

Citrus Pest Quick Guide: Orangedog (*Papilio cresphontes*)¹

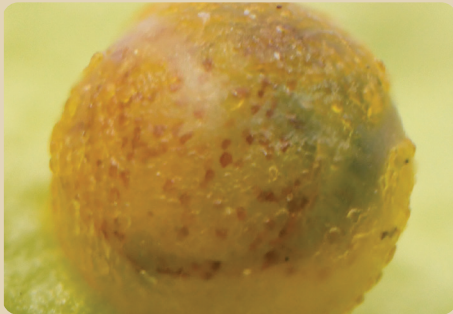
The purpose of this fact sheet is to aid in the identification of a common insect pest in citrus and its damage. This publication is targeted for a general public audience.

Life Cycle

Orangedog is a general name used to identify the larval stage of the giant swallowtail butterfly when it occurs as a pest of cultivated crops. Orangedog eggs are round, 1 to 1.5 mm in size, and semi-translucent orange in color. Orangedogs are brown and white, often resembling bird droppings, and are approximately 1 to 2 inches in length. When disturbed, orangedogs will discharge a distinct odor from their osmeterium, the defensive organ found on the head during the larval stage. Once orangedogs mature into the swallowtail butterfly, they have velvety black wings with a yellow pattern. Giant swallowtail butterflies can lay as many as 500 eggs in their lifetime.

Damage

Orangedogs feed on citrus foliage, preferring younger leaves. They tend to feed from the outside of the leaf and move inward. Orangedog feeding is generally not detrimental to the health of citrus trees. However, extensive feeding can lead to economic damage and defoliation. Injury is most likely to occur during the spring, when butterflies deposit large numbers of eggs on leaves. Several orangedog larvae can defoliate a young citrus tree in less than a week. Larvae increase their foliage consumption as they grow in size.



Orangedog egg (right photo magnified).
Credit: T. R. Weeks, UF/IFAS



Orangedog pupa.
Credit: L. M. Diepenbrock, UF/IFAS



Larva of giant swallowtail *Papilio cresphontes*.
Credit: D. Hall, UF



Full-grown larva.
Credit: T. R. Weeks, UF/IFAS



Orangedog larva with osmeterium ejected.
Credit: L. M. Diepenbrock, UF/IFAS



Orangedog larvae become giant swallowtail butterflies as adults.
Credit: D. Hall, UF

1. This document is ENY-2102, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date February 2024. Visit the EDIS website at <http://edis.ifas.ufl.edu> for the currently supported version of this publication.

2. Lauren M. Diepenbrock, assistant professor, Entomology and Nematology Department, UF/IFAS Citrus Research and Education Center; Katie L. Ray, summer 2019 student intern, Agricultural Education and Communication Department; and Jamie D. Burrow, Extension program manager, UF/IFAS Citrus Research and Education Center; UF/IFAS Extension, Gainesville, Florida 32611.