





BRANDYWINE CONSERVANCY INVASIVE SPECIES PROTOCOLS

Japanese Stilt Grass (*Microstegium vimineum*)

<p>What It Is</p>  	<ul style="list-style-type: none"> • Also known as “Nepalese Browntop.” • Annual grass with sprawling habit. • Germinates in spring, growing slowly through the summer months, ultimately reaching a height of 2-3½ feet. • Leaves pale green, 1-3 inches long, lance-shaped, asymmetrical, and have a shiny, distinctive mid-rib. • Slender stalks of flowers produced in late summer (August- October), followed by dry fruits soon afterwards. After fruit production, entire plant dies. • Resembles a small, delicate bamboo. • Looks similar to other delicate grasses and wildflowers, like Pennsylvania knotweed (<i>Polygonum persicaria</i>), Virginia cutgrass (<i>Leersia virginica</i>), and small carpetgrass (<i>Arthraxon hispidus</i>). • Leaves develop a purplish tinge in autumn.
<p>Where It Is Found</p>	<ul style="list-style-type: none"> • Established in 16 states, including Pennsylvania, Delaware and New Jersey, as well as Connecticut, Florida, Georgia, Indiana, Kentucky, Maryland, Massachusetts, New York, North Carolina, Tennessee, Virginia, West Virginia and Washington, D.C. • Prefers moist, acidic-to-neutral soils that are high in nitrogen, but can be found in other habitats, including moist woodlands, floodplains, wetlands, uplands, fields, thickets, paths, clearings, roadsides and ditches, utility corridors and gardens. • Readily invades disturbed areas, especially those subject to regular mowing, foot traffic or flooding. • Can replace native vegetation in an area within 3-5 years.
<p>Where It Is From</p>	<ul style="list-style-type: none"> • Native to Japan, Korea, China, Malaysia and India. • Entered the United States in 1919 after escaping from packing materials used to ship porcelain.
<p>Why It Is a Problem</p>	<ul style="list-style-type: none"> • Extremely adaptable to low light and low moisture environments, making it a threat to native species in habitats ranging from full sun to full shade and from wet to dry environments. • Forms a dense, extensive and monotypic patch making it difficult for native species to compete for light. • One plant regularly produces 100 seeds in a growing season, but some individuals may produce up to 1,000 seeds. • Seeds can remain viable in the soil’s seed bank for up to seven years.
<p>How to Eradicate It</p>	<ul style="list-style-type: none"> • <u>Mechanical Method</u>—Hand pulling of Japanese Stilt Grass can be effective if it is thorough and timed correctly (from mid-July through mid-September). However, hand pulling can cause unnecessary disturbance to the soil, which may result in additional germination and/or adding seeds to the seed bank. Pulled plants should be taken offsite, as they will continue to go to seed even after being pulled. Mowing in late summer, prior to the plant going to seed (August- September), can be effective. • <u>Chemical Method</u>—Contact and systemic herbicides, such as glyphosate, imazapyr, and triclopyr, are effective in controlling Japanese Stilt Grass. When working in a wetland area or near water, a formula such as Rodeo should be used, which is labeled for application in wetlands. Another proven herbicide option is Vantage, active ingredient, Sethoxydim. Alternatively, a pre-emergent herbicide, such as Plateau, may be used in the spring.
<p>What Not To Do</p>	<ul style="list-style-type: none"> • When removing plants, be careful not to disturb desirable species. • Once eradicated in an area, be sure to restore by planting native species.

References

- U.S. Dept. of the Interior, National Park Service, Plant Conservation Alliance (www.nps.gov/plants/)
- U.S. Dept. of Agriculture, National Agricultural Library (www.invasivespeciesinfo.gov)
- The Nature Conservancy (www.tnc.org)
- Pennsylvania Dept. of Conservation of Natural Resources (www.dcnr.state.pa.us)