

Pest Alert

DACS-P-01673

Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Charles H. Bronson, Commissioner of Agriculture

The Twobanded Japanese Weevil, *Pseudocneorhinus bifasciatus* Roelofs, an Invasive Pest New to Florida (Coleoptera: Curculionidae)

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INTRODUCTION: The first North American specimens of the twobanded Japanese weevil (*Pseudocneorhinus bifasciatus* Roelofs) were collected in Philadelphia, PA in 1914, presumably imported with nursery stock from Japan (Wheeler and Boyd 2005). Since then it has been slowly expanding its range, probably with the help of man. The latest report on its distribution (Wheeler and Boyd 2005) records it from the New England states south to Georgia and west to Illinois and Indiana. It is here reported from Florida for the first time based on two specimens collected at Chipley, Washington Co., in July, and identified by Dr. C.W. O'Brien.

IDENTIFICATION: This is a stout, convex weevil about 5 mm in length (Fig. 1-2). It is distinctly pear-shaped, with the elytra much broader than the pronotum. It is covered with brown and grey scales, forming two more-or-less distinct cross bands on the elytra, with scattered metallic pale-blue scales especially laterally and in bands on the legs. In Florida it is most similar in size and shape to *Epicaerus formidulosus* Boheman, but differs in details of markings and in the structure of the tarsal claws, which are connate basally in *Epicaerus* but separated in *Pseudocneorhinus*.

BIOLOGY: Adults are leaf feeders and when abundant can cause significant damage (Allen 1959). Larvae live in the soil and feed on the roots of the adult host plants (Allen 1959). In the Northeast, weevils overwinter as adults, larvae, and eggs (Allen 1959). In the spring, adults begin feeding and laying eggs, while other stages continue their development. Allen (1959) counted at least 333 egg pods consisting of an average of 2.6 eggs per pod deposited by 42 weevils between mid-May and late August. Females fold and glue leaves of the host plant and deposit eggs in the fold (Zepp 1978). The average number of eggs per pod in 33 pods examined by Zepp (1978) was 5.1. The weevil is assumed to be parthenogenetic (Wheeler and Boyd 2005).

DISTRIBUTION: From New England south to northern Florida and west to Illinois and Indiana. In Florida, the only known locality is near Chipley in Washington Co. in the Panhandle.

COMMON HOSTS: The twobanded Japanese weevil attacks a broad range of hosts, including "cherry laurel, broad-leaved evergreens, pyracantha, privet, barberry, euonymus, and many others" (Day 2003); forsythia, lilac, strawberry but not grasses (Allen 1959); mountain laurel, great rhododendron, multiflora rose, Allegheny blackberry, American bittersweet, flowering dogwood, gray dogwood, bittersweet nightshade (Maier 1983, 1986). The Florida specimens were collected sweeping in a soybean field. Wheeler and Boyd (2005) called it "an important pest of landscape plantings in the northeastern and midwestern" states, but noted that it has "received scant attention in the Southeast."

REFERENCES:

- Allen, H.W.** 1959. *The Japanese weevil Pseudocneorhinus bifasciatus* Roelofs. *Journal of Economic Entomology* 52: 586-587.
- Day, E.R.** 2003. *Japanese Weevil Coleoptera: Curculionidae, Pseudocneorhinus bifasciatus*. Virginia Cooperative Extension, Entomology, Publication 444-624. <http://www.ext.vt.edu/pubs/entomology/444-624/444-624.pdf#search='pseudocneorhinus'>. Accessed August 5, 2005.



Florida Department of Agriculture and Consumer Services
Adam H. Putnam, Commissioner

- Maier, C.T.** 1983. Influence of host plants on the reproductive success of the parthenogenetic two-banded Japanese weevil, *Callirhopalus bifasciatus* (Roelofs) (Coleoptera: Curculionidae). *Environmental Entomology* 12: 1197-1203.
- Maier, C.T.** 1986. Relative abundance of adults of *Callirhopalus bifasciatus* (Roelofs) and three *Otiorhynchus* spp. (Coleoptera: Curculionidae). *Journal of the New York Entomological Society* 94: 70-77.
- Wheeler, A.G., Jr., and David W. Boyd, Jr.** 2005. Distribution of an invasive weevil, *Pseudocneorhinus bifasciatus* Roelofs, in the southeastern United States. *Journal of Entomological Science* 40: 25-30.
- Zepp, D.B.** 1978. Egg pod formation by *Callirhopalus* (subg. *Pseudocneorhinus*) *bifasciatus* (Roelofs) (Coleoptera: Curculionidae: Eremninae). *Coleopterists Bulletin* 32: 311-313.



Fig. 2. *Pseudocneorhinus bifasciatus* Roelofs, lateral view.
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Fig. 1. *Pseudocneorhinus bifasciatus* Roelofs, dorsal view.
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