

## Sorghum

There are excellent herbicide combinations for weed control in both conventional and no-till sorghum. The best combinations include Dual or Lasso combined with atrazine, but to use these grass control materials, the sorghum seed must be properly protected with seed treatments of Concep or Screen. If untreated seed is to be used, then Ramrod and atrazine or atrazine alone are the only choices.

Consult the “relative effectiveness tables” listed in the *Weed Control in Corn* section for efficacy information on many of the sorghum herbicides.

**Table 5.60 - Sorghum No-till**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Cover crops, including perennial sods, annual weeds and top kill and suppression of perennial weeds	G + F	Paraquat 0.5-1.0 lb + surfactant	Gramoxone Inteon 2.0-4.0 pt + surfactant as labeled	Always use a nonionic surfactant. Uniform coverage is important for good kill. Use lower rate for rye cover crop. Must be accompanied by pre-emergence residual herbicides.
Cover crops, perennial sods, annual weeds and suppression of perennial weeds such as quackgrass and thistle (Canada)	G + F	Glyphosate 0.75-4.0 lb	4.0 lb ai/gal glyphosate con- taining product or equivalent 0.75-4.0 qt	Use 1.0-1.5 lb ai for control of annual cover crops and emerged annual grass and broadleaf weeds. Use 2.0-3.0 lb ai for emerged perennial weeds. At normal application dates in no-till systems, perennial weeds may not be at the proper stage of growth for control. Glyphosate is slower acting than paraquat in killing vegetation, therefore may result in greater soil moisture loss. Uniform coverage is important. Rainfall within 1-2 hours will reduce effectiveness. Must be accompanied by residual herbicides for season-long grass and broadleaf weed control.

<sup>1</sup>G = grain; F = forage

**Table 5.61 - Preemergence**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Barnyardgrass, crabgrass, cupgrass (southwestern), foxtail (giant, green and yellow), lambsquarters, morning-glory spp., nutsedge (yellow), panicum (browntop and fall), pigweed, purslane, rice (red), signalgrass and witchgrass. Also carpetweed, cocklebur, goosegrass, pusley (Florida), smartweed and velvetleaf	G + F	s-metolachlor 0.67-1.0 lb + atrazine 1.2-1.6 lb	Dual II Magnum 0.8-1.1 pt + atrazine 4L 1.2-1.6 qt or 90W 1.3-1.8 lb or Bicep II Magnum 5.5L 1.3-1.75 pt	<i>Use only if the sorghum seed has been treated by the seed company with Concep or Screen.</i> Apply to the soil and incorporate in the top 2 inches of soil within 14 days before planting using a finishing disk, harrow, rolling cultivator or similar implement capable of providing uniform 2 inch incorporation. Preemergence applications may be at planting (behind the planter or after planting, but before weeds or crops emerge. Do not use with atrazine on coarse soils or on soils with less than 1% organic matter. Observe precautions on the label.
Barnyardgrass, crabgrass, foxtail (giant, green and yellow), cupgrass (south western), lambsquarters, morning-glory spp., nutsedge (yellow), panicum (browntop and fall), pigweed, purslane, rice (red), signalgrass and witchgrass. Also carpetweed, cocklebur, goosegrass, pusley (Florida), smartweed and velvetleaf	G	Alachlor 2.0-3.0 lb + atrazine 1.0-1.75 lb	MicroTech 2.0-3.0 qt + atrazine 4L 1.0-1.75 qt or 90W 1.1-1.9 lb or Bullet 3.0-4.0 qts	<i>Use only if sorghum seed has been treated by the seed company with Concep or Screen.</i> Apply to the soil and incorporate into the top 1-2 inches of soil within 7 days before planting using a finishing disk, harrow, rolling cultivator or similar implement capable of providing uniform 2 inch incorporation. Preemergence applications may be at planting (behind the planter) or after planting, but before weeds or crops emerge. Do not use with atrazine on coarse soils or on soils with less than 1% organic matter. Observe precautions on the label.
Barnyardgrass, carpetweed, cocklebur, crabgrass, foxtail (giant, green and yellow), goosegrass, jimsonweed, lambsquarters, morning-glory spp., mustards, nightshade, panicum (fall), pigweed, pusley (Florida), purslane, ragweed, ryegrass (annual), smartweed and velvetleaf	G	Propachlor 2.5-3.0 lb + atrazine 1.0-1.6 lb	Ramrod 4L 2.5-3.0 qt + atrazine 4L 1.0-1.6 qt or 90W 1.1-1.8 lb	See label and adjust rate to soil texture and organic matter. Apply in 20.0 gal of water/A after planting and prior to crop and weed emergence. Thorough agitation in the tank is necessary. Corn, sorghum or soybeans may be planted the following year. Do not graze or feed sorghum forage or silage from treated fields to dairy animals. Do not use with atrazine on coarse soils with less than 3% organic matter content. Do not graze treated area or feed treated forage to livestock for 21 days following application.

<sup>1</sup>G = grain; F = forage

**Table 5.61 - Preemergence (cont.)**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Barnyardgrass, carpetweed, crabgrass, foxtails, goosegrass, nutsedge, panicum, pigweed spp., cocklebur, jimsonweed, lambsquarters, morning-glory, ragweed, smartweed, and velvetleaf	G + F	Dimethenamid-P 0.66-0.98 lb + atrazine 0.75-2.0 lb	Outlook 6.0EC 14.0-21.0 oz + Atrazine 4L 0.75-2.0 qt or 90W 0.8-2.21 lb or Guardsman Max 3.0-4.6 pt	<i>Use only if the sorghum seed has been treated by the seed company with Concep or Screen.</i> Can be applied preplant incorporated or pre-emergence. Under high soil moisture and/or cool conditions, Outlook may cause temporary stunting or leaf wrapping. Sorghum will normally out-grow these symptoms in 10-14 days. Sorghum forage may be grazed or fed to livestock at 60 or more days after application. Grain and fodder may be harvested and fed at 80 or more days after application.
Barnyardgrass, crabgrass (large), foxtail species, signalgrass (broadleaf), bedstraw, clovers, lettuce (prickly), morningglory, bindweed, suppression of common lambsquarters ragweed (common, giant), sunflower, velvetleaf, dandelion	G	quinclorac 0.25 lb	Paramount 75DF 5.3 oz	Labeled tank mix partners include Guardsman Max.
Barnyardgrass, crabgrass (common), foxtail species, goosegrass, panicum (fall), carpetweed, chickweed (common), dayflower (common), galinsoga, lambsquarter (common), mustard, pigweed, purslane, radish (wild), ragweed (common), shepherd's-purse, smartweed (Pennsylvania) and Suppression of annual morningglory, cocklebur, eastern black nightshade, prickly sida, sickleud, velvetleaf	G,F	linuron 0.25-1.0 lb	Lorox 5ODF 0.5-2.0 lb	Lorox can be tank mixed with other labeled herbicides for expanded weed control. Do not apply over the top of emerged sorghum. Do not use on sand or loamy sand soils. Do not use on soils with less than 1% organic matter. Sorghum seed must be planted at least 1 inch deep if Lorox is used preemergence.

<sup>1</sup>G = grain; F = forage

**Table 5.62 - Postemergence**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Barnyardgrass, crabgrass, foxtail (giant, green and yellow), common cocklebur, lambsquarters, morning-glory spp., nightshade (black), pigweed (redroot), purslane, pusley (Florida), ragweed, velvetleaf and witchgrass	G + F	Atrazine 1.0-2.0 lb	Atrazine 4L 1.0-2.0 qt or 90W 1.1-2.2 lb	Adjust rate to soil texture and organic matter. Do not graze or feed forage from treated crop. Apply to sorghum up to 12 inches in height. Add crop oil concentrate at the rate of 1.0 gal/100 gal spray mixture. Heavy rains immediately after treatment may result in crop injury. Do not plant in treated areas any crop except corn or sorghum the following year if applied after June 10. This treatment is weak on fall panicum. Refer to label for additional instructions.
Cocklebur, coffeeweed, galinsoga, horseweed, jimsonweed, lambsquarters, morning-glory spp., mustards, nightshade (black), pigweed, poorjoe, pusley (Florida), ragweed, sicklepod, spanish-needles, sunflower and velvetleaf	G	2,4-D 0.25-0.5 lb	2,4-D amine 0.5-1.0 pt of a 4.0 lb/gal formulation	Apply after crop reaches 6 inches tall and before it reaches 15 inches tall, but prior to the boot stage. A directed spray is desirable if crop is over 8 inches tall. Do not apply during boot to early dough stage. Hybrids vary in susceptibility to 2, 4- D. Treat only those known to be tolerant.
Clovers, cocklebur, jimsonweed, lambsquarter, morning-glory (ivyleaf and tall), mustards, nightshade (black), pepperweed, pigweeds, purslane, sida (prickly), or tea-weed, ragweeds, smartweed, spurge (prostrate), sunflower (common) and velvetleaf. Suppression of alfalfa, artichoke (jerusalem), bindweeds, dock (curly), dogbane (hemp), horsenettle, milkweed (common and honeyvine), plantain (broadleaf), sorrel (red) and thistle (Canada)	G	Dicamba 0.25 lb	Banvel 0.5 pt or Marksman 1.5-2.0 pt	Apply after weeds have emerged and are actively growing. Apply after sorghum is in the three leaf stage but before sorghum is 15 inches tall (12 inches for Marksman). Drop nozzles should be used if the crop is taller than 8 inches. Do not graze or feed treated sorghum, forage or silage prior to mature grain stage. Do not apply to sorghum grown for seed production. Observe precautions to avoid drift to adjacent crops.
Beggarticks, cocklebur, dayflower, jimsonweed, mustard (wild), nutsedge (yellow), ragweed, sida (prickly), smartweed, spurred anoda, sunflower (wild), thistle (Canada) and velvetleaf 1.0 qt	G + F	Bentazon 0.75-1.0 lb + crop oil concentrate	Basagran 0.75-1.0 qt + crop oil concentrate	Refer to label as the rate of application is dependent on leaf stage and height of weeds to be controlled. For Canada thistle and yellow nutsedge, only 1 application can be made in sorghum. Therefore, control may be partial or inconsistent.

<sup>1</sup>G = grain; F = forage

**Table 5.62 - Postemergence (cont.)**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Buckwheat (wild), cocklebur, jimsonweed, lambsquarters, morning-glory spp., mustard (wild), nightshade spp., ragweed (common and giant), smartweed spp. and velvetleaf	G + F	Bromoxynil 0.25-0.375 lb	Buctril 4E 0.5-0.75 pt or Buctril/Atrazine 1.5-3.0 pt	Apply as an early postemergence treatment to small weeds. Adjust rate to weed and crop size as specified by label. This treatment is nonvolatile and is appropriate for situations where the proximity of susceptible crops prohibits the use of 2,4-D or dicamba.
Harvest aid to reduce the moisture content of grain prior to harvest	G	Sodium Chlorate	Defol 6 0.75-1.0 gal	Desiccation of morning-glory and other vines may be erratic.
Harvest aid	G	Glyphosate up to 2.0 lb	4.0 lb ai/gal glyphosate containing product or equivalent up to 2.0 qt	Apply at 30% grain moisture or less. Allow at least 7 days between application and harvest. Apply with extreme caution because spray drift can be very damaging to trees, shrubs, and lawns at this time of year.
Cocklebur, nutsedge, pigweed, ragweed (common, giant), sunflower, and velvetleaf	G	Halosulfuron 0.032 lb	Permit 75WG 0.66 oz + approved tank mixes: or Banvel/Clarity 0.25-0.5 pt or Buctril 0.5-1.0 pt or 2,4-D 0.25-0.5 pt	Do not apply to sorghum under severe environmental stress. Do not apply aerially. Permit, alone, can be applied from the 2-leaf through layby stage (before grain head emergence). The use of a nonionic surfactant is recommended – consult label. Consult label for rotational restrictions.
Bindweed, cocklebur, jimsonweed, lambsquarters, morning-glory (suppression), mustards, pigweed, ragweeds, smartweed, velvetleaf	G	Prosulfuron 0.027-0.036 lb	Peak 57DF 0.75-1.0 oz + approved tank mixes: Banvel/Clarity 0.125-0.5 pt or 2,4-D 0.25-0.5 pt or Atrazine 0.5-1.0 qt or Buctril 0.5-1.0 pt or Marksman 1.0-2.0	Peak may be applied postemergence to sorghum between 5 and 30 inches in height. Do not apply to sorghum under stress. Use crop oil concentrate or nonionic surfactant. When tank-mixing, consult label for proper additive. Peak can interact with certain organophosphate insecticides. Consult label.

<sup>1</sup>G = grain; F = forage

**Table 5.62 - Postemergence (cont.)**

Weed problem	Sorghum type <sup>1</sup>	Chemical rate per acre	Product per acre	Remarks
Barnyardgrass, crabgrass (large), foxtail species, signalgrass (broadleaf, bed-straw), clovers, lettuce (prickly), morningglory, bindweed and suppression of common lambsquarters, ragweed (common, giant), sunflower, velvetleaf, dandelion	G	0.25-0.38 lb  0.25-0.38 lb	Paramount 75DF 5.3-8.0 oz	Paramount requires the addition of methylated seed oil (MSO) or crop-oil concentrate (COC). Nitrogen fertilizers may also be included (AMS or UAN). Apply up to 12-inch tall sorghum. Can be tank mixed with 2,4-D, atrazine, Clarity, and Buctril. Best results occur with applications to weeds less than 2 inches tall.
Lambsquarters (common), morningglory (ivyleaf and pitted), nightshade (eastern black), pigweed, velvetleaf	G,F	carfentrazone 0.008-0.016 lb	Aim 2EW 0.5-1.0 fl oz	Apply to weeds 1 to 4 inches tall. Include a nonionic surfactant (NIS). Tank mixing other herbicides increases the spectrum of weeds controlled.
Barnyardgrass, crabgrass, foxtails, goosegrass, panicum (fall and Texas), ryegrass (annual), signalgrass (broadleaf), morningglory (annual), carpetweed, chickweed (common), cocklebur (common), dayflower (common), groundsel, knawel, lambsquarters (common), mustard, pigweed, prickly sida, purslane (common), ragweed (common), sicklepod, smartweed (Pennsylvania), velvetleaf, wild buckwheat	G,F	linuron 0.5-1.0 lb	Lorox 50 DF 1,0-2.0 lb	Post-directed application only. Do not apply over the top of emerged sorghum. Use only when there is sufficient differential between height of sorghum and weeds so that weeds are thoroughly covered and upper leaves of sorghum and whorl are not exposed to spray or drift. Include a nonionic surfactant (NIS). Weeds should be treated prior to 2-inch tall grass weeds and 6-inch broadleaf weeds.

<sup>1</sup>G = grain; F = forage