Teff (Eragrostis tef) Intercrops for Forage Production in Manitoba

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Teff is a warm-season annual grass originating in northeast Africa, where it is grown for grain and forage.

**OBJECTIVE**
The study examined the interaction between teff grass and forage intercrops on crop performance, greenfeed yield and regrowth for late-season grazing of livestock.

**METHODS**
- Replicated (x4) at PCDF, Roblin; planted in alternating rows on May 26, 2023
- Forage harvest August 15 (teff-only, teff-barley, teff-oat); August 30 (teff-millet)
- Forage regrowth sampling date October 16

**CLIMATE**
- Soil moisture was adequate for germination, but lacking prior to greenfeed cut; good moisture for regrowth
- Heat was abundant for most of the growing season

**RESULTS & DISCUSSION**
- Teff-only, teff-barley and teff-oats regrew after cutting for greenfeed, providing late-season grazing opportunities
- Millet maturity was delayed, resulting in no regrowth
- Teff-millet greenfeed yield was higher than teff-only, but total yield did not differ significantly between treatments
- Intercrops reduced lodging in teff, improving ease of cut
- Low precipitation appeared to affect plant growth

**VARIETIES**
- **Teff**: Unidentified red (Imperial Seed)
- **Barley**: CDC Maverick
- **Millet**: Japanese
- **Oats**: CDC Haymaker

**REGROWTH FOR LATE-SEASON GRAZING OF LIVESTOCK**
- Treatments cut on August 15 produced good teff regrowth, plus intercrop regrowth (teff-oats = 30% oats by weight; teff-barley = 11% barley by weight)
- Teff-millet treatment (August 30) produced no regrowth for teff or millet
- Grazing potential depends on animal size, crop height, and crop condition
- Forage ranged from 35-50 cm tall
- Teff-only = 30 days grazing/ac; teff-oats = 27 days; teff-barley = 25 days†

† Assuming one 1500-lb cow and 500-lb calf per acre, 3% body weight reqs, 33% waste

**Fig 1: Weather summary Roblin Apr 15-Oct 15**
- Precipitation was 63% of normal
- Heat units were 116% of normal

**Fig 2: Forage yield for teff grass and teff-forage intercrops**
Yield for treatments marked with the same letter do not differ significantly.