Invasive Species Fact Sheets

National Park Service U.S. Department of the Interior

Natural Resource Stewardship and Science Biological Resources Division



Japanese stiltgrass

Microstegium vimineum (Trin.) A. Camus, Japanese stiltgrass, Poaceae

Synonyms: *Eulalia viminea* (Trin.) Kuntze, *Microstegium vimineum* var. *imberbe* (Nees ex Steud.) Honda, *Andropogon vimineus* Trin. (other synonyms at <u>https://www.itis.gov/servlet/SingleRpt/SingleRpt?</u>



Japanese stiltgrass habit. Chris Evans, University of Illinois, Bugwood.org.

Species Description & Habitat

Species Description

Japanese stiltgrass is a delicate, sprawling, annual grass that grows up to 1.1 m tall. Stems can root at the nodes. Leaves are pale-green, alternate, lanceshaped, 2.5-7.6 cm long, and asymmetrical with a shiny, off-center midrib. Upper and lower leaf surfaces are slightly pubescent. A feature that helps identify this species is a silvery line that runs down the center of the blade. Japanese stiltgrass begins flowering in September with fruit produced from late September through early October.

Habitat

In North America, Japanese stiltgrass occurs in a variety of disturbed sites including mesic roadsides, ditches, woodland borders, forested floodplains, and stream sides. It also occurs in mesic upland sites, forest edges, and wetlands and is usually found in moderate to dense shade.

Introduction and Impact

Japanese stiltgrass is native to Japan, Korea, China, Malaysia, India, and the Caucasus Mountains. It was first documented in the United States in 1918 in Tennessee where it was likely introduced as packing material for imported Chinese porcelain.

Microstegium vimineum invades natural areas, replacing native plant communities with monospecific stands. This species may be capable of altering soil conditions making them inhospitable for native plants. When established, Japanese stiltgrass also degrades nesting habitat from quail and other wildlife.



States where Japanese stiltgrass occurs. EDDMapS. 2018. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at http://www.eddmaps.org/; last accessed May 26, 2018.

Distribution in Introduced Range

In the United States, Japanese stiltgrass has been reported as invasive from New Hampshire and Vermont to the north, south to Florida, and from the east coast to Oklahoma and Texas to the west.

Other countries where this species has been introduced includes parts of Asia, extending its range into Pakistan, Nepal, and Turkey as well as Mexico, Europe, Australia, New Zealand, Africa, South America, and islands of the



Japanese stiltgrass. Bruce Ackley, The Ohio State University, Bugwood.org.



Japanese stiltgrass showing silver line on leaves. Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.

Control and Management

Manual and mechanical, environmental/cultural, and chemical methods can all be used to control Japanese stiltgrass. This species produces a soil seed bank that will require revisiting the site for seven years or more after treatment. Hand pulling can be successful if the work is thorough and timed before seed production. Cutting in late summer or treating with a range of post- and pre-emergent (to reduce seed germination) herbicides (imazameth, fluazifop-p, glyphosate, sethoxydim, diphenamid, benefin) have also been

Regulatory Status

This species is listed as a Class C noxious weed in Alabama, invasive and banned in Connecticut, and prohibited in Massachusetts.

References and Resources

Bugwood Wiki (<u>https://wiki.bugwood.org/Microstegium_vimineum</u>). Updated 17 February 2015. Accessed 26 May 2018.

Integrated Taxonomic Information System, ITIS (<u>https://www.itis.gov/</u>). Accessed 26 May 2018. (Naming convention follows ITIS).

Invasive.org. Center for Invasive Species and Ecosystem Health (<u>https://www.invasive.org/species/grasses.cfm</u>).

Invasive Plant Atlas of the United States (<u>https://www.invasiveplantatlas.org/subject.html?sub=3051</u>). Updated 22 Oct 2015. Accessed 26 May 2018.

United States Department of Agriculture Plants Database (<u>https://plants.usda.gov/core/profile?</u> <u>symbol=MIVI</u>). Accessed 26 May 2018.

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United States Department of Agriculture, US Forest Service. Fire Effects Information System (FEIS). *Microstegium vimineum* (<u>https://www.fs.fed.us/database/feis/plants/graminoid/micvim/all.html</u>). Accessed 26 May 2018.