

Johnsongrass **SORHA**

Sorghum halepense (L.) Pers.

Synonym: *Holcus halepensis* L.

From: Miller, James H. and Steve T. Manning. [working title] An Expanded Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and Control. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. DRAFT - August 2008

Family: Poaceae

Plant. Erect, perennial, warm-season grass, stout, 3 to 8 feet (1 to 2.5 m) tall, branching from the base having long and wide green leaves with prominent wide white midveins, from scaly rhizomes and prolific roots to form dense stands.. Conical-shaped seed heads with whorled thin branches becoming shorter near the top, each terminated by multiple purplish spikelets.

Caution: Plant toxic to grazing animals if fertilized heavily or drought stricken.

Stem (culm). Stout, hairless, light green, solid with pronounced whitish swollen nodes.

Larger stems branch below mid-plant,

Leaves. Alternate, long-lanceolate with a tapering tip, 8 to 32 inches (20 to 80 cm) long and 0.4 to 1.2 inches (1 to 3 cm) wide, green sometimes tinged maroon with a prominent wide white midvein and rough serrated margins, hairless except for occasional tufts within the flared throat of the whitish clasping base. The ligule at the leaf base is a prominent white-fringed membrane, 0.25 inches (2 to 5 mm) long.

Flowers. April to November. Open spreading panicles, 6 to 20 inches (15-50 cm) long, with numerous spaced whorls of projecting fine branches being shorter in the upper portion and towards the ends of branches. Flattened spikelets in pairs at the end of finer branchlets, one spikelet stemless and ovoid and the other stemmed and narrow, 0.15 to 0.24 inches (4 to 6 mm) long. Husks shiny and short hairy, either green, yellow, or purplish black when mature, tipped with a thread-like awn or absent. Tiny stigmas and stamens project and dangle during flowering.

Seeds. May to March. Grain dark reddish-brown, 0.15 to 0.22 inches (4 to 5.5 mm) long, released within the husks.

Ecology. Occurs as dense colonies in old fields and along field margins and right-of-ways to invade new forest plantations, open forests, and forest openings. Highly competitive with planted and natural tree seedlings, and excludes native plants. Persists and colonizes by rhizomes and spreads by seeds. New plants can produce seed in the first year and seed can remain dormant for many years. Each rhizome segment can sprout. Older plants flattened by running water or vehicles can sprout at each stem node.

Resembles several stout grasses when young, while the seedhead shape is more unique to the other *Sorghum* species that are crops and the common native grass purpletop tridens [*Tridens flavus* (L.) Hitchc.] whose leaves have only a thin whitish midvein, the leaf base is often reddish tinged, the ligule is a hairy fringe, and seeds are maroon on distinctly drooping panicle branches.

History and use. Introduced in the early 1800's and widely planted as a forage grass and still utilized in some locations. Multiple varieties developed that resulted in cold hardiness and a rapid spread northward.