

## Wavyleaf Grass

(*Oplismenus hirtellus* ssp. *undulatifolius*)

### Threat

Wavyleaf grass has the potential to become a widespread and aggressive invasive species in Virginia. It is adapted to forest understory, where it creates dense continuous carpets, outcompetes other ground-layer species, and suppresses shrub and tree seedlings. In 2012, the U.S. Department of Agriculture Animal and Plant Health Inspection Service assessed wavyleaf and found it to rank as a High Risk (USDA-APHIS 2012). The public, especially citizen scientists, are encouraged to be on the lookout for wavyleaf and report any sightings. See contact information below.

### Report Sightings

If you believe you have found an occurrence of wavyleaf grass, there are several ways to report your discovery. Call or email the Virginia Department of Conservation and Recreation (contact listed below). Use the online mapping tool iMapInvasives.org (requires free registration). Smartphone users can download an app dedicated to making reports of wavyleaf ([www.towson.edu/wavyleaf](http://www.towson.edu/wavyleaf)). In any case, it is extremely helpful to take close-up photographs. Images should focus on where the leaf meets the stem and any apparent flowering.

#### TO REPORT A SIGHTING:

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804-786-9112

Online mapping and reporting tool:  
<http://imapinvasives.org/vaimi/map/>

Smartphone app:  
[www.towson.edu/wavyleaf](http://www.towson.edu/wavyleaf)

For more information:  
[www.stopthisplant.org](http://www.stopthisplant.org)



### Description

Wavyleaf grass is a recent introduction to Virginia. It is a low-lying, trailing perennial grass, branching and rooting at nodes along creeping stems called stolons. Leaf blades are flat, about 0.5 to 1 inch wide, between 1.5 and 4 inches long, and deep green with rippling waves across the grass blades from base to tip. Leaf tips are elongated. Leaf sheaths and stems are noticeably hairy, although the hairs are short, approximately 0.25 inches. Wavyleaf blooms from mid-August into November. The flowering spikelets have glumes (lower bracts) with very long awns (extended, pointed tips). The awns produce a sticky substance that allows the grass seed to adhere to passing hikers or animals and readily disperse. Wavyleaf can be confused with invasive Japanese stiltgrass (*Microstegium vimineum*), joint-head grass (*Arthraxon hispidus*) and native deertongue (*Dichanthelium clandestinum*).

### Wavyleaf “Mimic” Plants

#### Japanese stiltgrass

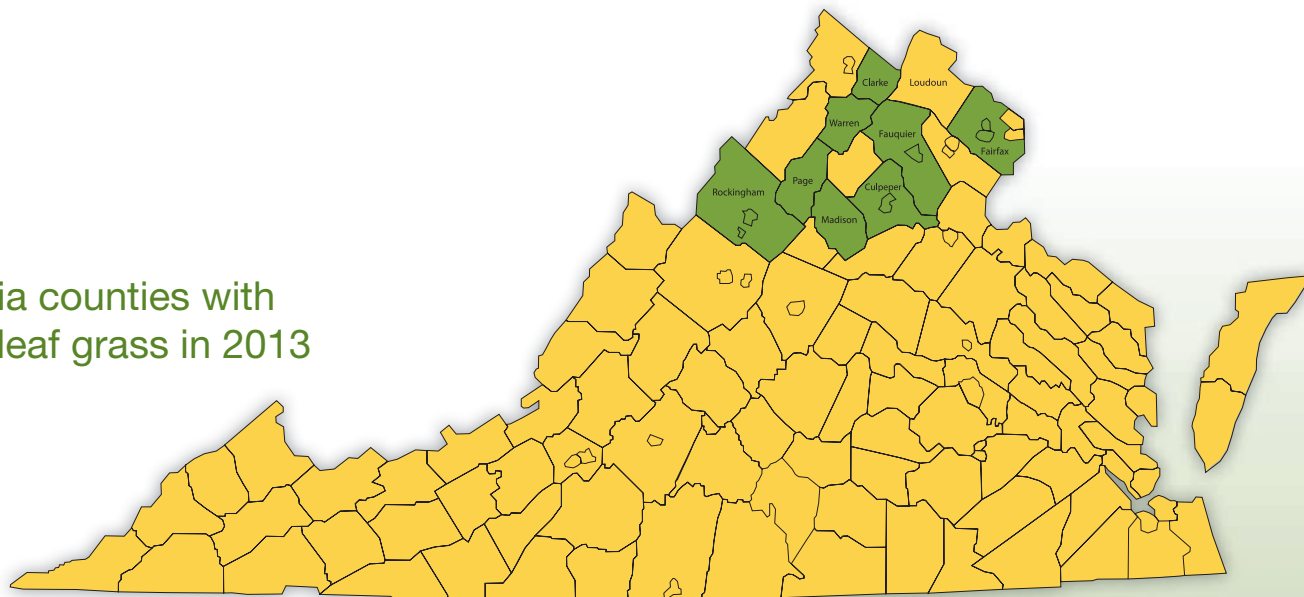


#### Joint-head grass



# INVASIVE PLANT ALERT – Wavyleaf Grass

## Virginia counties with Wavyleaf grass in 2013



## Distribution

Two small populations of a grass species not previously found in the United States were discovered in Maryland's Patapsco State Park in 1996. It was identified as *Oplismenus hirtellus ssp. undulatifolius*, which is native to southern Europe and Southeast Asia. The grass was discovered in 2005 in Shenandoah National Park. There are now more than 12 known occurrences in eight counties in Virginia: Rockingham, Page, Madison, Warren, Fauquier, Clarke, Culpeper and Fairfax (EDDMapS 2013). Surveys are planned for 2014 and 2015.

## Control

Small patches of wavyleaf grass can be controlled by hand pulling before seed-set. It can also be controlled with glyphosate or clethodim herbicides. Glyphosate is a broad-spectrum herbicide that affects all plant species. Clethodim is grass-specific. Treatment with either type should be done before wavyleaf has set seed. Several years of control will be required to deplete the seed bank. Seed viability is not known at this time. Care should be taken to avoid contact with plants that have set seed. If this is unavoidable, use duct tape to remove all seed that sticks to clothing, shoes or gloves. Keep pets away from the sticky seeds. Do not apply control treatments to populations of wavyleaf grass on property you do not own or are not legally authorized to manage.

### Photo credits:

Top clockwise: Wavyleaf grass. Seeds developing. Kerrie L. Kyde, Maryland Department of Natural Resources, Bugwood.org. Wavyleaf grass with root. Garrett Waugaman, M-NCPPC Weed Warriors, Bugwood.org

Bottom left to right: Japanese stiltgrass (*Microstegium vimineum*). David J. Moorhead, Univ. of Georgia, Bugwood.org. Joint-head grass (*Arthraxon hispidus*). Leslie J. Mehrhoff, Univ. of Connecticut, Bugwood.org

## SOURCES

EDDMapS [Early Detection, Distribution, and Mapping System]. 2013. Available online at: <http://www.eddmaps.org/distribution/usstate.cfm?sub=21294>. Accessed Sept. 12, 2013.

USDA-APHIS [United States Department of Agriculture – Animal and Plant Inspection Service]. 2012. Weed Risk Assessment for *Oplismenus hirtellus*(L.) P. Beauv. subsp. *Undulatifolius* (Ard.) U. Scholz (Poaceae) – Wavyleaf basketgrass (Version 2). Available online at: [http://www.pecva.org/library/documents/Land-Conservation/Managing-Your-Land/Remove-Invasive-Species/Wavyleaf-Basketgrass/usda\\_wavyleaf\\_report2012.pdf](http://www.pecva.org/library/documents/Land-Conservation/Managing-Your-Land/Remove-Invasive-Species/Wavyleaf-Basketgrass/usda_wavyleaf_report2012.pdf). Accessed Sept. 12, 2013.

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