NNY Regional Ag Team

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Planting BMR Brachytic Dwarf Sorghum in NNY

By Kitty O'Neil, Ph.D, kitty.oneil@cornell.edu

More NNY farms have become interested in brachytic dwarf BMR sorghum (BMR 6 gene) as a short-season alternative to corn, with similar yield and milk production potential as corn silage. In NY, Tom Kilcer of Advanced Ag Systems has the most experience with BMR forage sorghum, though he admits he doesn't have it all figure out yet. His recommendations are summarized here. Today's BMR sorghum varieties are high-yielding (20-24 tons/acre is possible) and are in the 85-89 day maturity range, giving growers flexibility to plant it later in the spring or to harvest it early enough in the fall to follow with a winter double crop of rye or triticale. A brachytic dwarf sorghum variety has the same number of stem nodes as a tall variety, but the distance between nodes is shorter. The resulting plant has the same number of leaves as tall sorghum, but less lodging risk. In NNY, brachytic dwarf BMR sorghum is managed as a one-cut crop.

Planting recommendations, summarized from Tom Kilcer's trials and publications:

- 1. Recommended varieties, types.
 - a. Brachytic, BMR-6 gene
 - b. Specific varieties are being compared
- 2. Wait until soil temperature is above 60 F and climbing.
- 3. These crops have small seeds. 17-20,000 seeds per pound is common for brachytic dwarf BMR sorghum varieties, so some modification of planting equipment may be required.
- 4. BMR brachytic dwarf sorghum can be planted with a grain drill or a converted corn planter, in 7.5, 15 or 30" rows. Choose your planting method based on your planting AND silage chopping equipment.
 - a. For 30" rows (corn planter with sorghum plates), plant at 5 lbs/acre.
 - b. For 15" rows (corn/soybean planter, or grain drill with alternating rows closed off) plant at 8 lbs/acre
 - c. For 7.5" rows (grain drill), plant at 8-10 lbs/acre. If the drill does not have gear reductions to allow planting this low rate without damaging seed, block off every other row and plant 15" rows. Corrugated drop tubes have caused problems with uniform spacing of small seeds, but smooth, sleeved drop tubes eliminated this problem.
 - d. For using a drop seeder with a cultipacker, plant at 8.5 lbs per acre on smooth, well-fitted fields.
 - e. Take care to get seeding rates correct. If populations are too high, plants will have thin stalks and will lodge at heading.
- 5. Use seed that has been treated with a safener to provide tolerance Dual and Atrazine applications.
- 6. Plant at ³/₄ to 1" depth.
- 7. Apply Atrazine and Dual immediately post-planting to control annual grasses. Do not delay.
- 8. Fertilize similar to corn, crediting manure applications similarly as well.

Harvesting recommendations will be summarized and communicated later in the season.

Additional resources:

- 1. BMR Sorghum January 2016 Newsletter. Tom Kilcer, Advanced Ag Systems
- 2. Sorghum & Winter Forage Nitrogen March 2016 Newsletter. Tom Kilcer, Advanced Ag Systems
- 3. Sorghum February 2013 Newsletter. Tom Kilcer, Advanced Ag Systems

For more information about field crop and soil management, contact your local Cornell Cooperative Extension office or NNY Cornell University Cooperative Extension Regional Field Crops and Soils Specialists, Mike Hunter and Kitty O'Neil.

Kitty O'Neil St. Lawrence County CCE Office, Canton (315) 379- 9192 x253 or (315) 854-1218 kitty.oneil@cornell.edu Mike Hunter Jefferson County CCE Office, Watertown (315) 788-8450 meh27@cornell.edu

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