News Column

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TEFF GRASS FOR EMERGENCY LIVESTOCK FEED

I realize that our moisture situation is good right now and that producers with livestock are not in need of emergency feed. But as we all know in agriculture that weather conditions can and do change, and having or knowing of more than one alternative can be helpful when the need arises. Below is information on a potential feed crop that is probably not very familiar to most of us around here. It has been tested in Graham County, with good results. My understanding is a few producers are utilizing it in NW Kansas and several other producers are routinely planting it in other parts of the state.

General Information:

Teff (Erogrostis tef), also known as Lovegrass, a warm season annual native to Ethiopia, is an excellent emergency forage crop feed source for livestock when established properly. Cattle and horses readily eat teff hay. Teff exhibits drought tolerance, good fertilizer response and can be grown on marginal soils. It is a highly palatable, fine stemmed grass than can be planted any time after the threat of frost. It can work as an emergency feed source when planted after wheat. Teff harvest can take place as soon as 45 days after seeding and should be done prior to maturation for best quality. Teff is best grown for hay. Grazing is not suggested as it can cause uprooting of plants, it is a shallow rooted forage. Teff is not known to cause prussic acid or nitrate poisoning.

Seedbed Prep:

Teff generally requires a very shallow seeding depth of around ¼ inch or less. Good seed to soil contact is important. A firm seedbed is suggested. Due to the extremely small size of teff seed, it can be difficult to meter properly through a drill. Results in Northwest Kansas were satisfactory when teff was drop seeded followed by a pass with a harrow to lightly bury the seed into worked soil.

Planting Date:

Teff is a cold intolerant plant, native to Africa. Do not plant teff prior to the frost free date in your area. For good results, it should not be planted during the fall to avoid cold fall nighttime temperatures.

Rate:

Teff seeds are very small, with one pound containing more than a million seeds. Around 8 lbs. per acre (give or take a pound) seems to work well in Northwest Kansas. Slightly increase seeding rates for coated seed. Coating increases size to allow for better flow through seeding equipment.

Seed Selection:

Teff seed comes in forage production and seed production varieties. Forage varieties have higher tonnage yields and feed quality.

Insects and Disease:

Insect and disease pressure is minimal.

Fertilization:

Teff responds well to nitrogen fertilization similarly to fescue. Soil test prior to seeding in order to determine available nutrients. When planted early into good moisture conditions. Two cuttings can be expected. Fertilizing again with nitrogen after cutting can have positive result. Thirty to fifty pounds of N per acre / per cutting is recommended.

Weed Control:

Applications of grass herbicides have been proven successful in teff crops. Contact your local extension office or chemical supplier for specific products. Broadleaf herbicides should not be used until Teff plants have 5-7 leaves.

Yield:

Results from northwest Kansas in 2008-2012 ran from a low of approximately 1300 pounds per acre, when planted after wheat, to a high of 3,500 pounds per acre when planted in May and managed for maximum production.

Quality:

Quality can vary greatly depending on harvest maturity. Harvesting after seed heading can greatly reduce quality. Mature or freeze damaged teff has a protein level similar to straw or mature prairie hay. For best results, harvest in 45-55 days, prior to heading. Well managed teff crops can have protein content in the 9-15% range.

As always if you need further information contact your local K-State Research & Extension Office.

Written by former Graham County Extension Agent Christopher Petty, now Extension Agent in Southwind Extension District and Wildcat District Extension Agent Josh Coltrain.