

TWO NEW *EOTETRANYCHUS* AND A NEW
OLIGONYCHUS FROM SOUTHERN FLORIDA
(ACARINA: TETRANYCHIDAE)

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The mites described below are all fairly common species in this area.

Eotetranychus tremae, n. sp.
(Figs. 1-4)

In the key to the species by Pritchard and Baker¹ *E. tremae* runs to *hicoriae* (McG.) but the female differs from McGregor's drawings and description² of *hicoriae* in that the peritreme ends in a shorter hook, and the male in that the distal part of the aedeagus is long, tapering, nearly straight, and forms about a right angle with the proximal part.

FEMALE: Grayish white with two pairs of blackish spots at sides of hysterosoma—one pair at humeral angle, the other about half way to end of body; dorsal body setae slender, tapering to apex and each longer than distance to seta next behind; peritreme ending in short hook. Terminal palpal sensilla large and about twice as long as wide, subterminal sensilla much smaller. Tibia I with one sensory and nine tactile setae, tarsus I with one sensory and five (sometimes four) tactile setae proximal to duplexes; tibia II with eight tactile setae, tarsus II with one sensory and three (sometimes two) tactile setae proximal to duplexes; tibia III with six tactile setae. Genital flap with transverse striae, area just anterior to it with longitudinal striae. Length of body including gnathosoma 350, width 183 microns.

MALE: Similar to female in colour, shape of peritreme, and body setae. Terminal sensilla of palpus almost conical, slightly more than twice as long as wide at base, subterminal sensilla somewhat longer than terminal. Tibia I with nine tactile and three (sometimes four) sensory setae, tarsus I with four (sometimes three) tactile and three sensory setae proximal to duplexes; tibia II with eight tactile setae, tarsus II with one sensory and three tactile setae proximal to duplexes. Aedeagus with distal part directed ventrad, long and tapering and forming about a right angle with basal part. Length of body including gnathosoma 261, width 120 microns.

Holotype: Male, Coral Gables, Florida, 22 May, 1956, (D. De Leon) on *Trema floridana*. *Paratypes*: 15 males, 25 females, 12 nymphs, and 2 larvae, 22 November, 1955, to 22 May, 1956; other collection data same as for holotype.

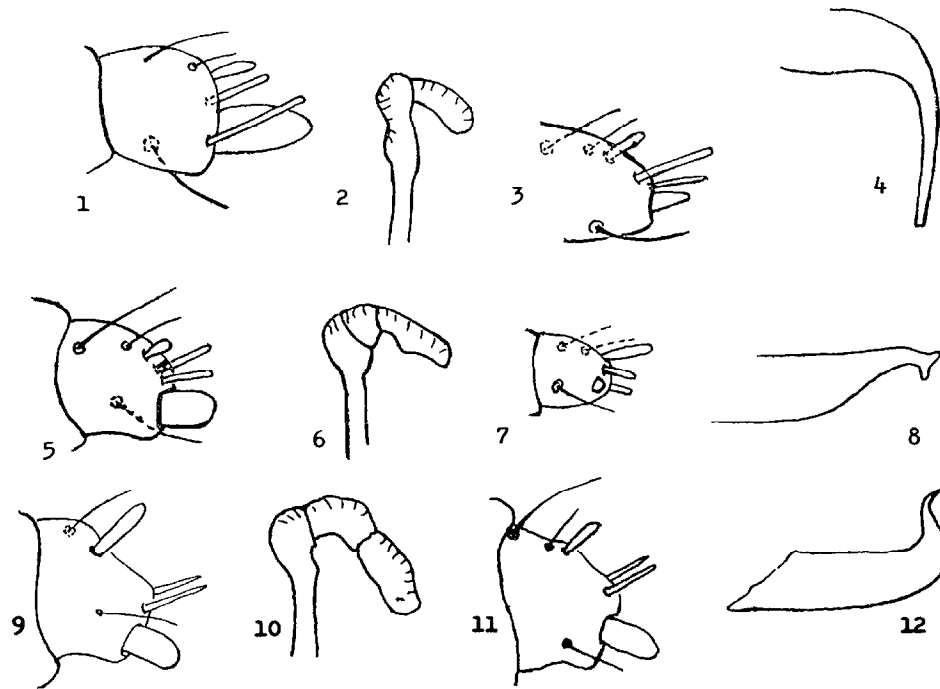
Eotetranychus mastichi, n. sp.
(Figs. 5-8)

E. mastichi runs to *perplexus* (McGregor) from the Pacific Coast in the key by Pritchard and Baker, but the male differs from McGregor's

¹ Pritchard, A. E. and E. W. Baker. 1955. A revision of the spider mite family Tetranychidae. Pac. Coast Ent. Soc. Memoir 2, 472p.

² McGregor, E. A. 1950. Mites of the family Tetranychidae. Amer. Midl. Nat. 44 (2): 257-420.

drawings of *perplexus* (op. cit.) in that the outline of the distal end of the aedeagus is concave and its general shape is different, and the female differs from McGregor's description in that tarsus I bears four tactile setae proximal of the duplexes.



Explanation of Figures.

Figs. 1 to 4. *Eotetranychus tremae*, n. sp. Terminal palpal segment of female, distal end of peritreme of female, terminal palpal segment of male, aedeagus.

Figs. 5 to 8. *E. mastichi*, n. sp. Parts in same order as for *tremae*.

Figs. 9 to 12. *Oligonychus plicarum*, n. sp. Parts in same order as for *E. tremae*.

FEMALE: Pearly white to grayish in colour with two pairs of blackish spots at sides of hysterosoma and with a blackish band connecting anterior pair; dorsal body setae slender, tapering to apex, each longer than distance to seta next behind; peritreme terminating distad in a short right-angled to J-shaped hook. Terminal palpal sensilla of moderate size and about three-fifths as wide as long, subterminal sensilla much smaller. Tibia I with one sensory and nine tactile setae, tarsus I with four (rarely five) tactile setae (and rarely one sensory seta) proximal of duplexes; tibia II with eight tactile setae, tarsus II with one tactile and one sensory seta proximal of duplexes, tibia III with six tactile setae. Genital flap and area just anterior to it with transverse striae. Length of body including gnathosoma 363, width 208 microns.

MALE: Cream to pale orange in colour; dorsal body setae similar to those of female's. Terminal sensilla of palpus rudimentary, subterminal sensilla about three times as long as wide. Peritreme terminating distad

as a short right-angled to J-shaped hook. Tibia I with one sensory and nine tactile setae, tarsus I with four tactile and two (sometimes one) sensory setae proximal of duplexes; tibia II with eight tactile setae, tarsus II with one tactile and one sensory seta (sometimes no tactile and two sensory setae) proximal of duplexes. Aedeagus ending in a knob with dorsal and ventral angles, the outline of end concave. Length of body including gnathosoma 300 microns, width 152.

Holotype: Male, Coral Gables, Florida, 29 November, 1955, (D. De Leon), on *Sideroxylon foetidissimum*. *Paratypes*: 28 males, 32 females, 21 nymphs, and 12 larvae, 8 November, 1955, to 8 May, 1956; other collection data same as for holotype.

Oligonychus plicarum, n. sp.

(Figs. 9-12)

The male of *O. plicarum* runs to *indicus* in the key to the species by Pritchard and Baker (*op. cit.*) but the peritremes are retrorse distad; the male is also distinctive in the shape of the aedeagus and in several other characters.

FEMALE: Yellowish orange, often with darker orange markings at sides of hysterosoma; dorsal body setae slender, tapering to apex, each longer than distance to seta next behind; peritremes retrorse distad. Terminal palpal sensilla about once and a half as long as wide, subterminal sensilla about four times as long as wide, slightly longer than terminal sensilla. Tibia I with one sensory and nine tactile setae, tarsus I with four tactile setae (a sensory seta usually in line with proximal duplexes, but sometimes slightly proximal of them) proximal of proximal set of duplexes; tibia II with seven tactile setae, tarsus II with one sensory and two tactile setae, tibia III with six tactile setae. Hysterosomal striae in mid-dorsal area more or less transverse, except between anterior pair of sacra where they are usually longitudinal. Length of body including gnathosoma 465, width 216 microns.

MALE: Similar to female, but usually rather hyaline. Terminal sensilla of palpus not quite twice as long as wide, subterminal sensilla smaller than terminal sensilla. Tibia I with two sensory and nine tactile setae, tarsus I with two sensory and four tactile setae proximal of duplexes, two ventral tactile setae distal of duplexes, proximoventral setae of empodium forming a broad, sharply pointed spur considerably larger than distal part of empodium; tibia II with seven tactile setae, tarsus II with one sensory and two tactile setae proximal of duplexes, tibia III with six tactile setae. Aedeagus with caudal part bent dorsad at about a right angle to shaft; distal part without a knob, tapering rapidly to a point and directed caudo-dorsad. Length of body including gnathosoma 416, width 177 microns.

Holotype: Male, Coral Gables, Florida, 23 July, 1956, (D. De Leon) from *Serenoa repens*. *Paratypes*: 14 females, 2 males, 1 nymph, 2 larvae, 20 April, 1955, from *Sabal palmetto* and 7 males, 16 females, 2 nymphs, 2 larvae, 23 July, 1956, from *Serenoa repens*.

Paratypes of these three species will be deposited in the University of Florida Collections, Gainesville.