

Supra Hay Growing Guide

1. **PLANTING** – Unlike any other variety of sorghum sudan that needs soil temperatures at 60° or higher at 6 inches deep for 10 days. This variety has a cold tolerant trait that enables the soil temperatures to be about 10 degrees colder or above 50° at 6 inches deep for 10 consecutive days throughout the field.

NOTE: If it makes little difference, or bad weather is forecast, wait until the soil temperatures are anticipated to be 60° at 6 inches deep for 10 days. This minimizes the risk of damage due to sudden weather changes (such as cold, cold rain, or snow) which can cause germination delays and lower crop yields. If you delay planting for a week or two due to weather, don't worry, this crop variety has another very special trait that enables the crop to catch up in size and maturity to what it would have been within weeks. The soil should also be moist for good germination and moist throughout the crop's life.

SEEDING RATE: At the Texas A&M trials our Supra Hay yielded 32.5 wet tons to the acre at 65% moisture, and 11.4 bone dry tons to the acre to reflect what could be expected for a hay crop. However, with a hay crop it would be a higher yield because you normally would bale it with about 14% moisture. The following seeding rate was used:

- a. Grain Drill on 15" centers: 6 lbs / acre **For a hay crop you may want to use 6-7 lbs./acre to get smaller stems in the bale. However, don't go more than 6-7 lbs./acre or you will not have the room required for the plants to tiller, which can significantly reduce yield.**
- b. Precision planter on 20" or 30" centers: 5 lbs./acre or about 80,000 seeds per acre. Seed count: Approximately, 17,000 seeds per pound. **With a hay crop at 6-7 lbs./acre it would require about 100,000 seeds per acre.**
- c. Planting depth should be about ¾ inch to 1 inch with a precision or corn planter. Recommended Row Spacing – 30 inches – this will provide about 3 inch spacing between plants for excellent tillering.

PLANTER: It is important to clean and calibrate the planter. You can Google up the make, model and model number of your planter and there should be a video showing how to calibrate your planter. If there is not one for your planter on the internet, contact the dealer and they can provide you one. **One major exception with the Supra Hay is it has special characteristics that require less seed per acre than is recommended by all the other sorghum varieties.**

SOILS: Good soil health can help a great deal. Soil Organics and soil conditioner is encouraged.

ADDITIONAL INFO: Please use the Supra website at www.supra.ag. There is detailed information on numerous issues including a Useful Reference Library on growing our Supra seeds. For planting look at the Supra seed calculator that provides recommended planting guidelines for each variety, whether it is used for Silage, baling or grazing. It will also address changes required if you are using a Broadcast, Grain Drill or Precision planter. If you have any questions, please feel free to call one of the Supra Representatives listed on the website.

2. **HERBICIDE** –
 - a. Pre-emergent: At Texas A&M trials at preplant they used Outlook (dimethenamid-P) and 1.5 pts/acre plus 2 lbs./acre Atrazine.
 - b. Alternative Pre-emergent: Dual II Magnum 1-1.3 pints / acre, Note: seed must be treated with Concept III as a safener for Dual II Magnum. Supra Hay comes with a safener if requested.
 - c. Post Emergent: Warrant (acetochlor) 14 oz./acre plus atrazine at 2 lbs/acre Other Post Emergent herbicides: Dicamba or 2,4-D

Post emergent application note: The most critical period to use the weed control post emergent application is the first four weeks after planting and before plants are 12 inches tall.

3. **FERTILIZER** – Good fertile soil health can help a great deal. There should be soil samples taken at several sections of the field. Be sure to test the soil for organics and potential mineral deficiencies. The samples can be sent to a soil lab and the analysis can be sent to Supra or the NRCS for guidance. A deficiency in any one essential mineral can make a big difference in crop yields and nutrition. It is important to spread the fertilizer application over three applications. This can be done with the irrigation applications. **Do not rely on residual nitrogen from previous crops, including planting after an alfalfa crop.** The last fertilizer application is also important because there is a direct correlation between the last fertilizer application and the nutrition content in the crop. The last nitrogen application (about a month before harvest) especially has an impact on the protein content contained in the final forage analysis. Even with the expensive cost of fertilizer, it provides a great return on investment.

The following fertilizer plan was used at the Texas A&M trials:

- a. Manure pre-wheat; Pre-plant strip-tilled (This variety can also be no tilled, minimum or regular tilled)
- b. N: 215 lbs./acre(This is contingent on organic matter and soil type)
- c. P: 40 lbs preplant or as recommended from soil test
- d. K: 40 lbs preplant or as recommended from soil test

Also, apply fertilizer, herbicide or insecticide using heavy equipment going across the field, not the length of the field to prevent killing entire rows of plants. Due to this crop's tillering ability, which fills in the space left by killed or damaged plants, the tillering fills in the space to prevent loss in yield, if you traverse across the field while spraying.

4. **INSECTICIDE** – Insecticide used at the Texas A&M trials included the following:
 - a. Sivanto Prime 4 oz/ acre with pre-plant strip-tilled. They had sugarcane aphids and used Sivanto Prime 14 oz/acre plus Vantacor 2/oz/acre aerially at 5 gpa.

NOTE: A great time to start examining your field for potential weed or pest problems is during your soil temperature and soil health testing before planting. If weed or insect issues are noted you should contact Supra, the Extension Service, or PCA. They can provide information as to what the infestation is and what the recommended treatment to be used, as well as application, timing and rates.

5. **WATER APPLICATIONS** – At Texas A&M Trials Irrigation included:
 - a. In-season irrigation: about 13.2 inches.
 - b. In-season Precipitation: 9.35 inches.

Critical stages of growth that require good moisture and fertilizer for good yields include:

- c. First irrigation
- d. 30 days after emergence
- e. 60 days after emergence

NOTE: The soil should be moist throughout the life of the crop and especially in every critical stage of growth. Once a crop stops thriving and it starts just surviving it never reaches its full potential.

6. **HARVESTING** – The Supra Sorghum Sudan Grass variety provides a great baled hay crop. The Sorghum Sudan Grass hay crop should be harvested when the crop is 5-6 feet in height and the stems are smaller and the crop dries for baling faster. The crude protein can be >10% and yields of 4-6+ tons are achievable with each cutting. Then do the same with the second and third crops contingent on the length of the season.