

## Teff Grass Factsheet

Teff is a warm-season annual grass that originates in northeast Africa, where it is commonly grown for grain and forage production. As a forage, the crop is notable for its high protein content and palatability, as well as its potential for good yields.

| Target seeding date          | Target soil temp at seeding | Seeding rate                               | Seeding depth                      | Target fertility*                             | Target date 1 <sup>st</sup> hay cut        | Target date 2 <sup>nd</sup> hay cut |
|------------------------------|-----------------------------|--|------------------------------------|---|--|-------------------------------------|
| After danger of hard frost** | 15-18 C                     | 5 lb/ac (drill) or 5.5-6 lb/ac (broadcast) | 1/8-inch or broadcast and harrowed | About 50 lb/ac N per cut; 10-40 lb/ac P total | Late July, when seed head begins to emerge | Early Sept; can also be fall grazed |

\* Based on tests in the United States, teff responds well to about 40-60 lb N/ac per cut. In those tests, additional N was broadcast after the first cut.

\*\* In the Parkland region of Manitoba, seeding was the 4<sup>th</sup> week of May.



For seed drills, the ideal seeding rate is 5 lb/ac. In small-plot trials in Manitoba, forage yield did not increase significantly for higher rates (6-7 lb/ac). However, yield decreased slightly at 4 lb/ac. It is recommended that the seeding rate should be increased slightly when broadcast. A seedbed that is reasonably free of crop residue is best, although the crop was grown under no-till conditions in small-plot trials.

Teff seed is very small (about half the size of a poppy seed), with 1.2 million seeds per pound. As a result, accurate metering of seed can be a challenge for some drill types. Blending the seed with phosphorus can improve flow. Some producers have blended the seed with clean, dry sand to act as a carrier.

Seedlings are small, but with adequate heat, teff produces enough forage to cut in late July. A second cut can follow in early September, or the teff can be grazed in the fall. It is important not to cut the first cut too short: preserve some green material to promote regrowth. From research in the United States, teff is highly responsive to irrigation, which may improve yields above what was observed in rain-fed trials in Manitoba. No herbicides are registered for use on teff in Canada, so good site selection and an application of non-residual pre-emergence herbicide are crucial.

|                          | 1 <sup>st</sup> cut      | 2 <sup>nd</sup> cut            |
|--------------------------|--------------------------|--------------------------------|
| <b>Avg yield (lb/ac)</b> | 1900 (2021); 2700 (2022) | 7500 (2021); 5500 lb/ac (2022) |
| <b>Crude Protein (%)</b> | 19.8                     | 10.9                           |
| <b>TDN (%)</b>           | 64.2                     | 58.9                           |
| <b>ADF (%)</b>           | 32.2                     | 37.2                           |
| <b>NDF (%)</b>           | 60.6                     | 66.1                           |

Due to the narrow leaves and thin stems, teff dries down quickly after cutting, assuming good haying conditions. The fine nature of the grass also results in good palatability for livestock.

As an annual, teff can have a good fit in cultivated cropland, extending crop rotations and providing producers with a valuable forage. The excellent forage quality, especially of the first cut, can be used for strategic applications, such as finishing animals or supplementing lower-quality feed.