

Using Summer Annuals To Boost Weak Alfalfa Stands

Situation: Weak alfalfa stands should either be rotated out of production or if the producer wants to keep the stand one more year, a warm season annual can be inter-seeded into the living alfalfa crop. However, to be successful, follow the guidelines below to improve the success rate.

Guidelines for Success

1. Ensure residual herbicides were not applied to the alfalfa stand previously that will injure or kill the crop being inter-seeded. Note: some herbicides may cause injury or failure for several months. Know the herbicide history and crop rotation restrictions of the products applied.
2. Soil temperatures must be at least 60°F at 7:00 am at a 2 inch depth and predicted to stay warm. Quite often this puts the producer in a dilemma in that soil temperature may not be warm enough after 1st cutting, especially if an early cutting was made. For this reason, fields that are candidates for thickening should either have a delayed 1st cut or harvested aggressively for 2 cuts prior to inter-seeding.
3. Evaluate the field for grass and annual weeds. If lots of perennial grasses are in the field, inter-seeding warm season annuals are not recommended. If annual grasses and weeds are present, a non-residual herbicide such as Gramoxone should be applied after harvest and before inter-seeding. If the field is in transition to organic or certified organic, the field should be disked prior to seeding. Alfalfa will tolerate light tillage very well and sometimes thickens a little.
4. No-till $\frac{1}{2}$ to $\frac{2}{3}$ of a full seeding rate into a thin stand after weeds have been managed.
5. Timing of harvest is usually based on alfalfa maturity.
6. Harvest field using wide swath and check cutter bar height. Cutter bar height may need to be raised for the inter-seeded crop to re-grow properly. A minimum of 3 to 4 inches is recommended. With BMR Sorghum sudans however, leave 2 nodes standing which is usually 4 to 6". If sorghum sudans are used, always crimp hard.
7. Apply nitrogen fertility (40 to 50 units) after each cutting except the last cutting.
8. To feed properly, a forage test should be taken that includes NDF digestibility. Summer annual grasses tend to run high in NDF; however, the fiber digestibility is usually very high with improved products. The combination of high fiber digestibility and NDF results in lots of digestible fiber that, when fed properly, will result in excellent animal performance.

Product selection:

Wet Hay (Baleage or Haylage)

BMR Sorghum Sudan

To date we have had the highest success rate with BMR Sorghum sudans. They have very good seedling vigor. Gene 6 products have the best fiber digestibility. Seed into moisture (up to 2" depth if conditions are dry on surface). If conditions are bone dry, delay seeding. Like soybeans, if sorghum sudan seeds swells than dries out the seed will die.

Dry Hay Potential

Corvallis Teff has been successfully seeded into thin alfalfa fields. The key to success is both seeding depth (must be surface seeded or just scratched in) and surface moisture. The seed size is approximately 1/2 that of timothy. Care must be taken to calibrate equipment.

Sudangrass dries down to dry hay in about three good drying days. Always crimp for making hay. Haymaker should be seeded 1/2 to 3/4 inches deep. If conditions are very dry, delay seeding date.

Cautionary Note: Both sorghum sudans and sudangrass may contain prussic acid. When fed as stored feed, virtually no prussic acid risk exists. Avoid grazing or greenchop when plants are short (<18") or after frost until plant has dried.

Millet (BMR or non-BMR) has a drier stalk and excellent palatability. With millet, there is no prussic acid danger.