

Florida Predatory Stink Bug

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Order: Hemiptera Family: Pentatomidae

Species: *Euthyrhynchus floridanus* (Linnaeus)

The Florida predatory stink bug (FPSB) is a native stink bug species in the southeastern United States. It predominately occurs in neotropical regions, but can be found as far north as Pennsylvania. This species is a natural enemy that feeds on a variety of insects including many agricultural pests (Figs. 1 & 2).

Description

Adults: FPSBs are fairly large insects (1/2 to 3/4 inch long) with bright coloration. They have metallic black coloration with a blueish-green tint and bright orange to reddish-orange abdomen with bright spots at the corners of the scutellum (Fig 1). Females tend to be larger than males. Variations in adult coloration can lead to some confusion with



Fig. 2: Florida predatory stink bug adult feeding on brown marmorated stink bug adult (Photo by John Aigner)

bright orange (Fig.1).

Eggs: Females lay 20 to 90 reddish brown barrel-shaped eggs on trees with distinct projections around the operculum ((Fig. 3).

genera:

Stiretrus,

Oplomus,



Fig. 1: Florida predatory stink bug adult feeding on small beetle (Photo by: Charles Ray, Auburn University, Bugwood.org)

FUN FACTS:

-Florida predatory stink bugs are also called Halloween Bugs

-FPSB will do "push-ups" and shake their antennae when they feed

-Nymphs and adults will feed on the same prey item

but these genera lack or have much less obvious humeral spines projecting from the sides of the pronotum.

Predatory stink bugs are easily distinguished from their plant feeding relatives by a thick proboscis that is attached near the front of the head. In the case of FPSB adults, their beak is

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Nymphs: Nymphs can be identified by their metallic green head, thorax, lateral plates, and medial plates. Their abdomen is a bright red color (Fig. 4). At first glance they may be mistaken for lady beetles, but close inspection will show that they lack the elytra and the chewing mouth parts of beetles. FPSBs go through 5 nymphal instars. First instar nymphs are small, approximately 1/16 in in length. They stay with their eggs from the time they hatch until their first molt. Second instars closely resemble the 1st instars and begin to feed on other insects. The iridescence of the dark colored areas is more noticeable on the larger nymphs.



Fig. 3: Florida Predatory Stink Bug eggs laid in Blacksburg, VA at Virginia Tech (Photo by A. Morehead)

Fully developed nymphs can reach a length of 1/2 in in length. They develop blue-black wing pads, but apart from that retain the coloration of previous instars.



Figure 4: Florida Predatory Stink Bug nymph with beak extended (Photo by Erich G. Vallery, USDA Forest Service -SRS-4552, Bugwood.org)

Life Cycle and Biology

FPSB develop from egg to adult in 58 days at 78-81°F with a 14:10 (Light:Dark) photoperiod. The egg stage was between 18 and 19 days of the development period. At a temp of 75° F the development period was extended to 100 days.

Both nymphs and adults appear to be gregarious and even feed together on the same prey organism, often impaled first by an adult FPSB.

Further Reading

Ables JR. 1975. Notes on the biology of the predacious pentatomid *Euthyrhynchus floridanus* (L.). Journal of the Georgia Entomological Society 10: 353-

356.

DeCoursey RM, Allen RC. 1968. A generic key to the nymphs of the Pentatomidae of the eastern United States (Hemiptera: Heteroptera). University of Connecticut Occasional Papers 1: 141-151.

Mead FW, Richman DB. 2000. Common name: Florida predatory stink bug (unofficial common name) scientific name: *Euthyrynchus floridanus* (Linnaeus) (Insecta: Hemiptera: Pentatomidae). http://entnemdept.ufl.edu/creatures/beneficial/e_floridanus.htm#top

Oetting RD, Yonke TR. 1975. Immature stages and notes on the biology of *Euthyrhynchus floridanus* (L.) (Hemiptera: Pentatomidae). Annals of the Entomological Society of America 68: 659-662.

Richman DB, Mead FW. 1982. Stages in the life cycle of a predatory stink bug, *Euthyrhynchus floridinaus* (L.). Entomology Circular. 242.

Richman DB, Whitcomb WH. 1978. Comparative life cycles of four species of predatory stink bugs (Hemiptera: Pentatomidae). Florida Entomologist 61: 113-119.

