

# U.S. National Early Detection and Rapid Response System for Invasive Plants

## EDRR Fact Sheet

Randy G. Westbrooks, U.S. Geological Survey. Whiteville, North Carolina. USA.

**Common Name:** Wavyleaf Basketgrass

**Scientific Name:** *Oplismenus hirtellus* (L.) P. Beauv.

Subspecies *undulatifolius* (Ard.) Roem. & Schult.

**Family:** Poaceae

**Description:** A shade tolerant, low-growing, stoloniferous perennial grass, from 20-30 cm tall. **Leaves** ovate, elongated, sharply pointed, dark green, 0.5” wide, 1.5-4” long, with rippling waves across the leaf blades.

**Leaf sheaths and stems** noticeably hairy with very short hairs\*. **Grass spikelets** with long sticky awns, flowering from mid-September to November. The sticky awns allow the grass seeds to adhere to passing animals, people, and vehicles.

**Stolons** delicate, 1-3 mm in diameter, creeping beneath leaf litter, rooting and branches from nodes.

\**Oplismenus hirtellus* ssp. *setarius*, which is native to the southeastern U.S. and Mexico, and is the closest relative of Wavyleaf basketgrass, has only a few hairs if any on the leaf sheaths and stems.

WLBG is similar in appearance to Japanese stiltgrass [*Microstegium vimineum* (Trin.) Camus], an introduced annual grass which also invades forest understories throughout the eastern U.S. However, the leaves of Japanese stiltgrass have a silvery row of hairs running down the midvein and end in a blunt gradual point. WLBG leaves are rippled across their width and end with an elongated sharp tip.

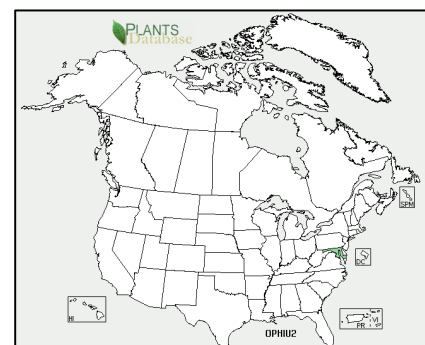
**Habitat:** Temperate environments in Coastal Plain, Piedmont, and Montane regions; full canopy hardwood forests, forest margins, and shady riparian zones; does not tolerate direct sunlight; appears adaptable to a wide range of pH.

**Native Range:** Europe and Asia.

**Pathways of Introduction and Spread:** It is unclear how WLBG was first introduced to the U.S. It is possible that the plant was a contaminant of discarded hanging baskets in Maryland. Variegated varieties of native bristle basketgrass are sold by plant nurseries in the Mid-Atlantic Region. However, WLBG is not known to be sold in the horticultural trade.

WLBG was first discovered in the U.S. in **Patapsco Valley State Park**, Howard County, MD, by botanist Edward Uebel in 1996. In 2000, it was found growing along a woody stream at the **Hernwood Sanitary Landfill**, Baltimore County, MD.

**U.S. and Canada Distribution:** WLBG is known to occur in Maryland and Virginia, USA.



**Ecological and Economic Impacts:** Once it becomes established, WLBG spreads rapidly through wooded natural areas – crowding out native herbaceous plants, and preventing regeneration of native hardwood tree species. Unless it is completely eradicated *soon*, it will continue to spread and will have a devastating impact on the deciduous forests of eastern North America for many decades to come.

**Prevention Measures:** Since 2006, volunteers with the Anacostia Watershed Society (AWS) have been working to detect and eradicate WLBG from MD and VA. In 2006, AWS volunteers discovered and began eradicating a three acre infestation in **Little Paint Branch Park**, Prince George’s County, MD. In 2007, several small colonies and patches of the plant were detected and treated in the **Beltsville Area Research Center-West**, Prince George’s County, MD. In 2008, AWS led the effort to establish the **Wavyleaf Basketgrass Task Force**. The task force is focused on mapping and eradication of known infestations, and a public awareness campaign to help detect and report other infestations before they become widespread.

**Physical Control:** WLBG is easily hand pulled at the roots and nodes. Hand pulling is thought to be more effective than herbicide treatment when the population is small enough for weeding (Westbrooks & Imlay, 2009; Wavyleaf Basketgrass Task Force, 2009).

**Chemical Control:** WLBG may be effectively treated with a 1-2% solution of glyphosate. Current populations in Maryland (USA) and Virginia are still relatively small and eradication is still possible. General weed killers such as **Roundup** work best late in the year, while grass inhibitors such as **Envoy Plus** (clethodim) are more effective early in the season.

**Regulatory Status:** Wavyleaf basketgrass is currently not regulated at the local, state, or federal level in the U.S.

#### **Online Resources:**

WLBG Fact Sheet – Randy Westbrooks and Marc Imlay, 2009.

URL: <http://www.se-eppc.org/southcarolina/WLBG.pdf>

WLBG – Maryland Invader of the Month. August, 2007.

URL: [http://www.mdinvasivesp.org/archived\\_invaders/archived\\_invaders\\_2007\\_08.html](http://www.mdinvasivesp.org/archived_invaders/archived_invaders_2007_08.html)

WLBG Profile - Global Invasive Species Database – ISSG.

URL: <http://www.issg.org/database/species/ecology.asp?si=1557&fr=1&sts=&%20ang=EN&ver=print&prtflag=false>

WLBG Task Force – Meeting Minutes. March 31, 2009.

URL: [http://www.fs.fed.us/ficmnew/documents/notices/WLBG\\_TaskForceMinutes\\_033109.pdf](http://www.fs.fed.us/ficmnew/documents/notices/WLBG_TaskForceMinutes_033109.pdf)

WLBG Images - U-GA Bugwood Image Gallery.

URL: <http://www.invasive.org/species/subject.cfm?sub=21294>

WLBG Profile - USDA Plants Database.

URL: <http://www.plants.usda.gov/java/profile?symbol=OPHIU2>

WLBG in Virginia - Virginia Department of Forestry.

URL: <http://virginiaforests.blogspot.com/2008/11/wavyleaf-basket-grass-invasive-exotic.html>