

Invasive Species

Leaflet





Sorghum halepense (Johnson Grass)

Initial Introduction and Expansion in Range



One of the most cosmopolitan of weeds, Sorghum halepense is thought to be native to the Mediterranean region but is now found in essentially all temperate regions of the world. It was introduced to the United States in the early 1800s as a forage grass, and by the end of the 19th century S. halepense was growing throughout most of the United States. In North Carolina, it occurs statewide.

Each plant can produce hundreds of seeds with potential for far ranging dispersal by water, wind, livestock, commercial seed contamination, and contaminated machinery, grain or hay. The immense, rapidly growing rhizome system of S. halepense gives this plant a competitive edge allowing it to form dense colonies, displacing desirable vegetation and restricting tree seedling establishment. In addition, the rhizomes regenerate easily from small pieces and are capable of growing or remaining dormant in a wide range of environmental conditions.

Description and Biology

- Tall (up to 8 feet), perennial, rhizomatous grass that grows in clumps or nearly solid stands.
- Stout stem that is pink to rusty-red near base.
- Long (2 feet), smooth leaves with a characteristic white mid-vein.
- Appearing during the summer, flowers are large, loosely branched and purplish.
- Seeds are reddish-brown and nearly 0.08 of an inch long.



Habitats Susceptible to Invasion

A major agricultural weed throughout the world including the United States, S. halepense is especially troublesome in corn fields where it forms tall, dense stands. It is also adapted to a wide variety of habitats including open forests, old fields, ditches and stream banks. Management of S. halepense is a constant problem along roadsides where it creates safety hazards by obscuring visibility.

Prevention and Control

Sorghum halapense is a challenging plant to control because of its prolific seed production, extensive rhizome system, ability of rhizome fragments to re-sprout, and adaptation to a wide range of habitats. The application of a foliar solution of 2 percent glyphosate in the early summer (just prior to seed maturity) has resulted in a high rate of mortality. This herbicide treatment may need to be repeated for several years to ensure good control. The most successful chemical control can be achieved with a foliar solution of 1 ounce sulfosulfuron/100 gallons water plus a 0.5 percent non-ionic surfactant. This solution will treat an area approximately the size of an acre.

THE LABEL IS THE LAW!

WHEN USING ANY PESTICIDE, FOLLOW ALL LABEL INSTRUCTIONS

Citations:

Smith, Cherri. 2008. Invasive Exotic Plants of North Carolina. N.C. Department of Transportation. Raleigh, NC.

Sorghum halapense photography by Cherri Smith, NCDOT (left) and Karen M. Lynch, NCDOT (right).







