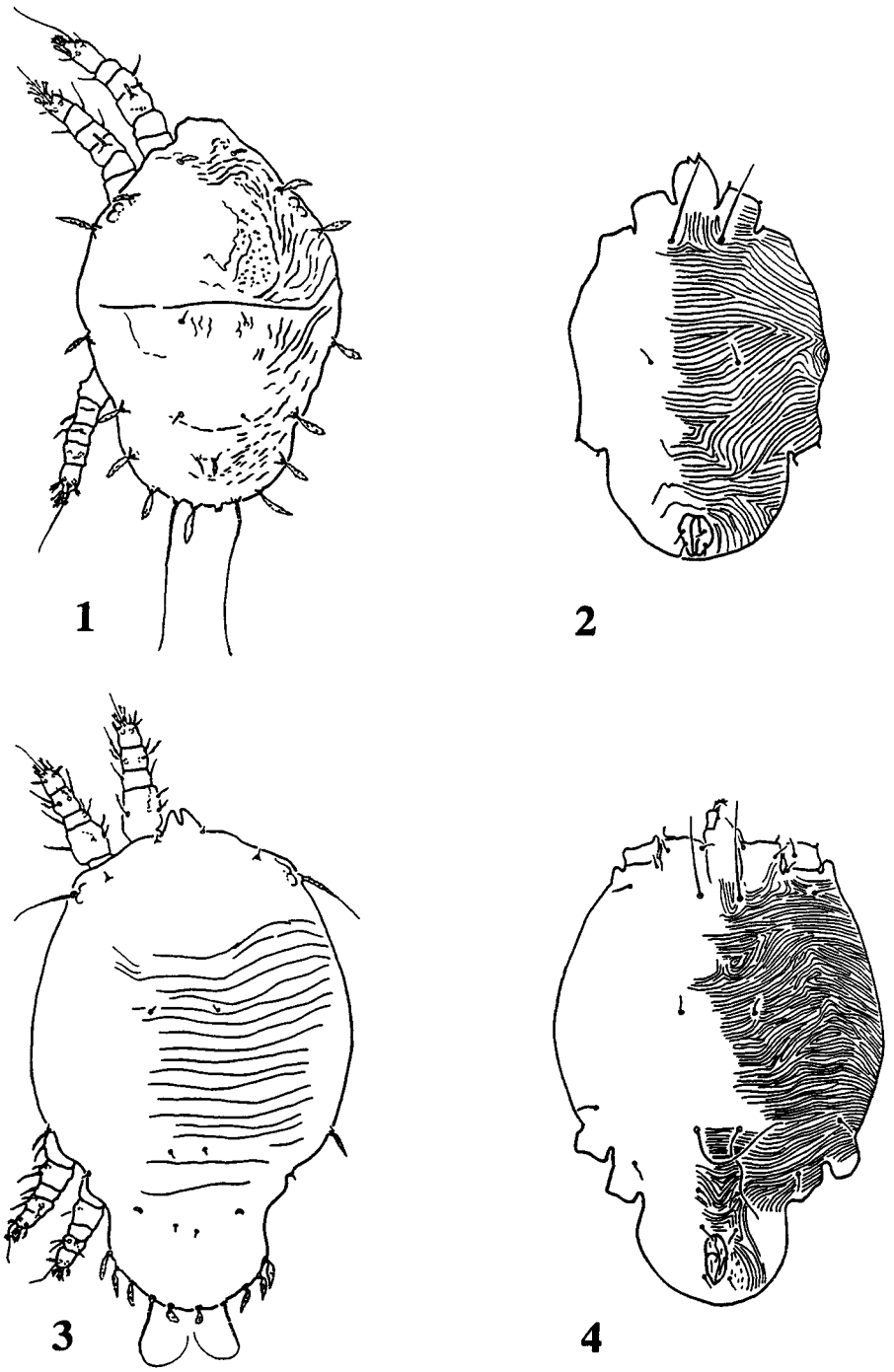

Figs. 1 - 4. *Tenuipalpus oliveirai* n.sp.
1 - Larva, dorsal aspect. 2 - Larva, ventral. 3 - Protonymph, dorsal.
4 - Protonymph, ventral.

Figs. 5 - 14. *Tenuipalpus oliveirai* n.sp.
5 - 10. Deutonymph. 5 - Dorsal aspect. 6 - Palpus. 7 - Tarsus and tibia I. 8 - Tarsus and tibia II. 9 - Ventral aspect, showing internal structures of genital field. 10 - Opisthosomal venter, with initial stage of genito-ventral shield. 11 - 14. Female. 11 - Dorsal aspect. 12 - Gnathosoma, dorsal. 13 - Gnathosoma, ventral. 14 - Genito-ventral shield and anal area.

Except for one pair of agenital shield setae which is added in the female, the full complement of leg and body setae is present in the deutonymph. All tarsi in the deutonymph and in the female with one pair of strong pectinate setae ventrally and all tibiae with one pair of serrate setae ventrally. Other setae as figured.

Length of body (n = 5): 310 um (299 - 323); greatest width of body: 198 (187 - 210).

MALE: Unknown.

DEUTONYMPH. (Figures 5 - 9).

Dorsomedially the idiosoma bears a few wide transverse striae. The humeral setae (c_3) are bifid.

Ventrally on the opisthosoma, internal structures of the egg passage of the reproductive system are strongly visible (Fig. 10); closer examination shows the initial stage of development of the genitoventral shield (Fig. 9), bearing 3 pairs of setae.

Length of body(n = 1): 299 um; greatest width 187 um.

PROTONYMPH. (Figures 3, 4).

Dorsomedially the idiosoma with 17 transverse striae. The full complement of dorsal body setae is already present. Opisthonotal pores are crescentic.

Length of body (n = 3):233 um (180 - 282); greatest width 167 (136 - 193).

LARVA (Figures 1, 2).

Mediodorsal area of propodosoma punctate; laterally striated. All dorsal body setae present, except for first pair of dorsolateral hysterosomal, which occurs in the protonymph. Hysterosomal dorsum with short striae.

Ventrally with one pair of medioventral (IC_3), one pair of coxal I and two pairs of anal setae. Integument finely striated.

Length of body (n = 2): 149 um; greatest width 102 um (95 - 108).

Field recognition: This species is dark red in colour.

TYPE MATERIAL: Holotype, female, ex-*Peschiera fuchsiaefoliae* Miers. (Apocynaceae), "leiteiro", Barretos, São Paulo, Brazil, June 02, 1993 (C.A.L. Oliveira). Four paratype females, one deutonymph, three protonymphs and two larvae, same data as for holotype. In the collection of the Department of Zoology, ESALQ, University of São Paulo, Piracicaba.

This species is named for Prof. Dr. Carlos Amadeu Leite de Oliveira, of UNESP, Jabuticabal Campus, SP, Brazil, for his contributions to Agricultural Acarology in Brazil.

DIAGNOSIS. This species belongs to the *Tenuipalpus caudatus* group of MEYER & SMITH (1979) and of BAKER & TUTTLE (1987) and is close to *T. sclerocaryae* Meyer, differing by the presence of dorsal elevations and by the dorsal ornamentations. This species further differs from *T. sclerocaryae* in that the third propodosomal setae are about six times as long as the first and second pairs of propodosomals whereas those of *T. sclerocaryae* are about twice as long as the first and second pairs.

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