Johnsongrass

Sorghum halpense

Colorado Department of Agriculture

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Key ID Points

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Identification and Management

Identification and Impacts

Johnsongrass (Sorghum halpense) is a perennial grass native to the Mediterranean region. The erect stems of this grass grows to be 2 to 8 feet tall and they are generally solid. At the base of the stalks they are reddish pink in color. Leaves of this grass range from 6 to 20 inches long and are 1/2 to 1 inch wide. The blades are flat with a very distinctive white midvein with maturity. The ligules of the plant are membranous and are surrounded with fine hairs. The inflorescence of Johnsongrass are is a large open panicle, reddish to purple in color. The spikelets of the panicle are generally awn-tipped and shiny. Not all spikelets will contain awns, but the awns that are present can be bent and needle-like. Johnsongrass reproduces by seed and a thick fibrous rhizomes.

Habitats for Johnsongrass include; crop fields, hay fields, roadsides, fence rows, and waste areas. Originally introduced as a hay or forage crop, and thought to be a warm season grass, it has adapted in cooler climates. When found in areas that may frost or become moisture stressed, Johnsongrass becomes toxic to livestock. It produces hydrocyanic acid, which can cause livestock's cells to lose the ability to utilize oxygen, similar to cyanide poisoning.

The key to effective control of Johnsongrass is the establishment and to minimize disturbance in areas susceptible to infestation. Using an integrated approach to control population of already established plant infestations can be an effective management tool. Depending on size of the infestation chemical, cultural and mechanical control options are useful. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Johnsongrass is designated as a "List C" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local jurisdictions managing this species. For more information, visit www.colorado.gov/ag/weeds or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

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Management Recommendations

Johnsongrass

CULTURAL
Maintaining a healthy rangeland or pasture can help prevent the establishment of Johnsongrass. Planting native grasses and forbs to outcompete the grass can assist in control. For specific seed recommendations contact your local Natural Resources Conservation Services for seed mixes.

BIOLOGICAL
Currently there is not any biocontrol available for Johsnongrass. Biocontrol takes many years of research and development. For more information, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916 .

MECHANICAL
Hand pulling or hoeing when soil is moist, and infestations are small can be effective. When infestations are larger, mowing, tilling or plowing can assist with control when used in combination with herbicides. The key to effective control is to prevent seed production and/or spread through rhizomes.

Integrated Weed Management:

Preventing the establishment and maintaining healthy pastures by minimizing disturbance of the is most effective in controlling Johnsongrass. Using a combination of control methods can be effective if an infestation is already established. Cultural, chemical and mechanical treatments can be effective if used together.

HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. Always read, understand, and follow the label directions. The herbicide label is the LAW!

HERBICIDE	RATE	APPLICATION TIMING
Glyphosate + Isopropylamine (Glyphomax)	16 oz/acre	Apply in early growth stages before plant reaches 12 inches in height.
Glyphosate + Potassium	22 oz/acre	Apply in early growth stages before plant reaches 6 inches in height.
2,4-D + Glyphosate + Isopropylamine (Recoil)	1.25 -2.5 qts./acre	Apply in pre-seedhead stages of plant.

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