

*BREVIPALPUS FLORIDIANUS*, A NEW MITE FROM  
SOUTHERN FLORIDA (ACARINA: TENUIPALPIDAE)

DONALD DE LEON  
Coral Gables, Florida

The genus *Brevipalpus* is world wide in distribution and is a large one containing about 50 described species, over half of which have been found in this country. Nine species have been found in Florida; of these, one, *phoenicis* (Geij.), cosmopolitan in distribution according to Pritchard and Baker,<sup>1</sup> is a common pest on a wide variety of plants. In South Florida, I have taken it from mango, avocado, coconut (it is often abundant on the seedlings), maple, mahogany, *Caladium*, *Hibiscus*, *Cordyline*, and more than fifty additional hosts. Two others of the species found in Florida, *B. linki* Baker, on live oak, and *B. floridianus*, n. sp., on sweet bay, have not been found outside the State and both appear to be limited to a single host.

*Brevipalpus floridianus*, n. sp.

*B. floridianus* belongs to the group of mites with six dorsolateral hysterosomals, two setae on the terminal palpal segment, and a single distal sensilla on tarsus I of the female. It is readily distinguished from all others in this group by the area between the anterior and posterior medioventrals being fully and distinctly covered with areolae. The nymph is also distinctive; dorsolaterals 2, 3, and 8 are about two-thirds the length of the body and the remaining ones are relatively long and spiculate.

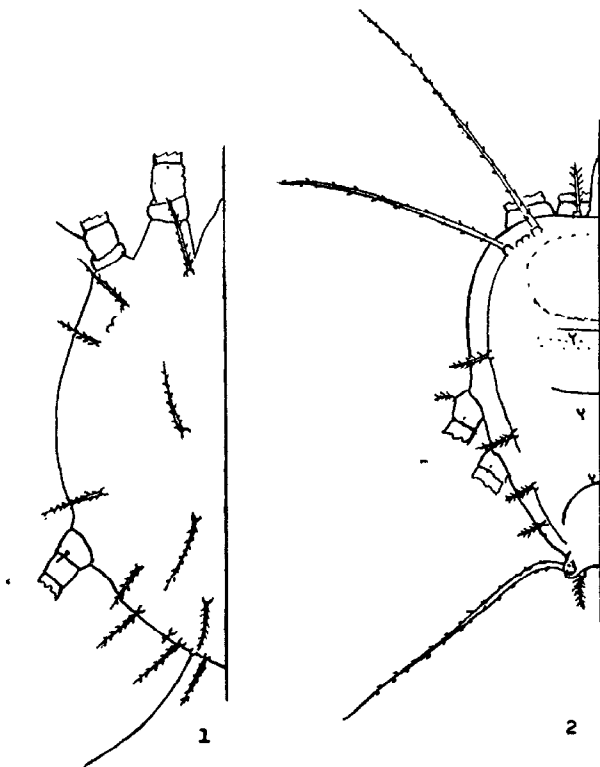
FEMALE:—Body ovate, reddish. Rostrum extending to a point about even with middle of femur I; rostral shield ending at a point slightly behind base of femur I, bilobed. Propodosoma dorsad evenly covered with areolae irregularly circular to oval in outline, the great majority more or less of same size (about 3 to 4 microns in short diameter); towards sides areolae somewhat larger and oval ones more numerous. Areolar pattern of hysterosoma somewhat similar to propodosoma but areolae more irregular in shape and larger; areolae in area between dorsocentrals 2 and 3 much wider than long, many extending nearly full width of area; caudal of this area and in some specimens anterior to this area, areolae become successively narrower. Ventrad, areolar pattern similar to dorsal propodosomal pattern and covering practically entire surface including area between anterior and posterior medioventrals; areolae of ventral plate predominantly wider than long in caudal mid-area. First pair of dorsal propodosomals obovate, about as long as distance between bases; second and third pairs small, narrowly elliptic; hysterosoma with six pairs of serrate, subequal, narrowly elliptic to oval dorsolaterals, distances between respective bases of 1 to 5 much greater than setal lengths, distance between 5 and 6 about equal to their lengths; dorsocentrals broadly oval, serrate, first pair about one-third as long, and second and third pairs about half as long as transverse distance between respective bases. One pair of pores present. Posterior medioventrals long, anterior pair short, Terminal palpal segment with two setae and a sensilla. Legs slender. Dorsal seta of femur I about

<sup>1</sup> Pritchard, A. E., and E. W. Baker. 1952. The false spider mites of California (Acarina: Phytoptipalpidae). *Uni. Calif. Publ. Ent.* 9(1): 1-93.

three-fourths width of femur, broadly elliptic, serrate; dorsal seta of femur II about one-half width of femur, narrowly elliptic, serrate; dorsal setae of patellae and tibiae I and II almost setiform, faintly serrate; tarsus II with a posterodistal sensilla about as long as width of tarsus; femur IV slightly more than three times as long as wide. Length including rostrum 291, width 162 microns.

**MALE:**—Resembles female, but hysterosoma without transverse areolae, and dorsocentrals somewhat smaller. Dorsolateral hysterosomals slender, strongly pectinate; 1 to 4 subequal in length (about 22 microns); 2, 3, and 4 about as long as distance between adjacent bases, 5 and 6 somewhat shorter than 4 and less than their length apart. Tarsus II with an anterior and a posterior distal sensilla. Length including rostrum 284, width 132 microns.

**DEUTONYMPH:**— (Fig. 2); mottled grey, black and red. Dorsocentrals minute. Dorsolaterals 2, 3, and 8 about one-half to two-thirds length of body, sparsely, weakly spiculate; 1 narrow, about 33 microns long, spiculate, the remaining setae about one-half to two-thirds as long as 1 and spiculate; seta 8 arising from a prominent lateral protuberance, seta 9 apparently missing; setae 3 and 4 more variable in length than others — in a few specimens seta 3 about



Larva and deutonymph of *Brevipalpus floridianus*, n. sp. Fig. 1. Dorsum of larva; Fig. 2. Dorsum of deutonymph. Scale of drawing of larva twice that of deutonymph.

a third as long as 2, and in some specimens seta 4 two to three times as long as 5.

**LARVA:**—(Fig. 1); red, dorsal body setae spiculate, 17 to 37 microns long, except dorsolateral 7 which is minute and 9 which is more than twice as long as 10 and extremely slender.

**HOLOTYPE:**—Female, Coral Gables, Florida, 15 November, 1955, (D. De Leon) from *Persea (Tamala) borbonia*. Allotype: same data as for holotype and on same slide. Paratypes: 9 males, 10 females, 10 nymphs, and 10 larvae, November 8 to December 20, 1955, other data as for holotype. The holotype and allotype will be deposited in the U. S. National Museum and paratypes in the University of Florida collections, Gainesville.