More Exotic Pests

Mile-a-Minute Weed
by J. Douglas Oliver

Polypogon perfoliatum L. (Polygonaceae), commonly referred to as mile-a-minute weed, is a native of eastern Asia that was first collected in the United States in 1890 (Hickman and Hickman, 1976; Cusick and Ort, 1987). Agriculturalists, biologists, and others have indicated concern over the invasive nature of this plant. Early records from York County, Pennsylvania, include a 1946 collection from an orchard (Hill et al., 1981). These plants probably originated from Rhododendron nursery stock imported from eastern Asia in the 1930s. By the 1970s–1990s, the plant was spreading into other states. Although quantitative data for the speed of spread appear to be lacking, the plant is known to be progressing southward quickly, and could soon invade Florida.

Description and identification

Mile-a-minute weed is a prickly annual vine, easily identified by deltoid leaves, backward-bending barbs on the stem, and iridescent blue fruits (Hill et al., 1981). Leaves are perfect triangles, one to three inches (2.5 to 7.5 cm) long, and the same width across, appearing thinly membranous and pale green (Mountain, 1989). Sheaths at the nodes are saucer-shaped, completely encircling the stem (thus providing the name perfoliatum). It is seldom found as single individuals, but becomes locally abundant in dense populations.

Biology

Mountain (1989) states that Polypogon perfoliatum is an annual, propagated from seeds each spring, but if the plant enters Florida, it might become perennial. Although information about this species is sparse, it is known that other species in the same genus grow as a perennial as well as an annual (e.g. P. hydropiperoides, Tarver et al., 1986).

Common habitats are mostly disturbed areas, but undisturbed areas are also colonized. Natural habitats include wet, low ground such as low meadows, as well as stream banks.

In the plant's native region of southeast Asia, the environment is relatively wet and warm, similar to much of Florida. Thus, it would not be surprising if mile-a-minute weed continues to spread south and invade undisturbed wet areas in Florida.

Doug Oliver is a biologist with the Florida Department of Environmental Protection's Bureau of Mine Reclamation in Tallahassee.

Exotic Weevil on Bromeliads

The Endangered Plant Advisory Council is upgrading two bromeliad species from threatened status to endangered because of the effects of an exotic weevil which arrived four years ago. The common wild pine (Tillandsia fasciculata) and giant wild pine (T. utriculata) are preferred targets of the weevil (Metamasius callizona). Its natural range is Mexico and Central America. The beetles apparently arrived in Fort Lauderdale before 1990 on bromeliads imported from Mexico.

This species burrows deep into a bromeliad's basal rosette of leaves, often causing otherwise apparently healthy bromeliads to drop from their host plants. However, on infested plants, a gentle tug will successfully remove leaves from the center of the rosette. The species appears to be a generalist; it has been recorded feeding on over a dozen genera of bromeliads. The adult weevil is 15 mm long and velvety black with a transverse yellow bar over elytra (wing covers).

Division of Plant Industry entomologists expressed particular concern about bromeliad populations in Everglades National Park, Fakahatchee Strand State Preserve and Big Cypress Preserve. Populations have been confirmed in central Broward County north to West Palm International Airport as well as in natural areas in Fort Myers (Lee County) and Castellon Hammock (Dade County).

Exotic Tortoise Beetle on Ipomoea sp.

Natural areas managers and biologists, especially in parks with listed species of morning-glories such as Ipomoea microactyla, f. tenusissima, Jacquemontia reclinata, or J. curtissii, have a new exotic threat to watch for. A neotropical tortoise beetle, Chelymorpha cribaria (F.), was discovered in 1993 in Broward County at Davie. It has since expanded to several other locations including Cape Florida State Recreation Area and Dade County's Matheson Hammock.

Adult beetles resemble a brown native tortoise beetle which feeds on the foliage of railroad vine (Ipomoea pes-caprae). Identification is relatively easy: the new arrival is the only red and black tortoise beetle in our area. C. cribaria ranges from 6 to 10 mm (1/4 to 3/8 inch) in length. They are oval in shape, with a black pronotum (head) and a brick-red elytra (wing covers). The larvae are black and spiny and may carry a shield of fecal matter and debris under which they hide. Though smaller and darker,
they resemble the larvae of the geiger beetle, which is commonly found feeding on the foliage of geiger trees (Cordia sebestena).

Both the adults and larvae feed exposed on morning-glory leaves, and the species is probably restricted to morning-glories.

The natural range of this species is South America and the Antilles. It is not known how it was introduced into Florida, though Hurricane Andrew is strongly suspected. By removing large areas of hammock canopy, the storm dramatically increased growth of morning-glories (and other vines), which probably helped the beetle become established. Suspected Chelymorpha cribaria specimens should be sent to Dr. M.C. Thomas (Division of Plant Industry, P.O. Box 147100, Gainesville, Florida 32614-7100) for confirmation.

This article is current as of March 1994.

Parks with new infestations of either of these beetles should notify District Biology immediately.

Compiled by Jim Duquesnel (District 5 Administrator) from materials provided by Florida Division of Plant Industry.

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