Weed Management in Grain Sorghum—New for 2012

Huskie Herbicide
2012 Sorghum Pointers for use of Huskie Herbicide

Compiled by Calvin Trostle, Ph.D.
Texas AgriLife Extension Service--Lubbock
trostle@ag.tamu.edu, 806-746-6101
April 4, 2012
Huskie label (access a copy through http://www.cdms.net, then click on ‘Services’ then ‘Labels’ then type in product name)

Texas High Plains
- Brent Bean, Extension agronomist, Amarillo, (806) 677-5600, bbean@ag.tamu.edu
- Pete Dotray, Extension weed scientist, Lubbock, (806) 746-6101, pdotray@ag.tamu.edu

Central Texas
- Paul Baumann, Extension weed scientist, College Station, (9797) 845-3041, pbaumann@ag.tamu.edu
Huskie Herbicide for GS (2012)

- Selective Post-emerge, including Palmer amaranth, redroot pigweed, kochia, species of morningglory, devil’s claw, henbit, marestail; partial control on bindweed, puncturevine

- Best weed control from label suggests spray by 4” tall weeds
Huskie in Cotton Production Regions

- Huskie appears to be a much better option all around than 2,4-D or dicamba in regions where cotton is grown, particularly where either chemical can severely injure cotton due to drift.
  - 2,4-D amine is better for minimizing drift, but may give up to 10% less weed control than ester formulations (Brent Bean, TX AgriLife, Amarillo).

- Huskie cost relative to 2,4-D or dicamba may be a concern for some dryland farmers.
Huskie Herbicide for GS (2012)

- Apply over-the-top, 3-leaf stage to 12” tall
- Pyrasulfotole + 2 active ingredients similar or same as Buctril (bromoxynil)
  - Buctril is already labeled in grain sorghum
- Numerous tank mix options, but for grain sorghum the key is **atrazine: 0.25-1.0 lbs. atrazine per acre** to ‘strengthen and expand weed control’ (from the label)
  - This atrazine appears somewhat lower than for straight atrazine applications (~1/3 less?)
Huskie Herbicide for GS (2012)

- Tank mix for broadleaf control: includes Ally, dicamba, 2,4-D, Peak, Starane
- Label suggests spray grade ammonium sulfate (AMS) at 0.5-1.0 lbs./A
- NIS (non-ionic surfactant) if tank mix partner requires it
- TX AgriLife has noted only minor to ~15% leaf burn/injury at 4-leaf sorghum, essentially all disappears by 3 weeks; similar to none at 8-leaf stage;
- No maturity delay or reduced yield due to Huskie has been observed in TX AgriLife trials, 2009-2011.
Huskie Control of P. Ameranth
Hale County, Texas

(A) Non-treated control, and (B) good Palmer Amaranth control with Huskie + atrazine.

Credit: Dr. Pete Dotray
The overarching advantage of Huskie over 2,4-D or dicamba is reduced sorghum plant injury.

2,4-D or dicamba might be considered as a tank mix with Huskie in two possible circumstances:

- Weeds have moved beyond the 4” tall growth stage (harder to control)
- If you are dealing with triazine or glyphosate resistant weeds you may need to consider a stronger level of control to further minimize escapes and kill existing weeds
Huskie—TX AgriLife Results
Bushland, TX (2009-2010)

- 91%+ control 7 & 42 DAT (days after treatment) of 3-4” Palmer ameranth when applied alone at 13-16 oz./A
- 95%+ Palmer ameranth control when applied with 0.5 lb. atrazine at 13 oz./A
- Adding 4 oz./A dicamba did not improve control
- 80% control on 18” tall pigweed (unlabeled for this late application to grain sorghum)
Huskie—TX AgriLife Results
Halfway, Hale Co. (2010-2011)

- 2010: Huskie + atrazine, 97% control of 2-4” Palmer amaranth at 41 DAT; 96% control of 6-8” weeds @ 37 DAT
- Slight sorghum injury for all POST treatments, but ≤5% at 37-41 DAT unless 2,4-D included
- Tank mix with 2,4-D or dicamba reduced yield
- 2011: Huskie + atrazine controlled P. amaranth 94% or more at 21 DAT though control decreased with time (hot, hot year).
Huskie in Crop Rotations

- 1 month: Small grains
- 4 months: alfalfa, millet, grain sorghum, soybean
- 9 months: corn, sunflower
- Cotton? Field assay, but tests and observations to date show 9 months should be OK
Huskie & Grain Sorghum Injury

Sourced from Russ Perkins, Bayer CropScience, Lubbock:

- Full label rate applications across several grain sorghum nurseries in the Texas High Plains in 2009-2010 noted up to 10% of sorghum lines that demonstrated slightly higher leaf phytotoxicity (injury) at 15-20%, but symptoms were largely gone in < 14 days.

- Breeding staff noted no apparent delay in maturity or reduced yield due to Huskie.
Additional Huskie Pointers

- Do not apply Lorsban (chlorpyrifos) with Huskie as unacceptable injury may occur.
- Baythroid is an acceptable tank mix insecticide partner.
- Do not apply Huskie after mesotrione herbicides (e.g., Callisto, Lumax, Lexar).
Huskie & Sorghum Forages?

- Caution on sorghum/sudan, sorgo or sweet sorghum, sudangrass (forage sorghum not specifically noted)
- Some hybrid sensitivity? Label states ‘not recommended’ for use in above sorghum types, so producer would assume any risk of injury.
- TX AgriLife does not foresee major Huskie injury potential in any sorghum forage type.
- Bayer’s Perkins reports that these forages have demonstrated higher leaf burn (20-30% in a few cases, but forage grew out of it)
  - Bayer observations suggest that iron chelate labeled for foliar use may reduce injury potential
Huskie & Sorghum Seed Production?

- Huskie is acceptable for use in seed production

- This is in contrast to the restrictions for seed production using 2,4-D or dicamba, which can risk sharp reduction in seed production and seed viability