

# Invasive Plants in Pennsylvania

## Shattercane and Johnsongrass

*Sorghum bicolor ssp. X. drummondii* and *S. halapense*



Photo: Jil Swearingen, NPS, [www.invasive.org](http://www.invasive.org)

### Background:

Johnsongrass has naturalized throughout the world but is thought to be native to the Mediterranean region. Shattercane, also known as Sudangrass, is originally from Africa. Both grasses were first introduced into the U.S. in the early 1800s as forage crops.

### Range:

Shattercane can be found in scattered patches in PA, FL, AL, TX, HI, the Midwest and Southwest. Johnsongrass is more commonly found across the U.S.

### Description:

Johnsongrass (*on left*) is a tall perennial grass that can grow up to eight feet tall. The leaves are two-feet in length and arranged alternately along the stout, hairless stem. The leaves have a distinct, white midrib. Flowers occur in loose, spreading, purple panicles.



Photo: The Ohio State University

Shattercane (*shown above*) is an annual grass that grows four to twelve feet tall. The large panicles of round, shiny black or red seeds shatter easily, hence its name. It can look very similar to corn seedlings.

Both of these plants are on the Pennsylvania Noxious Weed List, meaning it is illegal to plant, sell or transport them.

### Biology and Spread:

Johnsongrass spreads aggressively via its rhizomes. Shattercane does not have rhizomes; it spreads only via seeds, which are spread by wind, water and livestock and can remain viable in the soil for two to three years.

### Habitat:

Johnsongrass can adapt to a variety of habitats including open forests, old fields, roadside ditched and wetlands. Shattercane is a common weed of cultivated fields.

### Ecological Threat:

Both Johnsongrass and shattercane can form dense colonies that displace native vegetation, restrict tree seedling establishment, and compete with food crops.



Photo: Bonnie Harper-Lore, FHA,  
[www.invasive.org](http://www.invasive.org)

## How to Control this Species:

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The prolific seed production and ability to grow in a wide range of habitats for both species, and the extensive rhizome system and sprouting ability of fragmented rhizomes in Johnsongrass, make these species difficult to control.

### Manual

For light infestation, clumps and individual plants may be hand pulled in June, just after a rain when the ground is soft. All plant parts should be removed from the area. Broken stems and roots left in the ground should be dug up. For heavy infestations, cut the plants by mowing or tilling.

## Look-A-Likes:

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There are other Sorghum species that resemble shattercane and Johnsongrass, including *S. almum* (another invasive species in the Midwest). Without being familiar with grass structures it can be difficult to tell the various Sorghum species apart.



U. of Florida, [Weeds of the EAA](#)

### Chemical

These grasses can be effectively controlled using any of several readily available general use herbicides, such as glyphosate. Herbicide treatment may need to be repeated for several years to ensure good control. Follow the herbicide label and all state herbicide requirements.

## References:

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*The Ohio State University Noxious Weeds of Ohio:*  
[http://ohioline.osu.edu/b866/b866\\_13.html](http://ohioline.osu.edu/b866/b866_13.html)

*Center for Invasive Species and Ecosystem Health:* [www.invasive.org](http://www.invasive.org)

*Natural Biodiversity BioBullies:*  
<http://www.naturalbiodiversity.org/biobullies/downloads/Shattercane.pdf>

*U.S. Forest Service Weed of the Week:* [http://www.na.fs.fed.us/fhp/invasive\\_plants/weeds/johnsongrass.pdf](http://www.na.fs.fed.us/fhp/invasive_plants/weeds/johnsongrass.pdf)

## For More Information:

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*DCNR Invasive Species Site:*  
<http://www.dcnr.state.pa.us/conservationscience/invasivespecies/index.htm>

*Plant Invaders of Mid-Atlantic Natural Areas, National Park Service:*  
<http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

*Invasive Plants Field and Reference Guide, U.S. Forest Service:*  
[http://na.fs.fed.us/pubs/misc/ip/ip\\_field\\_guide.pdf](http://na.fs.fed.us/pubs/misc/ip/ip_field_guide.pdf)

## Native Alternatives:

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There are many drought-tolerant native warm season grasses, such as big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), and switchgrass (*Panicum virgatum*).



**Little bluestem**

Photo: Howard Schwartz,  
Colorado State U.,  
[www.forestryimages.org](http://www.forestryimages.org)