**Microstegium vimineum**  
(Japanese Stilt Grass)

**COMMON NAME**

Japanese Stilt Grass

**FULL SCIENTIFIC NAME**

*Microstegium vimineum* (Trin.) A. Camus

**FAMILY NAME COMMON**

Grass family

**FAMILY SCIENTIFIC NAME**

Poaceae

**IMAGES**

- Close-up of infructescence
- Close-up of roots
- Habitat
- Incursion
- Fall color
- Seedlings
NOMENCLATURE/SYNONYMS

Synonyms: Eulalia viminea (Trin.) Kuntze

DESCRIPTION

Botanical Glossary

Microstegium vimineum is an annual grass that can grow up to 2 m (6.5 ft.) tall. Its culms root at the nodes forming long, branched, prostrate or reclining stems up to 1.52 m (5 ft.) in length with numerous upright branches resembling individual plants. Both the nodes and internodes are glabrous. The alternate light green leaves are 5-8 cm (2-3 in.) long and up to 15 mm wide. They are lanceolate in shape and taper at both ends. Both upper and lower leaf surfaces are slightly pubescent, except for the silvery line running down the center of the blade. The summit of the leaf sheath collar is ciliate on one or both sides; the membranous ligule is also ciliate. The inflorescence is a terminal, thick-branched panicle 2-7 cm (0.8-2.8 in.) in length, barely if at all exerted from sheathing leaves. It has fewer than five branches, usually only one or two. The spikelets are paired and deciduous. Glumes are present and awnless. The lemmas, two per spikelet, can be awned or awnless although most northeastern specimens appear awned. The 3 mm (0.1 in.) ellipsoid fruit, a caryopsis (grain), ranges from yellow to yellow-purple in color, changing with the season. Microstegium vimineum begins to flower in mid-September. It fruits from late September through early October producing an abundant crop of caryopses. Many of these appear to germinate, giving rise to dense stands of light-green individuals. In late fall, Microstegium fades to pale greenish-yellow or turns pale-purple in color.

Page References: Gleason & Cronquist 815, Holmgren 772, Magee & Ahles 191. See reference section below for full citations.

SIMILAR SPECIES

Leersia virginica Willd. (White grass)

Microstegium vimineum is easily confused with Leersia virginica, the native white grass. The following table compares the characteristics of these two species.
<table>
<thead>
<tr>
<th>Character</th>
<th>Microstegium vimineum</th>
<th>Leersia virginica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflorescence</td>
<td>Terminal spike-like branches</td>
<td>Open panicle</td>
</tr>
<tr>
<td>Glumes</td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Lemma</td>
<td>Awned or awnless</td>
<td>Awnless</td>
</tr>
<tr>
<td>Flowering Initiation</td>
<td>Mid September</td>
<td>Early to mid August</td>
</tr>
<tr>
<td>Sheath Summit</td>
<td>Hair along margin and near summit</td>
<td>Glabrous or scaberulous</td>
</tr>
<tr>
<td>Nodes</td>
<td>Glabrous</td>
<td>Hairy</td>
</tr>
<tr>
<td>Roots</td>
<td>Fibrous</td>
<td>Scaly rhizomes</td>
</tr>
<tr>
<td>Annual/Perennial</td>
<td>Annual</td>
<td>Perennial</td>
</tr>
<tr>
<td>Fall Color</td>
<td>Yellowish to pale purple</td>
<td>Green to stramineus</td>
</tr>
</tbody>
</table>

REPRODUCTIVE/DISPER SAL MECHANISMS

*Microstegium vimineum* is mechanically dispersed. Long distance dispersal may occur by clinging to animals and people.

DISTRIBUTION

*Microstegium vimineum* is native to tropical Asia. In the United States, it is has been reported from New York to Florida, and west to Illinois, Arkansas, Louisiana and Texas. It has also been reported from Puerto Rico. In New England it is present in Connecticut and Massachusetts.

HISTORY OF INTRODUCTION IN NEW ENGLAND

Since its initial report from Tennessee in 1919, where it was thought to have been used as packing material, *Microstegium vimineum* has spread rapidly northward, reaching southern New England by the 1980s. The first Connecticut report came from Branford in 1984. This plant was reported from Hamden County, Massachusetts in 1998 and from a few localities in Rhode Island in 2005.

HABITATS IN NEW ENGLAND

Abandoned Field
Microstegium vimenum easily invades disturbed areas and has the ability to produce seeds in low light, thus allowing it to thrive in shade. In New England, Microstegium vimenum has invaded floodplain forests, early and late successional forests, abandoned fields, roadsides and other habitats.

**THREATS**

Microstegium vimenum forms dense monotypic stands that can dominate entire habitats, including the understory of a forest. These dense stands displace native understory and wetland vegetation. The fact that this plant can grow in low light threatens not only "edge" communities, but forests as well. Each plant produces many seeds that can persist in the seed bank for long periods of time. Even if an area is burned Microstegium seeds will sprout up, making control of large populations difficult. The seeds are easily spread by hikers by attaching to their clothing.

**EARLY WARNING NOTES**

Microstegium vimenum is reported from some parts of the three southern most New England states. It should be watched for and reported immediately if found in new localities in these states or in the remaining states.

**MANAGEMENT LINKS**

Virginia Department of Conservation and Recreation
A fact sheet containing information about the species as well as some control measures.

The Nature Conservancy
Extensive control information

Plant Conservation Alliance
Fact sheet includes management information

**DOCUMENTATION NEEDS**
Documentation required: Herbarium specimen or mounted snippet of the stems with inflorescences.  
Best time for documentation: Fall.

ADDITIONAL INFORMATION

Integrated Taxonomic Information System (ITIS)  
General taxonomic information.

The PLANTS Database  
Distribution information and additional links

The Nature Conservancy  
Comprehensive information

North Carolina State University  
A fact sheet

Plant Conservation Alliance  
Fact Sheet

REFERENCES


DATA RETRIEVAL

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MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

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