



SORGHUM CHECKOFF

information

Checklist for Sorghum Production

Growth Stages of Sorghum	Growth Stage 1 (1-30 days)	Growth Stage 2 Reproductive (31-60 days)	Growth Stage 3 Bloom to Harvest (61-115 days)
KEY DECISIONS PRIOR TO PLANTING	MANAGEMENT PRACTICE	SIGNIFICANT FOR YIELD	COMPLETING THE CROP
<p>Choice of Hybrids</p> <ol style="list-style-type: none"> 1. Stability of performance over years (adaptation, staygreen trait) 2. Potential of high yield in its maturity class 3. Hybrid with which your neighbors have success 4. Attend field days, study public & private data 5. Non-tillering hybrids may offer best opportunity to control plant population under dryland <p>Consider purity & germination of seed</p> <p>Control plan population by determining seed per pound and adjusting planter according to seed drop per foot</p> <p>Consider the use of a seed treatment to control insects/diseases</p> <p>Give priority to moisture at planting as well as prospects for season</p> <p>Use lower plant population and hybrid of an earlier maturity anticipating less than optimum moisture</p> <p>Apply a minimum sufficient starter fertilizer-rely on soil test information</p> <p>When possible, choose a planting date most likely to coincide with annual rainfall pattern or to avoid insect pressure</p>	<p>Plant at 65°F soil temperature, at 60°F minimum-narrow row width is desirable</p> <p>Determine planting depth on available moisture, chance of drying wind, known vigor of hybrid, and soil temperature. Avoid planting into dry soil</p> <p>Apply appropriate pre or post-emergent herbicide</p> <p>Where necessary, break crust e.g. with rotary hoe</p> <p>Side-dress additional N with minimum root pruning. Sorghum 35 lbs. N and 11 lbs P2O5 for each 1000 lbs (18 bu) of grain and 1200 lbs of stover</p> <p>Inspect for presence of harmful insects e.g. greenbugs and chinch bugs</p> <p>Leaf number determined by maturity</p> <p>Final leaf number will be determined at change to head formation (panicle initiation - time in each growth stage will vary according to hybrid, planting date, and temperature)</p>	<p>Head begins to form at growing point (8-12 leaf stage of development)</p> <p>Final seed number is determined when panicle is formed during GS2</p> <p>Drought stress or extreme temperature limits yield by reducing seed number; approximately 2" water is needed to produce each 1000 lbs grain after first 8-10" of water</p> <p>GS-2 is critical time to apply irrigation, either limited or full</p> <p>Where needed apply post-emergent herbicide e.g. for grass and throw sufficient soil to base of plant to avoid root lodging</p> <p>Disease or insect damage will reduce yield; grow resistant hybrids where appropriate</p> <p>Purity of seed can be determined late in GS-2 as height mutants/tall outcrosses become evident</p> <p>Extreme heat in this stage may cause blasting or floret abortion, and reduced seed number and head size</p>	<p>Watch for midge during flowering</p> <p>Late season greenbug damage will reduce test weight and increase lodging</p> <p>Temperatures below 60°-65° can cause pollen sterility and lack of complete seed set. Select proper maturity for your hybrid</p> <p>Stay-green desirable to assure high test weight and minimize stalk disease/lodging</p> <p>Bloom to physiological maturity (black layer) results in moisture at 30-35%</p> <p>Each day after physiological maturity will reduce H2O 1-1.5%</p> <p>Test weight determined in part by length of grain fill; also seed size and density</p> <p>Hybrids tend to vary in post-freeze stalk breakage at the internode</p> <p>Irrigation will not increase yield after black layer forms—only maintains plant health</p> <p>Adjust combine for minimum grain loss</p>

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