

A NEW *OLIGONYCHUS* AND DESCRIPTION OF THE FEMALE ALLOTYPE OF *OLIGONYCHUS PSIDIUM* ESTEBANES & BAKER (ACARI, TETRANYCHIDAE) FROM *QUALEA GRANDIFLORA* MART. (VOCHYSIACEAE) IN NORTHWESTERN SÃO PAULO, BRAZIL

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ABSTRACT. *Oligonychus longipenis*, **sp.n.** and the female allotype of *O. psidium* Estebanes & Baker, 1968 from *Qualea grandiflora* Mart. (Vochysiaceae) is described. The male of *O. psidium* is redescribed in Northwestern São Paulo (Brazil). This is the first record for *O. psidium* in Brazil.

KEY WORDS. Acari, Tetranychidae, taxonomy

During investigation on acarine fauna associated with wild plants from Northwestern São Paulo (Brazil), two species of the *Oligonychus* were found on *Qualea grandiflora* Mart. (Vochysiaceae). A description of *O. longipenis*, **sp.n.** and the female allotype of *O. psidium* Estebanes & Baker, 1968 are presented. All measurements are given in micrometers (μm). The body length included the rostrum. The range of measurements are shown in parentheses. Setal nomenclature adopted is that of GRANDJEAN (1939), according to LINDQUIST (1985) and, in parentheses, equivalent notations used after JEPSON *et al.* (1975).

The holotype is deposited in the Departamento de Zoologia, Universidade Estadual Paulista (UNESP), Campus de São José do Rio Preto (São Paulo, Brazil). Paratype, allotypes and other specimens studied are in same local as holotype and in author's collection.

Oligonychus longipenis, **sp.n.**

Figs 1-8

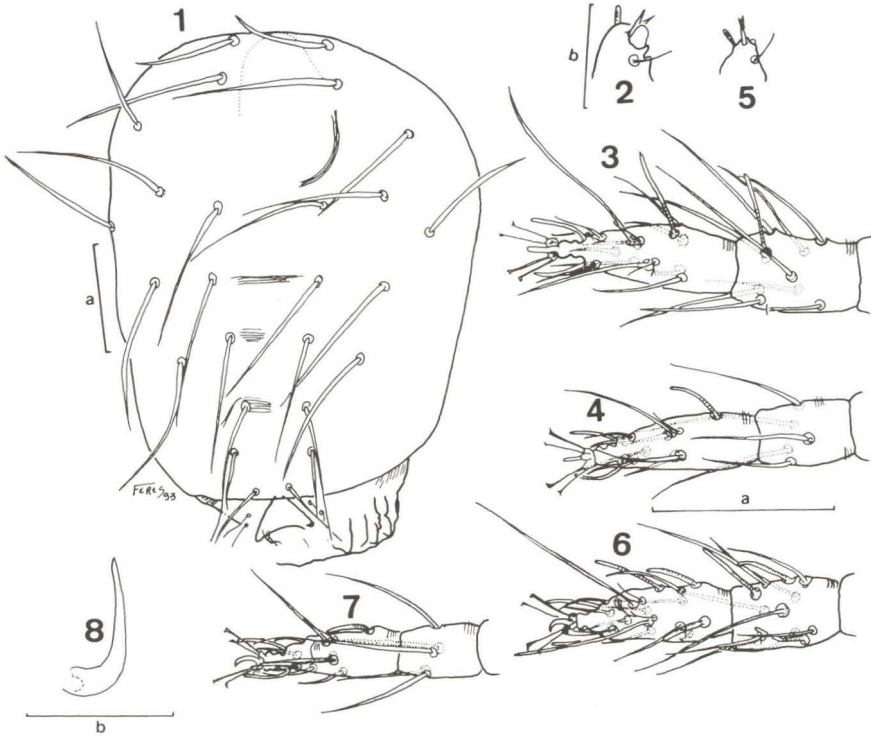
Diagnosis. Resembles *Oligonychus pritchardi* (McGregor, 1950) and *O. propetes* Pritchard & Baker, 1955, but is distinctive in the aedeagus shape.

Female. Measurements (n=2): body length 338 (335-341); width 192 (187-198).

Dorsum (Fig. 1). Prodorsum with longitudinal striae and transversal on opisthosoma; lobes on striae short, rounded, wider than higher and separated by spaces at their bases. Dorsal setae set directly on integument, slender, pubescent and longer than intervals between their bases. Venter: genital flap and area

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Figs 1-8. *Oligonychus longipenis*, sp.n.. (1-4) Female. (1) Dorsal view; (2) palptarsus; (3) tibia and tarsus I; (4) tibia and tarsus II. (5-8) Male. (5) Palptarsus; (6) tibia and tarsus I; (7) tibia and tarsus II; (8) aedeagus. Scale bar a = 50 μ m, b = 20 μ m.

immediately anterior transversally striated. Gnathosoma: stylophore conic and rounded anteriorly. Peritremes straight and ending in a simple bulb. Palptarsus bearing a rounded terminal sensillum, 1.3 times as long as broad; proximal sensillum clubshaped, four times as long as broad (Fig. 2). Legs (Figs 3-4): chaetotaxy (from coxa to tarsus) I: 2-1-10-5-9(1)-13(1)+2 duplex, II: 2-1-7-5-5-10(1)+1 duplex, III: 1-1-3-3-6-9(1), IV: 1-1-2-3-6-9(1). Tarsus I with four tactile setae and one solenidion proximal to duplex setae; tarsus II with one solenidion proximal to duplex setae. With two tactile setae on venter beyond duplex.

Male. Measurements (n=2): body length 286; width 140 (137-143). Gnathosoma: terminal sensillum of palptarsus reduced; proximal sensillum club-shaped, about 3.5 times as long as broad (Fig. 5). Legs (Figs 6-7): chaetotaxy (from coxa to tarsus) I: 2-1-10-5-9(3)--13(3)+2 duplex, II: 2-1-7-5-5-10(1)+1 duplex, III: 1-1-3-3-6-9(1), IV: 1-1-2-3-6-9(1). Tarsus I with four tactile setae and two solenidia proximal to duplex setae; tarsus II with one solenidion proximal to duplex setae. Aedeagus (Fig. 8): with distal two thirds bent dorsad at a right angle,

with long neck gradually curved anteriorly and ending in an acute tip.

Ecological data. Inhabits the upper leaf surface.

Type species. Male **holotype**, female allotype and paratypes (one female and one male), BRAZIL, *São Paulo*: São José do Rio Preto (Sítio Santo Antonio, small farm at 49°17'45"W, 20°50'26"S), ex. *Qualea grandiflora*, VI-21-1990.

Etymology. *Longipenis* from the latin *longus*=long + *penis*.

Oligonychus psidium Estebanes & Baker, 1968

Figs 9-17

Oligonychus psidium Estebanes & Baker, 1968: 94. - Tuttle, Baker & Abbatiello, 1976: 73.

This species was described based only on the male, who distinguished it from other species in this genus by the presence of nine tactile setae on tibia I, at least two setae more than in other described species up to that time; the aedeagus is similar to that of *Oligonychus pityinus* Pritchard & Baker, 1955, but differs by greater dorsal bending.

Female. Measurements (n=2): body length 357 (352-363); width 209. Green when alive.

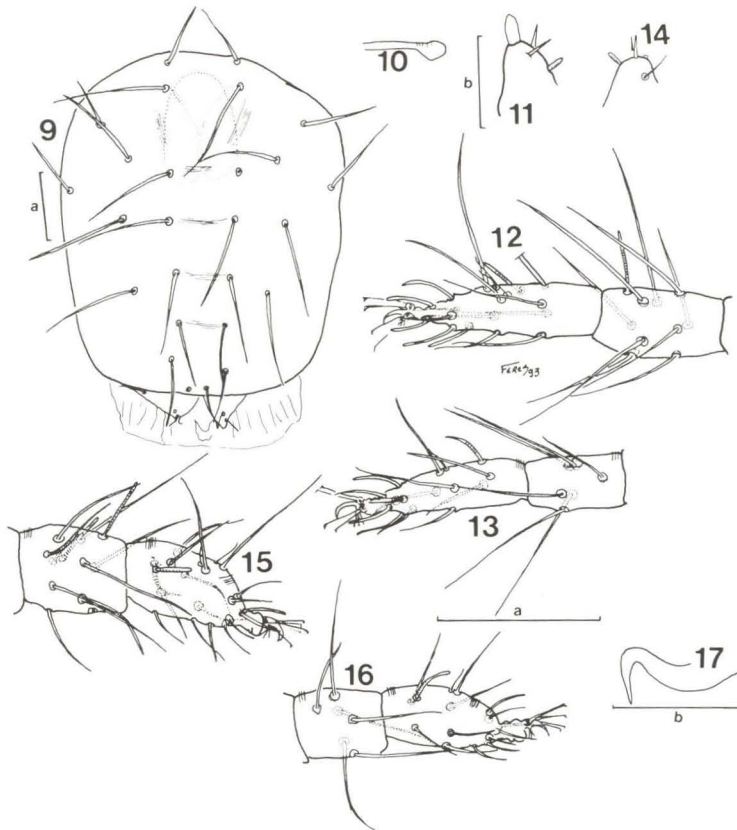
Dorsum (Fig. 9). Integument with longitudinal striae on prodorsum and transversal striae on opisthosoma, with wide rounded lobes, separated by intervals at their bases. Dorsal setae set directly on integument, longer than intervals between their bases, slender, pubescent and lightly enlarged near the base. Gnathosoma: stylophore conic and rounded anteriorly. Peritremes straight and ending in a simple bulb (Fig. 10). Terminal sensillum of palptarsus well developed, about twice as long as wide; proximal sensillum club-shaped, three times as long as wide (Fig. 11). Legs (Figs 12-13): chaetotaxy (from coxa to tarsus) I: 2-1-8-5-9(1)-13(1)+2 duplex, II: 2-1-7-5-6-12(1)+1 duplex, III: 1-1-3-3-5-9(1), IV: 1-1-2-3-6-9(1). Tarsus I with four tactile setae and one solenidion proximal to duplex setae; tarsus II with two tactile setae and one solenidion proximal to duplex setae.

Male. Measurements (n=1): body length 297.

Gnathosoma. Terminal sensillum of the palptarsus reduced and conic; proximal sensillum club-shaped, with a slight basal constriction, about three times as long as wide (Fig. 14). Legs (Figs 15-16): chaetotaxy (from coxa to tarsus) I: 2-1-8-5-9(3)+2 duplex, II: 2-1-7-5-6-12(1)+1 duplex, III: 1-1-3-3-5-9(1), IV: 1-1-2-3-6-9(1). Tarsus I with four tactile setae and three solenidia proximal to duplex setae; tarsus II with three tactile setae and one solenidion proximal to duplex setae. Aedeagus (Fig 17): similar to drawn by ESTEBANES & BAKER (1968: Fig. 134). Shaft curved dorsad and with distal half bent ventrad, at about a right angle, ending in an acute tip.

Type species. Female allotype, BRAZIL, *São Paulo*: São José do Rio Preto (Sítio São Luiz, small farm at 49°17'48"W, 20°44'46"S), ex. *Qualea grandiflora*, VI-1990. One female and one male, same data as allotype.

Distribution. Mexico and Brazil (*São Paulo*).



Figs 9-17. *Oligonychus psidium*. (9-13) Female. (9) Dorsal view; (10) peritreme; (11) palptarsus; (12) tibia and tarsus I; (13) tibia and tarsus II. (14-17) Male. (14) Palptarsus; (15) tibia and tarsus I; (16) tibia and tarsus II; (17) aedeagus. Scale bar a = 50 μ m, b = 20 μ m.

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