

Brevipalpus californicus (Banks), a pest of woody ornamentals

(ACARINA:TENUIPALPIDAE)¹

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INTRODUCTION: Banks (1904) described this mite as Tenuipalpus californicus from specimens collected at Redlands, California, feeding on oranges. McGregor (1949) placed it in the genus Brevipalpus. There are at least 5 synonyms for this species (Pritchard and Baker, 1958:216).

DISTRIBUTION: B. californicus has been reported from Algeria, Australia, Ceylon, Egypt, France, Israel, Malaya, Mexico, Natal, South Rhodesia, Transvaal, and the U.S.A. In the U. S.: California, Florida, Hawaii, Kansas, Louisiana, Maryland, and Texas. In Florida it has been reported from the following counties: Alachua, Baker, Brevard, Dade, Duval, Hillsborough, Indian River, Jefferson, Martin, Orange, Palm Beach, Pinellas, Polk, Putnam, Sarasota, Seminole, and Volusia.

ECONOMIC IMPORTANCE: Fruit, leaves, and stems of fruit trees, and woody ornamentals are injured by the feeding of this mite. Injury to Pittosporum sp. is shown in Figure 1.

HOSTS: The following genera contain 1 or more species of host plants: Acacia, Acer, Acineta, Allamanda, Anguloa, Anthurium, Antidesma, Aphelandra, Bletia, Brassia, Callicarpa, Callistemon, Calycanthus, Catasetum, Citrus, Clausena, Clerodendrum, Cocos, Codiaeum, Columnnea, Cordia, Cupressus, Crescentia, Croton, Dendrobium, Dodonaea, Dolichos, Epidendrum, Euphorbia, Ficus, Flacourtia, Flaveria, Gardenia, Gongor, Hibiscus, Houlletia, Howea, Ilex, Jacaranda, Ligustrum, Liquidambar, Lycaste, Magnolia, Malus, Melia, Odontoglossum, Peristeria, Persea, Pilea, Podocarpus, Poinsettia, Rhododendron, Sida, Solanum, Stantropea, Tabebuia, Thea, Thunbergia, Trevesia, Trichophila, Vitis, and Wisteria.

DESCRIPTION: Female 228 microns long (fig. 2); reddish in immature specimens and rufous amber in adults; body shape from above ovate-sagittate; width approximately 2/3 that of the length; dorsal cuticular surface of body conspicuously reticulated. The areolae on cephalothorax laterad of mandibular plate about 1/3 longer than wide. Dorsally the cephalothorax bears 3 pairs of rather weak setae; 1 pair at anterior margin between coxae I, 1 just in front of and 1 just behind eyes. Abdomen bearing 20 very weak setae dorsally: 7 along each lateral margin from the main suture back to the caudal tip; 3 submedian pairs, the first near the main suture, the 2nd and 3rd pairs opposite the 2nd and 3rd marginal setae, respectively. All dorsal setae appear to be simple, unpectinate, and unserrate. A pair of dusky-bordered pores open dorsally on the abdomen a short distance behind the main suture. Legs short, stout, the posterior pair barely reaching beyond the tip of abdomen.

SURVEY AND DETECTION: Look for necrotic areas on the underside of leaves (fig. 1) and the presence of white molt skins or reddish, flat mites that move slowly when disturbed.

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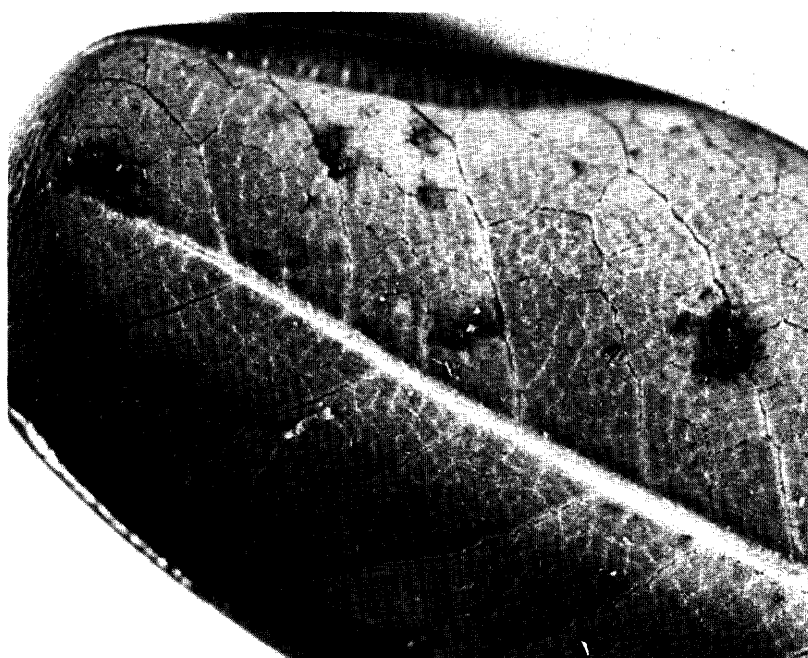


Fig. 1. Mite feeding injury to pittosporum. (DPI 700303).

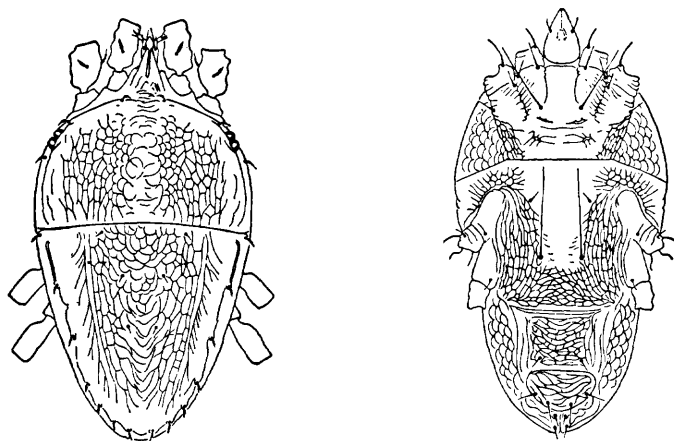


Fig. 2. Dorsal and ventral views of adult female mite (DPI 702312).

LITERATURE CITED:

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