Invasive Plants Fact Sheet

Japanese Stilt Grass Microstegium vimineum (Trin.) A. Camus Grass
Family (Poaceae)

Status: Not yet common (reported in five counties), but invasive in Connecticut.

Description: Japanese stilt grass is a non-native lime-green grass, 24 to 40 inches in height. This shade-tolerant annual is a native of Asia, but has recently spread into New York and Connecticut. It is most easily recognized by its leaves, which are distinctly tapered at both ends and about two to three inches long. The flower clusters occur at the tip of long stalks. In the fall, identification becomes somewhat easier after the plant develops a slight purplish tinge. It grows in dense monotypic stands and should be considered invasive.

Preferred habitat: Japanese stilt grass occupies various habitats such as river banks, floodplains, swamps, woodland thickets, and roadsides. It spreads rapidly through naturally or artificially disturbed areas, replacing herbaceous ground vegetation within three to five years. In undisturbed areas, it may spread more slowly. Since it prefers moist and shaded areas, Japanese stilt grass is particularly common in wooded areas near streams or wetlands.

Seasonal Cycle: Japanese stilt grass germinates in June, flowers in late August, and produces seeds from late September to early November. Under optimal conditions, one plant may produce more than 1,000 seeds, but 100 seeds per plant is more typical. Since the mode of seed dispersal has not yet been studied, and there are no obvious mechanisms of dispersal such as hooks or barbs, the rapid expansion of Japanese stilt grass is not well understood.

Distribution: Subsequent to its first collection in Tennessee in 1919, Japanese stilt grass has spread northward. By 1960 it had reached Ohio and Pennsylvania and eastward to all the coastal states from Florida to New Jersey. More recently it has been found along the Hudson River in New York, and has been collected from sparse populations in most Connecticut counties. (At present, Japanese stilt grass is being monitored at a Nature Conservancy site in East Haddam along the Connecticut River.) Other points of interest: Japanese stilt grass does not appear in most familiar field guides, but does in more extensive botanical references. It may be listed under Microstegium vimineum, or in some manuals under its synonym, Eulalia viminea. (Eulalia is also the common name for another, unrelated grass.) Japanese stilt grass is also called Chinese packing grass, because it was once used to protect porcelain during shipment. This may be the way it was introduced into the United States.
Control: Because Japanese stilt grass threatens native wetland species, monitoring and eradication may become necessary to prevent it from spreading into floodplains and tidal marshes. It is time-consuming to remove, but pulling by hand is effective if it is thorough and timed correctly. Pulling before mid-September reduces unintentional spread of the current year’s seeds. However, pulling before early July allows germination of new plants from the seed bank, which will mature during the remaining season and produce seeds. August and early September seem to be good times to pull plants by hand in Connecticut. A weed whacker may be used on dense stands as long as the stalks are non-flowering and the plants do not have enough time to mature and produce seeds. Smaller populations are relatively easy to eradicate, but continued monitoring is necessary because it takes at least seven years to exhaust the seed bank in the soil. Following eradication, surveys to check for repopulation should be carried out every two years. Additional information sources: Manual of Vascular Plants of Northeastern United States and Adjacent Canada (second edition). H.A. Gleason and A. Cronquist. New York Botanical Garden, 1991. For more detailed information: Monitoring Plan for Microstegium vimineum at Chapman Pond, East Haddam, Connecticut. Beth P. Lapin. Unpublished report of The Nature Conservancy, 1994. Diagnostic information: Flowers: racemes 2-5 cm, approximate, few in the panicle; pedicel flattened, ciliate; glumes 5 mm, awnless; lemmas shorter than glumes, the fertile lemma awnless or often with a slender awn, 4-8 mm. Leaves: lanceolate blades, 5-8 cm. This fact sheet has been prepared by The Nature Conservancy Connecticut Chapter in cooperation with The Natural Diversity Data Base of the Connecticut Department of Environmental Protection. It may be reproduced without permission.

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