

Arthraxon grass, small carpgrass
Arthraxon hispidus (Thunb.) Makino
Grass Family (Poaceae)



DESCRIPTION

Arthraxon grass, is an annual grass that forms dense stands. It is similar to Japanese stiltgrass (*Microstegium vimineum*), another non-native, invasive annual, warm-season grass species; however, *Arthraxon* has broader leaf blades with distinctly heart-shaped bases that clasp the stem.

Stems - The upright stems of Arthraxon grass grow up to 18 inches tall and may root at the nodes at the base of the stem where they contact the soil surface.

Leaves - The leaf blades are 1–2 ½ inches long and distinctly heart-shaped and clasping at the base; the edge of the leaf is hairy.

Inflorescence - The inflorescence consists of several spikes of flowers diverging from a common point of attachment. They appear in late summer or early fall.

DISTRIBUTION AND HABITAT

Native to Southeast Asia, Arthraxon grass is naturalized in the eastern United States from Pennsylvania south to Georgia and west to Missouri. Arthraxon grass prefers moist open areas in full sun; unlike Japanese stiltgrass, it is not shade tolerant.

In Pennsylvania, Arthraxon grass has spread quickly in the southeastern region of the state and continues to expand its range every year.

EFFECTS OF INVASION

Arthraxon grass can spread rapidly following a disturbance such as flooding or soil moving. Within three to five years it can form dense monotypic stands which crowd out native, herbaceous vegetation.

REPRODUCTION AND METHOD OF DISPERSAL

Arthraxon grass is an annual and must produce seed each year. As a warm season (C4) grass it flowers late in the season. Surface flow of water, movement of animals, or mowing equipment may spread the seed. Little is known about this species' ability to seed bank.

CONTROLS

Mechanical - The best strategy for controlling Arthraxon grass is removal of the plant by hand or mechanical means late in the growing season but before seed production. Pulled plants must be bagged and removed to avoid post-pulling seed maturation. Mowing or burning early in the

season does not control the plant; new seeds germinate following such measures and can still produce seed by the end of the season.

Chemical – Use of a preemergent herbicide may be effective, however no reports documenting the use of this strategy against Arthraxon grass are currently available. Glyphosate (Roundup) could be used against established plants, but its use in a natural area may also affect desirable species. Glyphosate is recommended because it is biodegradable; however, it is a nonselective, systemic herbicide that affects all green plants. To be safe and effective, herbicide use requires careful knowledge of the chemicals, appropriate concentrations, and the effective method and timing of their application.

Biological - No biological controls are available at this time.

REFERENCES

Flora of North America Editorial Committee. 2003. *Flora of North America* Vol. 25 Magnoliophyta: Commelinidae (in part): Poaceae, part 2. Oxford University Press, New York.

Rhoads, Ann Fowler and Timothy A. Block. 2007. *The Plants of Pennsylvania, An Illustrated Manual*, 2nd edition. University of Pennsylvania Press, Philadelphia.

Internet resources – <http://www.paflora.org>, <http://www.invasivespecies.gov>,
<http://plants.usda.gov/java/profile?symbol=ARHI3>



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