

Target Invasive Species

Japanese stiltgrass *Microstegium vimineum*



Description

Japanese stiltgrass, also called Napalese browntop, grows as an annual grass with a sprawling habit, and can reach heights of up to 3 feet. It has thin, pale green, lance-shaped leaves, about 3 inches in length, that grow alternately along a branched stalk. The leaves have a silvery stripe of reflective hairs down the center of the upper leaf surface. The stalk is

distinctly divided by nodes, with the segments between the nodes flattened and widening toward the upper end. The flowers bloom along a delicate spike that emerges from the stalk tips in late summer and early fall. The seeds mature in mid to late fall, and can remain viable for more than five years in the soil. Plants spread locally by rooting at the nodes. Seed dispersal is by animals, water, or deposition with fill dirt. Vegetative plants can be distinguished by the silvery stripe running along the middle of the leaves of Japanese stiltgrass, a character lacking in *Leersia virginica*. The two species are easily distinguished when in flower or fruit.

Habitat

In New Jersey, Japanese stiltgrass is found in a range of habitats, from wetlands to early successional fields and forested upland. It reaches its greatest abundance in floodplain forests and moist soils over shale, diabase, and glauconite. Although it is a shade adapted species, it also grows in full sunlight, especially in disturbed habitats such as roadsides, powerline right-of-ways, ditches, agricultural lands, lawns and gardens. It appears to favor soils that are moist, acidic to neutral, and high in nitrogen.



Threats

Japanese stiltgrass alters the structure of natural plant communities and reduces biodiversity by displacing indigenous herbaceous vegetation through its dense growth, which rapidly forms monocultures that are sometimes acres in extent. Because of its rapid and dense growth, it alters light and moisture regimes and likely affects seed germination.

Control

Prevent introduction of Japanese stiltgrass from invaded sites to adjacent natural areas by avoiding disturbance to vegetation and soil in the natural areas. Small infestations can be hand-pulled, but pulling will have to be repeated until the seed bank is exhausted. Plants can be mowed when flowers are blooming, but before seed set. Herbicides can be effective, and should be applied before plants set seed. Herbicides should be used with caution, as they could harm indigenous co-occurring plants.



Source: An Overview of Nonindigenous Plant Species in New Jersey, New Jersey Dept of Environmental Protection Natural and Historic Resources Group, Parks and Forestry. www.state.nj.us/dep/parksandforests/natural/invasivereport.pdf.
Photo of foliage by Chuck Barger, <http://www.invasive.org>.
Photo of seeds by Steve Hurst. Provided by ARS Systematic Botany and Mycology Laboratory, India. <http://plants.usda.gov/>.
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