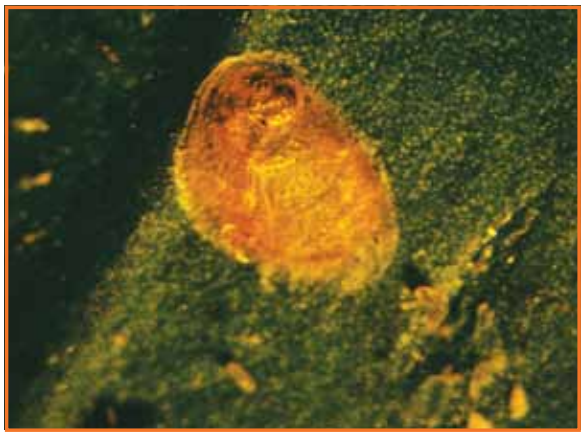

Fig. 1. *Adult female chaff scale (Parlatoria pergandii Comstock)*

Fig. 2. *Chaff scale buildup on leaves and twigs*

Chaff scale

By Michael E. Rogers

SCIENTIFIC NAME

Parlatoria pergandii Comstock (Homoptera: Diaspididae)

IDENTIFICATION

Chaff scale is an armored scale insect that is most often found on the trunk and inner canopy of citrus trees. Adult females (Fig. 1) are brown to gray in color. The outer covering of this scale species is irregular in shape, generally conforming to the dimensions of the cracks, crevices or depressions where they are found. By flipping the scale over, one can see the insect's body that is flat, circular and purple in color. Eggs are laid beneath the covering of the female, which provides protection until they hatch. Immature chaff scales resemble adults, but are smaller in size. Males are similar in appearance to females but their covering is more elongated in shape.

DAMAGE

Chaff scale has a slower developmental rate compared to many other scale species. Thus, it can take several years for populations of this scale to build up to noticeable levels (Fig. 2). Unlike other species of scale insects, feeding by chaff scale has not been shown to cause damage to leaves or twigs. The primary concern with chaff scale is the cosmetic damage caused to fresh fruit. Because chaff scale inhabits depressions on the fruit surface, they can be difficult to remove in the packinghouse. When they are successfully removed, the location where they have fed exhibits spotting on the fruit surface that remains light yellow or green at maturity (Fig. 3).

Fig. 3. *Tangerine with areas of the fruit surface that failed to color properly as a result of feeding by chaff scale*

MANAGEMENT

The slow rate of reproduction combined with the control provided by the parasitic wasp *Aphytis hispanicus* (Mercet) helps keep chaff scale from becoming a significant problem in most cases. In isolated cases where a fresh fruit block has a history of chaff scale problems, infestation of fruit can be minimized using two insecticide applications targeting the crawler stage of this insect — one spray post-bloom and the second around the middle of July.

Michael E. Rogers is a University of Florida-IFAS associate professor of entomology at the Citrus Research and Education Center in Lake Alfred.