

Tessellated Scale, *Eucalymnatus tessellatus* (Signoret) (Insecta: Hemiptera: Coccidae)¹

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Introduction

Tessellated or palm scale is a soft scale that was first described in France by V. Signoret in 1873 from specimens collected on a palm he reported as *Caryota ursus*. The genus *Eucalymnatus*, according to Borchsenius (1957), contains 17 species; two species are Ethiopian in origin and the remainder neotropical. Borchsenius (1957) considers *E. tessellatus* (Sign.) probably South American in origin and disseminated by man to all parts of the world on its cultivated hosts.

Synonymy

Lecanium tessellatum Signoret, 1873;
Eucalymnatus tessellatus, Cockerell & Parrott, 1901;
Eucalymnatus, Lindinger, 1943.

Distribution

In Florida, Division of Plant Industry collections include specimens from the following counties: Alachua, Baker, Brevard, Broward, Charlotte, Clay, Collier, Dade, Dixie, Duval, Escambia, Flagler, Glades, Gulf, Hendry, Hernando, Highlands,

Hillsborough, Indian River, Jefferson, Lake, Lee, Leon, Manatee, Marion, Martin, Monroe, Nassau, Orange, Palm Beach, Pasco, Pinellas, Polk, Putnam, St. Johns, St. Lucie, Sarasota, Seminole, and Volusia.

Description

The adult female is oval, opaque, reddish brown to dark brown, and 4 to 5 mm in length. The apex is angulate and the posterior broadly rounded. The dorsal surface appears checkered or cellular in pattern when examined with the aid of a 10-power hand lens or magnifying glass. A median, longitudinal, smooth ridge divides the cellular pattern on the dorsal surface. The cells formed nearer the ridge appear concave, progressively becoming flattened outwardly to the larger, flat, marginal cells.

Hosts

Achras zapota L. (sapodilla), *Ajuga reptans* L. (bugle weed), *Allamanda neriifolia* Hook., *Alocasia* sp., *Alpinia speciosa* (Wendl.) Schum. (shell ginger), *Annona muricata* L. (soursop), *A. reticulata* L. (common custard-apple, bullocks-heart), *Anthurium andraeanum* Lind., *A. magnificum* Lind.,

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Figure 1. A female tessellated scale, *Eucalymnatus tessellatus* (Signoret), on host. Credits: Division of Plant Industry

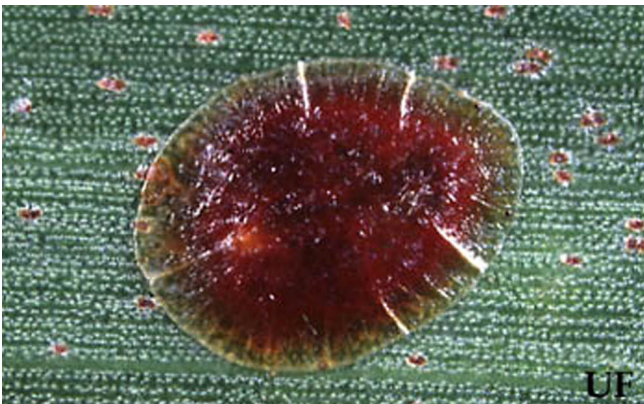


Figure 2. Tessellated scale, *Eucalymnatus tessellatus* (Signoret). Credits: Paul. M. Choate, University of Florida

Archontophoenix alexandrae Wendl. & Drude (alexander palm), *Ardisia escallonioides* Schiede & Deppe (marlberry), *A. pickeringia* Torr. & Gray, *Areca catechu* L. (betelnut palm), *Arecastrum romanzoffianum* Becc. (queen's palm), *Asplenium nidus* L. (bird's nest fern), *Baccharis angustifolia* Michx. (groundsel), *Bischofia javanica* Toog., *Brunfelsia* sp. (lady-of-the-night), cactus (unknown), *Callistemon* spp. (bottlebrush), *Calocarpum sapota* Merr. (sapota), *Calophyllum* sp.

(beauty-leaf), *Carissa* sp., *Caryota mitis* Lour. (fish-tail palm), *C. urens* L. (wine-palm), *Cestrum* sp. (jessamine), *Chamaedorea elegans* Mart. (neanthe bella palm, dwarf palm, parlor palm), *C. tenella* H. Wendl., *Chrysalidocarpus lutescens* Wendl. (areca palm), *Chrysophyllum cainito* L. (star-apple), *Chrysophyllum* sp. (satinleaf), *Cinnamomum cassia* Nees & Eberm. (cassia bark tree), *Cinnamomum* sp. (cinnamon), *Cleyera album* Wendl. & Drude, *Dieffenbachia* sp., *Diospyros ebenaster* Retz., *Dipholis salicifolia* (L.) A. DC. (willow bustic), *Dizygotheca elegantissima* (Veitch) Vig. & Guill. (aralia), *Dracaena* sp., *Elaeocarpus cyaneus* Sims, *Ervatamia coronaria* Stapf. (crape-jasmine), *Eugenia hookeriana* Hort. (Australian brush cherry), *Euphoria longana* Lam. (longan, lungan), *Eurya* sp., *Fatsyhedera lizei* (Cochot) Guill., *Fatsia* sp., *Feijoa sellowiana* Berg., *Ficus jacquiniaefolia* A. Rich (jacquinia fig), *F. rubiginosa* Vent. (rusty fig), *Gardenia jasminoides* Ellis (cape jasmine), *Genipa clusiaefolia* (Jacq.) Griseb. (seven-year apple), *Gerbera jamesonii* Bolus (African daisy), *Gordonia lasianthus* (L.) Ellis (loblolly bay), *Hedera* sp. (English ivy, ivy), *Hedychium* sp. (gingerlily), *Homalocladium platycladium* Bailey (ribbon plant, ribbon bush, tapeworm plant), *Ilex cassine* L. (Florida holly, dahoon holly, yaupon holly), *I. cornuta* Lindl. (Chinese holly), *I. cornuta* Lindl. 'Burfordii' (Burford holly), *I. glabra* (L.) A. Gray (gallberry), *I. latifolia* Thunb. (lusterleaf holly), *Ixora parviflora* Vahl. (giant ixora), *Ixora* sp. (white ixora), *Jasminum* sp. (jasmine), *Kentia belmoreana* F. Muell., *Kigelia pinnata* DC. (sausage tree), *Laurus nobilis* L. (sweet bay tree), *Litchi chinensis* Sonner (lychee), *Lucuma nervosa* A. DC. (canistel, eggfruit), *Macrozamia peroffskyana* Miq. (a cycad), *Magnolia virginiana* L. (white bay), *Mangifera indica* L. (mango), *Mascarena* sp., *Melaleuca leucadendron* L. (punk tree, cajeput), *Mimusops emarginata* L. (wild sapodilla), *M. roxburghiana* Wight (bulletwood), *Muehlenbeckia* sp. (inch plant, maidenhair vine, wire plant), *Musa* sp. (banana), *Myrtus* sp., *Nerium* sp. (oleander), *Ochrosia* sp. (kopsia), *Ocotea catesbyana* (Michx.) Sarg., *Peltandra virginica* Kunth (green arrow-arum), *Persea americana* Mill. (avocado), *Philodendron* sp., *Phoenix roebeleni* O'Brien (pigmy date palm), *Phoradendron flavescens* Nutt. (mistletoe), *Pilea* sp. (aluminum plant),

Ptychosperma elegans (R. Br.) Blume (solitaire palm), *Rapanea guaynensis* Aubl., *Rhapis excelsa* (Thunb.) Henry (lady palm), *Rhaphidophora decursiva* Scott, *Rhodomyrtus* sp. (downy myrtle), *Schinus terebinthifolius* Raddi (Brazilian pepper tree), *Scindapsus* sp. (pothos), *Stigmaphyllon* sp., *Strobilanthes* sp., *Syzygium jambos* Alston (rose apple), *Tetrapanax papyriferus* Koch (Chinese rice paper plant), *Thevetia peruviana* (Pers.) Schum. (luckynut), *Thunbergia* sp., *Trachycarpus fortunei* H. Wendl. (windmill palm), *Trevesia palmata* Vis. 'Micholitzii' (devil's tongue) and *Viburnum odoratissimum* Ker.



Figure 3. Tessellated scale, *Eucalymnatus tessellatus* (Signoret), on ribbon bush, *Homalocladium platycladium* Bailey. Credits: Division of Plant Industry

Economic Importance

Tessellated scale is primarily a leaf-infesting soft scale and a greenhouse pest. In South Florida, it is frequently found out-of-doors on palms, crape-jasmine, and mango. Infestations are often of economic importance in commercial nurseries whenever pest management programs are neglected.

Management

Insect Management Guide for Fruit (http://edis.ifas.ufl.edu/MENU_IG:Fruit_and_Nuts)

Insect Management Guide for Ornamentals (http://edis.ifas.ufl.edu/scripts/htmlgen.exe?MENU_IG:Turf_and_Ornamentals)

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