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EENY-062

Polydamas Swallowtail, Gold Rim, Tailless Swallowtail, *Battus polydamas lucayus* (Rothschild and Jordan) (Insecta: Lepidoptera: Papilionidae: Troidini)[1]

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Introduction

The polydamas swallowtail is one of only two United States swallowtails of the genus *Battus andis,* our only eastern United States swallowtail without tails.

Distribution

The polydamas (subspecies *lucayus*) swallowtail is a tropical species occurring in peninsular Florida, the Florida Keys, and the Bahamas. Occasional strays wander as far north as Missouri and Kentucky. At least 12 other subspecies occur in areas of southern Texas, throughout the Antilles, and through Central and South America to Argentina.

Description

The wingspread range is 3.9 to 4.8 cm. The upper surface of the wings is black with submarginal yellow bands. The underside of the wings is black with a submarginal row of yellow spots on the front wing and a submarginal row of wavy red lines on the hind wing. The body of the adult is black with red dots dorsally on the anterior part of the thorax and red-orange dots laterally on the thorax and coxae. An orange lateral line runs the length of the abdomen.

Figure 1. Dorsal view of adult polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Jerry F. Butler, University of Florida

Figure 2. Lateral view of adult polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Jerry F. Butler, University of Florida

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Eggs are variable from yellow to orange or yellow-brown.

Figure 3. Eggs of the polydamas swallowtail - *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Andrei Sourakov, Florida Museum of Natural History

Florida larvae are typically dark brown with black-tipped orange tubercles and have an orange collar.

Figure 4. Young larvae of the polydamas swallowtail - *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Donald Hall, University of Florida

Figure 5. Full grown larva of polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
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Pupae may be light brown with orange markings or light green with yellow markings.

Figure 6. Pupa of polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
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Life Cycle

The polydamas swallowtail favors open woods or disturbed areas. There are many flights all year in southern Florida and southern Texas, but they are rare during the winter. Eggs are laid in small groups on stems or tips of new leaves of pipevines of the genus *Aristolochia* (Aristolochiales: Aristolochiaceae). Young larvae are gregarious, but become solitary as they mature. Larvae feed on leaves and flowers of the host.

The native host in southern Florida is believed to be Marsh's dutchman's pipe *Aristolochia pentandra* Jacq. However, a variety of exotic ornamental pipevines are cultured in the United States, and polydamas larvae commonly use them for hosts, often becoming pests by defoliating the vines and eating the flowers. Two of the most common of these exotic species are dutchman's pipe, *A. macrophylla* Lam. (synonyms: *A. durior* Hill and *A. sipho* L'Heritier, Stirp.), and elegant dutchman's pipe or calico flower, *A. littoralis* Parodi (synonym: *A. elegans* M.T. Mast). Larvae have also been recorded from Virginia snakeroot, *A. serpentaria* L., a native species that ranges from central Florida northward.

Figure 7. Elegant dutchman's pipevine, *Aristolochia littoralis* Parodi, a host of the polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Donald Hall, University of Florida

Figure 8. Virginia snakeroot, *Aristolochia serpentaria* L., a host of the polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Jerry F. Butler, University of Florida

The pipevines contain pharmacologically active aristolochic acids that are stored by *B. polydamas* and by the blue or pipevine swallowtail, *Battus philenor*, a close relative. *Battus philenor* is distasteful because of these chemicals and is believed to be the model for other dark swallowtails in a Batesian mimicry complex. *Battus polydamas* is believed to also be distasteful to vertebrates and also may serve as a Batesian model in some parts of its range.

Figure 9. *Lantana camara* Linnaeus (Verbenaceae) - orange form, a host of the polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan).
Credits: Donald Hall, University of Florida

Adults feed on nectar from a variety of flowers and are reported to be particularly fond of the flowers of *Lantana camara* Linnaeus. They are occasionally abundant on flowers in the vicinity of their host plants.

Figure 10. *Lantana camara* Linnaeus (Verbenaceae) - pink form, a host of the polydamas swallowtail, *Battus polydamas lucayus* (Rothschild & Jordan)
Credits: Donald Hall, University of Florida

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