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White peach scale, Pseudaulacaspis pentagona (Targ.-Tozz.)

(HOMOPTERA:COCCOIDEA:DIASPIDIDAE)[1]

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SYNONYMY: Diaspis pentagona Targioni-Tozzetti; Diaspis amygdali Tryson; Diaspis lanatus Morgan and Cockerell; Chionaspis prunicola Maskell; Aulacaspis pentagona (Targioni); Sasakiaspis pentagona (Targioni).

INTRODUCTION: White peach scale also has been referred to as white scale and West Indian peach scale. It is one of the most economically important scale insects in the Southeastern United States. It is native to Italy and has a widespread distribution in southern Europe as well as the West Indies (Paddock 1978).

DESCRIPTION: The adult female armor (fig. 1) is white, grayish-white, or yellowish-white. The armor is thick, convex, circular, with the yellowish orange to brick red exuviae near the margin. Frequently, the armor has small pieces of plant bark incorporated in or attached to it, obscuring its true color.

Fig. 1. White peach scale adult females. (DPI Photo #702826-1)

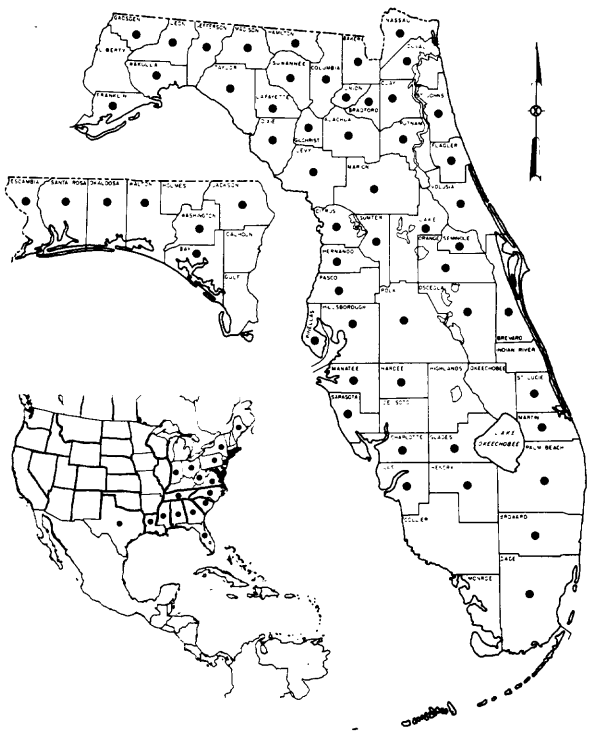

Fig. 2. Distribution of white peach scale in the U. S. and Florida. (DPI Photo #702810).

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The adult male armor is elongate, white and non-carinate. Usually, male crawlers settle near the mother scale and appear as clusters of white male armors near the base of plants. Female crawlers apparently tend to move upward on the plant away from the mother scale (Bennett & Brown 1958).

BIOLOGY: Females begin oviposition in 14-16 days after mating, and in 8-9 days their entire compliment of eggs are deposited (Bennett and Brown 1958). The eggs that are deposited early in oviposition become daughters, and these eggs are white-coral in color. The eggs that are deposited late in oviposition become sons, and these eggs are pinkish-white. The sex ratio is very near 1:1 (Bennett and Brown 1958).

Eggs begin to hatch in 3-4 days after oviposition. Crawlers settle and begin feeding within 48 hours after hatching. The first nymphal stage (crawler) is completed in 7-8 days. After about 20 days and 2 more molts, adult females are present. During these 20 days the 2nd instar males construct a long white armor, and after 3 more molts emerge as winged adult males. Progeny are produced only through mating.

DISTRIBUTION: See fig. 2 for Florida and U.S. distribution. White peach scale was reported in Oregon in 1969 (Paddock 1978). It has been eradicated from California (Nakahara 1982). It is also known from most of the Caribbean area, Central America, and South America. For the complete foreign distribution see Nakahara (1982).

HOSTS: Polyphagous; some important hosts are peach, almond, plum, pear, apricot, walnut, and fig. In Florida it is frequently found on Ligustrum sinense Lour.

ECONOMIC IMPORTANCE: This is one of the most economically important scale insect pests of fruit and ornamental plants in the eastern United States. In states where peaches are a major crop several thousand dollars are spent each year for control of white peach scale. It occurs on the bark, leaf, and fruit and is considered a "triple threat" (Paddock 1978).

SURVEY AND DETECTION:
1. Look for scales on the bark, leaves, and fruit.
2. Usually the elongate and clustered white male armor can be observed before the more cryptic females.

CONTROL: Control is very difficult, and several applications of an approved insecticide will be necessary. If possible, controls should be applied when crawlers are present, since they are much more vulnerable to insecticides.

LITERATURE CITED:
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Nakahara, S. 1982. Checklist of the armored scales (Homoptera:Diaspididae) of the conterminous United States. USDA-APHIS-PPQ. 110p.

Paddock. E. L. 1978. White peach scale, Pseudaulacaspis pentagona (Targ.). Calif. Dept. of Food and Agric., Division of Plant Industry - Exclusion and Detection. Detection Manual (Revision). D.T. 3:89.