UNIVERSITY OF MISSOURI
Extension

CAPE GIRARDEAU COUNTY

684 West Jackson Trail
P.O. Box 408
Jackson, MO 63755
PHONE: 573-243-3581
FAX: 573-243-1606
E-MAIL: Capeco@missouri.edu
WEB: http://extension .missouri.edu

Grain Sorghum (Milo) Management Quick Reference

Varieties – Refer to Variety Performance Trials Arkansas and Missouri. Use Concep + fungicide treated seed. Consider insecticide seed treatment, especially in no-till.

Planting Date – April 20th – May 15th ; May 15th – June 1st yield potential drops slightly
Planting between these dates will retain >95% yield potential. Yield potential drops below 80% after June 1st.
Soil temp must be 65°F to maximize germination and emergence uniformity.

Planting Rate – 60,000 pure live seed (PLS) per acre non-irrigated; 80,000 PLS/A irrigated.
Actual seeding rate will depend on germination percentage and planting conditions, methods, and if planting past ideal dates. MO research shows that milo seed head will compensate for **uniform** thin stand of 35,000 on irrigated ground when Nitrogen rates were above 100 lbs/A.

Planting Depth – ½ inch to 1 inch; avoid planting deeper

Planting Method – 7.5" to 30" row width. Consider twin row when on 38" beds.

Fertility – Soil Test
Nitrogen – Split application ideal: 33% to 50% preplant or at planting; 50% to 67% sidedress at V5
Nitrogen recommendations are based on the formula: 60 + [(lbs of Milo/A)*(0.014)] – 10 = Units of N.
However, rate will vary with soil type and irrigation. Yield goal dryland: 80 to 120 bu/A; irrigated: 120 to 160 bu/A. Arkansas dryland research indicates >95% yield potential at rate of 120 lbs Nitrogen/A.

Phosphorus (P) – removal rate of 0.4 lb P_2O_5/bushel
Potassium (K) – removal rate of 0.25 lb K_2O/bushel

Water Usage - Peak water use: Boot to Bloom at 0.35 inches/day

Pest Management – Weeds
Refer to Missouri Manual 171 "Pest Management Guide" for specific product recommendations.
Read and follow all label directions.
Problem Weeds – johnsongrass and Texas panicum (AVOID PLANTING IN THESE FIELDS)
Herbicides:
PRE: metolachlor or alachlor; atrazine can be applied PRE, however, POST is optimum.
POST: Atrazine + COC by 12 inch height cutoff
Atrazine has use restrictions on low organic matter sands due to potential crop injury
This is the foundation program; additional products labeled can be used PRE and/or POST
***Check label for additional surfactant needs/restrictions specific to products used.*

Pest Management – Insects
Refer to Missouri Manual 171 "Pest Management Guide" for specific product recommendations.
Read and follow all label directions.

Problem Insects – midge, corn earworm
-white sugarcane aphid is a new pest that producers need to monitor
Scouting:
Midge – scout at flowering: Milo flowers from tip to bottom over 4 to 9 day period. Read MU Guide 7140 for specific midge scouting techniques. Threshold: 1 adult midge/head average
Corn Earworm (sorghum headworm) – scout at soft dough to hard dough: Read MU Guide 7110 for specific corn earworm scouting techniques. Threshold: 2 larva/head average
White Sugarcane Aphid – (new pest) scout at boot to heading: IDEALLY - AVOID SPRAYING PYRETHROID IF IDENTIFIED IN FIELD.
Insecticides:
Midge - labeled pyrethroids
Sorghum Headworm – pyrethroids offer some level of control; may need Lepidoptera products such as Belt and Tracer
White Sugarcane Aphid – Transform insecticide received section 18 approval for 2014. If approved for 2015 – do **not** mix with pyrethroid
***Check label for specific instructions.*

Pest Management - Disease
Seedling blights most common – plant in soil suitable for rapid germination and seed treatments
Foliar and head molds – tolerant varieties; fungicides very limited and generally not warranted
Stalk rot – most damaging is Charcoal Rot during drought conditions
***Check label for specific instructions.*

University of MO does not endorse any one product. Product Trade names are used for ease of reference.

Harvest - Desiccants are generally recommended but not necessary.
Glyphosate and Sodium Chlorate after physiological maturity when moisture reaches 25% and a minimum of 7 days prior to harvest

Harvest Losses – 20 kernels/square foot = 1 bushel per acre
Measure in front, behind header and behind separator to get an estimate of where losses are occurring and combine for total harvest loss. Count kernels (including those still attached to intact heads) in 10 sq. ft area behind combine and divide by 200. Harvest losses of 5% or less are ideal.

Anthony Ohmes
University of Missouri Extension
Southeast Region
573-243-3582
http://extension.missouri.edu/capegirardeau