

# SORGHUM

(Forage, Grain)

## ESTIMATED WEED CONTROL RATINGS OF HERBICIDES

Ratings	Expected Control	Application Method	Crabgrass	Goosegrass	Signalgrass	Seedling johnsongrass	Fall panicum	Pigweed	Cocklebur	Morningglory	Prickly sida	Sicklepod	Hemp sesbania	Lambsquarter	Crop Tolerance
0-3	slight														
4-6	fair														
7-8	good														
9-10	excellent														
Dual*		pre	9	9	7	8	9	8	0	0	4	5	2	6	G
Bicep*		pre	9	9	8	8	8	9	6	6	8	6	6	9	G
alachlor*		pre	9	9	8	7	8	9	0	5	6	6	0	8	G
alachlor* + atrazine		pre	9	9	9	8	8	9	6	7	9	6	7	9	G
atrazine		pre	9	6	5	4	4	9	9	8	8	8	7	9	F
Outlook		pre	9	9	9	7	8	9	0	6	6	-	-	8	G
Permit		post	3	3	3	3	3	8	9	5	7	4	4	5	G
atrazine		post	7	5	6	3	4	8	9	8	8	7	6	8	G
atrazine + oil		post	8	6	7	3	5	9	9	8	9	8	7	9	F
2,4-D		post	0	1	0	0	2	9	9	9	8	8	9	9	F
bentazon**		post	0	0	0	0	0	5	9	2-9	8	0	4	7	G
paraquat***		post	8	8	8	8	8	8	5	5	6	9	2	7	F
Peak		post	0	0	0	0	0	9	9	8	9	8	8	8	G
linuron		post	8	7	8	6	8	8	7	8	8	8	8	9	F
Buctril***		post	0	0	0	0	0	6	9	8	5	4	8	9	G

\*Sorghum seed must be treated with seed protectant to prevent damage from alachlor, metolachlor (Dual, Bicep) or dimethenamid - P (Outlook)

\*\*Control of morningglory varies among species.

\*\*\*Small weeds

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
<b>Preplant</b>				
paraquat at 0.5 to 1 lb/A	2.0 EC Gramoxone Inteon — 32 to 64 oz in a minimum of 10 gal by ground and 5 gal by air. Add a nonionic surfactant at 1 to 2 pt per 100-gal mix.	Before sorghum emerges.	Most small emerged annual weeds.	Apply as a broadcast spray. Use 32 to 40 ounces when weeds are 1 to 3 inches and 48 to 64 ounces on 6-inch or larger weeds. Do not apply during windy conditions or graze or feed treated forage to livestock. See the label for tank mixtures with Atrazine, 2, 4-D LV, and Harmony Extra.
glyphosate at 0.375 to 1.5 lb ae	See glyphosate table on pages 5-6 for rates.	Preplant for vegetation knockdown.	Consult label for list of weeds controlled.	Refer to the glyphosate formulation table on page 5 for surfactant/adjutant recommendations for specific glyphosate formulations.
saflufenacil at 0.02 to 0.04 lb	2.85 lb/gal - Sharpen — 1 to 2 oz with 5 gal or more by ground or 3 or more gal by air. Add MSO adjuvant 1% v/v + AMS at 1% to 2% v/v. Consult label.	Preplant or preemergence check label.	Small, actively growing broadleaf weeds and preemergence activity on broadleaf weeds. Consult label for specific weeds.	Rainfall is required to activate this herbicide. Do not apply to emerged sorghum. Do not apply Sharpen within 30 days of planting. Consult label for crop rotational intervals and Sharpen tank-mix partners. The use of Sharpen with Gramoxone at high temperatures may result in reduced Sharpen activity.

Consult labels for approved adjuvants.

Weed resistance to recommended use-rates of certain herbicides has been documented in Mississippi — SEE PAGE 9.

*Sorghum (Forage, Grain), Continued*

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
<b>Preemergence</b>				
acetochlor at 1.35 to 2.5 lb + atrazine at 0.67 to 1.24 lb	4.04 lb/gal - Degree Xtra — 2 to 3.7 qt/A in 10 gal or more by ground.	Preemergence at planting.	Annual grasses and broadleaf weeds. Consult label for specific weeds.	<b>Apply only to grain sorghum planted with seed treated with a seed protectant or safener.</b> Rates should be based on soil texture and tolerance of sorghum hybrid. Consult label for crop rotation restriction and soil texture rate. Do not exceed 2.5 pounds per acre of atrazine per year. For grain sorghum forage use, allow a 60-day preharvest interval.
alachlor at 1.5 to 2.5 lb	4 lb/gal INTRRO — 1.5 to 2.5 qt in 10 gal or more by ground or 3 to 10 gal by air.	At planting, preemergence.	Annual grasses and small broadleaf weed.	Consult the label for application rates based on soil texture and tank-mix partners. <b>Apply only to grain sorghum planted with seed treated with a seed protectant or safener.</b> Do not make more than two applications per year. The graze or harvest for forage interval is 70 days after application.
alachlor at 2.5 to 3 to 3.5 lb/A	2.5 to 3 to 3.5 qt of 4 lb/gal in 15 or more gal water per acre by ground. See table (page 3) to calculate band rate.	At planting.	Annual grasses and small-seeded annual broadleaves.	Apply only to fields planted with seed treated with flurazole seed protectant. See label for restrictions.
halsulfuron + dicamba at 0.03125 to 0.04688 lb/A + 0.138 to 0.206 lb/A	Yukon WSG — 4 to 6 oz in 10 gal or more by ground or 5 to 15 gal by air. Add NIS at 0.25% to 0.5% v/v or COC at 1% v/v.	Postemergence 2-leaf to 15-inch-tall grain sorghum (milo). Use drop nozzles if sorghum is taller than 8 inches.	Small broadleaf weeds. With ALS-resistant weeds, reduced control may occur.	Best performance is obtained when applied to 3- to 5-leaf sorghum and weeds are small. Apply as a single application with the total application rate not to exceed 6 ounces per season. Do not graze or feed treated sorghum forage or silage for 30 days after treatment. Do not apply to sorghum for seed production. Consult label for tank-mix partners and crop rotation restrictions. If stress conditions occur after application, temporary stature reduction may occur.
metolachlor at 1.5 to 2 to 2.5 lb/A or 0.95 to 1.43 to 1.59 lb/A	Dual Magnum 7.62 or Dual II Magnum 7.64 lb/gal 1 to 1.5 to 1.67 pt in 10 gal or more water by ground or 2 gal or more water by air. See table (page 3) to calculate band rate.	At planting.	Most annual grasses and small-seeded broadleaf weeds.	Apply only when the sorghum seed has been properly treated with Concep or Screen seed protectant. See label for rotation restrictions.
s-metolachlor at 1.31 lb + atrazine at 1.31 lb + mesotrione at 0.168 lb	3.66 lb/gal - Lexar — 3 qt in 10 gal or more by ground application.	At planting or up to 21 days before planting.	Most annual grasses and broadleaf weeds.	<b>Sorghum seed must be treated with Concept III safener before planting.</b> Base use rate on soil texture (consult label). Applying Lexar more than 7 days before planting reduces risk of crop injury. A split application of 50% applied 7-21 days before planting and 50% applied preemergence may be used. Do not apply more than 3 quarts per growing season. If weeds are present at application, add NIS (0.25% v/v) or COC (1% v/v) and spray grade UAN (2.5%) or AMS (8.5 pounds per 100 gallons). Do not apply to sandy soils (sand, sandy loam, or loamy sandy). Do not apply to emerged sorghum. Do not use in production of forage sorghum, sudangrass, sorghum-sudangrass hybrids, or dual-purpose sorghum.

*Sorghum (Forage, Grain), Continued*

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
alachlor at 2 to 2.25 + atrazine at 1.25 to 1.5 lb/A or 2 + 0.75 to 1 lb/A (see right column)	4 lb/gal — 2 to 2.25 qt + atrazine - 1.25 to 1.5 qt 4L or 1.5 to 1.9 lb 80W or 1.4 to 1.7 lb 90 WDG in 15 gal water or more per acre by ground or 3.3 to 4 qt Lasso/atrazine pre-mix. See table (page 3) to calculate band rate.	From time of planting to 5-inch sorghum.	Most annual grasses and broadleaf weeds preemergence or emerged weeds with 2 or fewer leaves.	Do not apply atrazine at 1.25 pounds per acre or above on sand, loamy sand, or sandy loam soils. Atrazine at 0.75 to 1 pound per acre may be applied to coarse soils (other than sand) with less than 3% organic matter. Apply only to fields planted with seed treated with flurazole seed protectant. See label for the use of additional Lasso or atrazine for hard-to-control species.
metolachlor at 1.5 to 2 or 0.95 to 1.43 + atrazine at 1.2 to 1.6 lb/A	Dual Magnum 7.62 or Dual II Magnum 7.64 lb/gal at 0.95 to 1.43 pt + atrazine at 1.2 to 1.6 qt of 4L formulation or 1.5 to 2.5 lb of 80% WP formulation or 1.3 to 2.2 lb of 90% WDG in a minimum of 10 gal water. See table (page 3) to calculate band rate.	At planting.	Most annual grasses and broadleaf weeds.	Use with sorghum seed properly treated with Concep or Screen seed protectant. Do not use on sand, loamy sand, or sandy loam. On medium to fine-textured soils with 1-1.5% organic matter, use low rate; above 1.5% organic matter, use high rate. Do not use on any soil with less than 1% organic matter.
atrazine at 1.6 lb/A	3.2 pt of a 4 lb/gal or 2 lb of 80% wettable powder or 1.78 lb of 90% WDG in a minimum of 10 gal of water for ground application and 3 gal for aerial application. See table (page 3) to calculate band rate.	At planting.	Most annual grasses (except signalgrass) and broadleaf weeds.	Do not use on sand, loamy sand, or sandy loam or any soil with less than 1% organic matter. On soil containing 1-1.5% organic matter, use low rate; on soil with over 1.5% organic matter, use high rate. Do not plant crops other than corn or sorghum until the year after treatment. If treatment is made after June 10 crops other than corn or sorghum should not be planted the following year. Do not graze or feed forage from treated areas for 21 days following application. Thorough soil tillage after harvest minimizes the possibility for crop injury the following year. Do not exceed 2 pounds of active ingredient per acre per year.
dimethenamid - P	Outlook 6EC — 16 to 20 oz in 20 or more gal/A spray solution.	At planting.	Annual grasses and small-seeded annual broadleaf weeds.	<b>Do not use on forage sorghum.</b> Apply only to sorghum planted with seed treated with a chloroacetamide herbicide safener. See label for tank-mix application with atrazine. See label for restrictions.

**Postemergence**

acetechlor at 1.35 to 2.5 lb + atrazine at 0.67 to 1.24 lb	4.04 lb/gal - Degree Xtra — 2 to 3.7 qt in 10 gal or more by ground.	Postemergence — surface apply before crop exceeds 11 inches.	Annual grasses and broadleaf weeds.	Check the label for appropriate rates based on soil texture and organic matter. Do not exceed 2.5 pounds per acre of atrazine per year. For grain sorghum forage use, allow a 60-day preharvest interval. Check the label for crop rotation restrictions.
bromoxynil at 0.25 to 0.375 lb/A	0.5 to 0.75 pt Buctril 4E in 10 to 20 gal water by ground or 5 gal by air.	After sorghum is in the 3-leaf stage to 12 inches tall.	Many annual broad-leaf weeds in the 2- to 4-leaf stage. Pigweeds should be 2 inches or less.	A contact herbicide, coverage is extremely important. Apply with at least 30 psi. Will not control sicklepod, weak on prickly sida. Do not add surfactant.

*Sorghum (Forage, Grain), Continued*

<b>Crop, weed, or situation and active chemical per treated land acre</b>	<b>Formulation needed to treat 1 acre broadcast</b>	<b>Time of application</b>	<b>Weeds controlled</b>	<b>Special instructions and remarks</b>
2,4-D at 0.3 to 0.5 lb/A	2,4-D amine — 0.66 to 1 pt of 4 lb/gal formulation.	Apply as directed spray when plants are 4 to 12 inches tall.	Small broadleaf weeds.	Use a directed spray from the side of the drill to keep the spray out of the whorls of the plants. Labels vary on method of application. Do not apply before sorghum is 4 inches tall. Some labels permit over-the-top applications on 6- to 8-inch sorghum. If applied over-the-top use only the low rate. All labels suggest directed spray after sorghum reaches 8 inches tall.
atrazine at 2 lb/A	atrazine — 4 pt of a 4 lb/gal or 2.5 lb of 80% WP or 2.22 lb of 90% WDG in a minimum of 10 gal of water for ground application and 3 gal for aerial application. See table (page 3) to calculate band rate.	After sorghum is completely emerged but before 12 inches tall and before weeds are over 1.5 inches tall.	Most annual grasses and broadleaf weeds.	Do not exceed 2 pounds of active ingredient per acre per year. Do not use on sand or sandy loam soils. Do not use when sorghum is under stress or crop is wet and succulent from recent rainfall. Do not graze or feed forage for 21 days after application. If applied after June 10, do not plant with crops other than corn or sorghum the following year. See label for restrictions.
atrazine at 1.2 lb/A + crop oil concentrate	atrazine — 2.4 pt of a 4 lb/gal or 1.5 lb of an 80% WP or 1.3 lb of 90% WDG + 1 qt crop oil concentrate in a minimum of 10 gal water per acre by ground. See table (page 3) to calculate band rate.	Sorghum 4 to 12 inches tall.	Same as atrazine at 2 lb/A.	Same as atrazine at 2 pounds per acre. Be sure oil is not contaminated or crop injury may result. Do not exceed 2 pounds of active ingredient per acre per year. See label for restrictions.
linuron at 0.5-1 lb/A	1 to 2 pt Linex 4L. Add 2 pt surfactant to each 50 gal spray. Apply in 20 to 30 gal water per acre. See table (page 3) to calculate band rates.	Apply a single application as a directed spray to 12- to 15-inch sorghum. Apply when weeds are 2 to 4 inches tall.	Most annual grasses and broadleaf weeds that are actively growing and are 2 to 4 inches tall.	Use shields and/or gauge wheels to accurately direct the spray to the base of the sorghum. Keep spray off the upper leaves and whorl of sorghum. Use the low rate on small sorghum and 2-inch weeds. Use the high rate for large sorghum and 2- to 4-inch weeds. Keep spray pressure low to prevent injury to sorghum. Do not graze or feed plants to livestock within 3 months after application. Do not apply within 15 days of harvest.
bentazon at 0.5 to 1 lb/A	1 to 2 pt Basagran 4E in 20 gal water over-the-top or directed spray.	After sorghum has completely emerged but before boot.	Cocklebur, small prickly sida, smartweed, and ragweed.	Particularly useful where 2,4-D cannot be used because of nearby sensitive crops. Use low rate for up to 4-leaf cocklebur and stage when weeds are small and actively growing and high rate for 6- to 10-leaf cocklebur and other broadleaf weeds. Control may be poor if applied under drought stress. Rainfall after application may reduce effectiveness. Crop oil concentrate or surfactant may be used in accordance with label.
halosulfuron at 0.032 lb/A	Permit 75DF — 0.67 oz in 10 or more gal/A spray solution. Add 1 pt surfactant or 4 pt crop oil for each 50 gal spray.	Over the top to sorghum from 2-leaf to head emergence.	Annual broadleaf weeds and nutsedge suppression.	See label for tank mixture with atrazine, Banvel, Buctril, or 2,4-D, and restrictions.

*Sorghum (Forage, Grain), Continued*

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
prosulfuron at 0.43 or 0.57 lb/A	Peak 57 WDG 0.75 or 1 oz in a minimum of 2 gal of water by air or 10 gal by ground. Add 1 pt nonionic surfactant for each 50 gal spray mix.	Over the top when sorghum is 5 to 30 inches tall.	Most annual broadleaf weeds.	DO NOT USE ON FORAGE SORGHUM. See label for rate to use on weed height. Improved weed coverage with directed/semi-directed application to sorghum 20 inches or taller. See label for tank mixtures with atrazine, dicamba, 2,4-D, or bromoxynil using 0.5 or 0.75 ounce per acre. See label for restrictions. Plant only STS soybeans the year following application; apply only the low rate if cotton will be planted the year following application; allow 10 months between application and planting for both cotton and soybeans.
quinclorac + atrazine at 0.25 to 0.375 lb/A + 0.5 to 1 lb/A	Paramount — 5.3 to 8 oz/A + atrazine (0.5 to 1 lb ai/A). Add methylated seed oil (MSO) (preferred additive) or crop oil concentrate (COC) at 1 qt/A.	Preemergence to early postemergence (12-inch-tall sorghum).	Annual grasses and broadleaf weeds.	Apply when weeds are less than 2 inches tall. Do not use liquid fertilizer as a carrier.

**For Use Under Hooded Sprayer**

paraquat at 0.25 to 0.50 lb/A	2 EC Gramoxone Inteon — 16 to 32 oz in 10 or more gal water plus 1 pt nonionic surfactant per 50-gal mix.	After sorghum is 12 inches tall.	Small annual grasses and weeds.	<p><b>For hooded or shielded sprayers:</b> To avoid excessive crop injury, use a hooded or shielded sprayer with skids or wheels on the spray boom. Apply by directing sprayer between the rows and use the hooded or shielded sprayer to prevent spray contact with the plant.</p> <p><b>Without hooded or shielded sprayers:</b> Do not exceed 30 psi. Use precision direct spray application equipment adjusted so no more than the lower 3 inches of each plant is sprayed. Some crop injury will occur. Do not spray during windy conditions.</p>
carfentrazone at 0.008 to 0.016 lb/A	2 EC AIM — 0.5 to 1 oz/A in at least 10 gal/A water. Add nonionic surfactant at 2 pt per 100-gal mix.	See special instructions.	Morningglories, pigweed, waterhemp, and velvetleaf.	Apply AIM to row middles of emerged crop with a <b>hooded sprayer</b> . Hooded sprayers must be designed, adjusted, and operated in such a manner as to totally enclose the spray pattern and prevent any spray deposition to the green stem tissue or foliage of the crop. Base application rate on weed size. See the label.

**At Harvest for Weeds**

sodium chlorate at 6 lb/A	1 gal of 6 lb/gal or 2 gal of 3 lb/gal in 15 to 20 gal water by ground or 5 gal by air. Add 2 pt surfactant per 50 gal mix for aerial and 1 pt surfactant per 50 gal mix for ground application.	After sorghum grain has 25% or less moisture.	Grasses.	Apply on a bright sunny day when air temperature is above 85 degrees and relative humidity is below 65%. Broadleaf weeds may be defoliated but there will be little desiccation.
glyphosate at 0.75 to 7.5 lb ae/a	See table on pages 5-6 for glyphosate rates.	After grain reaches 30% moisture or less and kernel black layer has formed; at least 7 days before harvest.	Johnsongrass, other susceptible weeds, and desiccation of green vegetation.	Allow a minimum of 7 days before harvest or grazing.