TEXAS A&M UNIVERSITY
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TEXAS A&M AGRILIFE EXTENSION

## TAM-AAMM

***Texas A&M—AgriLife Agronomic Monday Memo*** *(Sept. 16, 2024)*

*Dr. Calvin Trostle, Texas A&M AgriLife Extension Agronomist, Lubbock*
*(806) 777-0247 (M), ctrostle@ag.tamu.edu*

# Johnsongrass in Texas—Control but also Limited Risky Grazing: Part 1

*Aggressive rhizome roots complicate control, and prussic acid is a constant animal concern.*

**Fig. 1.** Aggressive ubiquitous rhizomes from Johnsongrass, McLennan Co., TX. (Calvin Trostle.)

Among all the crop and plant species I have learned about and worked with in my career, I think Johnsongrass is among the most impressive. For better or worse. It is tough. The rhizomes are like the proverbial 'nine lives' of a cat. In one Texas county I saw Johnsongrass growing in the bed of a flat-bed semi-truck trailer. (Where did I save that picture?)

Most often we think of Johnsongrass as a weed. It germinates from seed (Fig. 2) in the spring, but also aggressively emerges from spreading rhizomes. So, control methods are foremost on our mind. There are several chemical options for Johnsongrass control, but I will defer to a

**Fig. 2.** Johnsongrass seed head which annually replenishes potential seed supply for further spring infestations. (Calvin Trostle.)

comprehensive University of Georgia Extension document "Johnsongrass Control in Pastures, Roadsides, and Noncropland Areas," https://extension.uga.edu/publications/detail.html?number=B1513. The document—confirm suggestions with current herbicide labels—summarizes the different situations where control is desired. These include:

- Use of pre-emerge dinitroaniline herbicides will suppress germination from seed, but do not affect rhizome growth, emergence, and spread.
- Selective herbicides for control in *existing* hay patches and pastures. These include sulfosulfuron (acetolactate synthase ALS-inhibiting herbicide) which can be used cautiously in existing bermudagrass and bahiagrass. Also, combinations of nicosulfuron + metsulfuron and imazapic may also control Johnsongrass in bermudagrass pastures though Univ. of Georgia suggests this latter combination may be more injurious to existing bermudagrass. A positive for these active ingredients is there are no grazing restrictions.
- For Johnsongrass that infests non-grass crops like forage legumes, herbicide with active ingredients like *clethodim* (most common brand name 'Select') and *quizalofop-P-ethyl* (common brand name Assure II) may be used.
- Other Johnsongrass control options for include other herbicides and glyphosate to translocate and kill the root (most common formulation is Roundup) if it is acceptable to kill all vegetation. I am unsure, however, if there is less effectiveness in translocation to rhizomes. (It would seem rhizomes might be somewhat impervious to this mechanism.)

University of Georgia notes long-term control of Johnsongrass if best with fall applications.

**What is Johnsongrass?**

Johnsongrass (*Sorghum halpense*) is a cousin of grain sorghum (*Sorghum bicolor*), but it is a distinctly different species. There are genetic differences in the genes (haploid vs. tetraploid). Grain sorghum and closely related crops like sorghum/sudan do not produce rhizomes. Dr. Bill Rooney, sorghum breeder with Texas A&M, dispelled a long-time incorrect assumption I had. On the Kansas farm I grew up on, my brother and I cut 'shattercane' heads and treated the roots with sodium chlorate in our family's fields. I thought shattercane was a cross of grain sorghum and Johnsongrass. Not so. Dr. Rooney notes the term shattercane is not used much in Texas.

*What is the potential for Roundup-resistant Johnsongrass?*

I am asked about twice a year when farmers might have Roundup-Ready grain sorghum. The answer has always been 'never.' This would lead potentially to the crossing of grain sorghum and Johnsongrass resulting in glyphosate-resistant populations of Johnsongrass. Not good!

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**From TAM—AAMM one year ago**: **"What do you see?"—Observations of Sorghum/Sudan Harvest.** *Educational points from a picture of a swather cutting sorghum/sudan. (Sept. 15, 2023).*

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This weekly agronomic Memo for Texas A&M AgriLife Extension county agents is compiled by Dr. Calvin Trostle, Professor & Extension Agronomist, Lubbock, (806) 777-0247 (mobile), ctrostle@ag.tamu.edu TAM-AAMM tips will be collected at http://_(to_be_determined) Permission is granted to AgriLife Extension personnel to use this information as you see fit for Extension education purposes (newsletters, web posting, social media, etc.).