

forages with potential fact sheet

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The following perennial dryland forages have potential in the Bulkley-Nechako and Fraser-Fort George (BNFFG) regions but have not yet seen widespread use.

alaska brome

Potential: Alaska brome (*Bromus sitchensis*) is a species native to British Columbia (BC) and the Alaska panhandle. The variety Hakari Alaska brome has been developed for commercial production.

Benefits

- High winter hardiness.
- Drought and disease resistance.
- High first cut yields and promising suitability for stockpile grazing.
- Well suited to hay production with later maturity, upright growth, and quick dry down.



What's holding it back

- Alaska brome is still relatively new as a dryland forage making seed availability a possible issue.
- Seed size is large, making it an expensive crop to establish.



festulolium

Potential: Festulolium gets its name from the combination of Festuca, the genus of fescue, and Lolium, the genus of ryegrass. Festulolium is bred from crosses between perennial or Italian ryegrass and meadow fescue or tall fescue. Depending on the combination of parent grasses, Festulolium is grouped into tall fescue or ryegrass types.

- Fescue types offer more persistence, winter hardiness and drought tolerance.
- Ryegrass types are more geared towards spring growth, digestibility, and palatability.
- Among the various Festulolium combinations, the tall fescue types are likely best suited to BNFFG areas.

festulolium, continued

What's holding it back

- Winter hardiness continues to be a challenge for many of the Festulolium types, although the tall fescue types show promise for better persistence.
- Not well suited for hay because of lengthy dry-down times.

Festulolium physical characteristics will be similar to ryegrass and tall fescue.

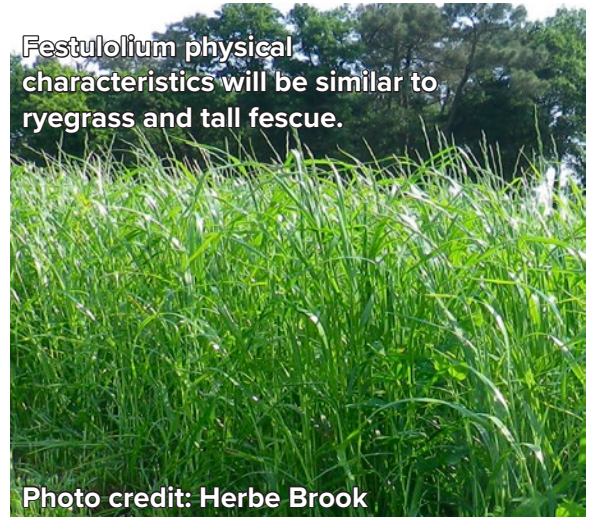


Photo credit: Herbe Brook

intermediate wheatgrass

Potential: The high yield potential of intermediate wheatgrass (*Thinopyrum intermedium*) seems to make it a good candidate for hay stands. Some of the benefits include:

- Highly palatable to livestock.
- Maturing later than other grasses, providing a high-quality grass in a legume hay mix.
- Suited for stockpiling, holds protein content into fall and early winter.
- Can handle soils with lower pH levels.

What's holding it back

Some of the reasons why you may not see intermediate wheatgrass in forage blends include:

- Persistence is highly variable and can range from 4 to 50+ years
- It is generally short lived in grazing situations.
- Usually only tolerates one cut per season but can then be stockpiled for late season.
- Seed size is large, making it an expensive crop to establish.

Intermediate wheatgrass in a hayland mix.



Photo credit: J. MacKenzie

meadow fescue

Potential: A close relative of tall fescue, meadow fescue (*Festuca pratensis*) looks very similar but has shorter and thinner leaves. For flood prone areas, meadow fescue may be a good choice as it:

- Maintains quality well after fall frost.
- Produces mostly basal growth, making it well suited for grazing.
- Can withstand 2-5 weeks of spring flooding.
- Can withstand wet soils all season long.

What's holding it back

- Not very winter hardy.
- Short lived (<3 years).
- Requires high soil moisture levels.
- Seed availability is limited.
- Is mostly replaced with tall fescue in seed mixtures.

Meadow fescue with 2 weeks re-growth



Photo credit: J. Thornton

tall fescue

Potential: The following traits make tall fescue (*Festuca arundinacea*) a good fit for central and northern BC:

- New soft leaved varieties available.
- Endophyte-free varieties available for forage production.
- Outyielded orchardgrass in regional forage trials.
- Tolerates soils with low pH levels.
- Well suited to high moisture soils, tolerates wet or waterlogged soils.

What's holding it back

- Persistence is variable and variety dependent.
- Winter survival is variable and variety dependent.
- Must purchase endophyte-free varieties.
- Palatability quickly declines with heading.

Leaves are shiny and waxy, with basal growth

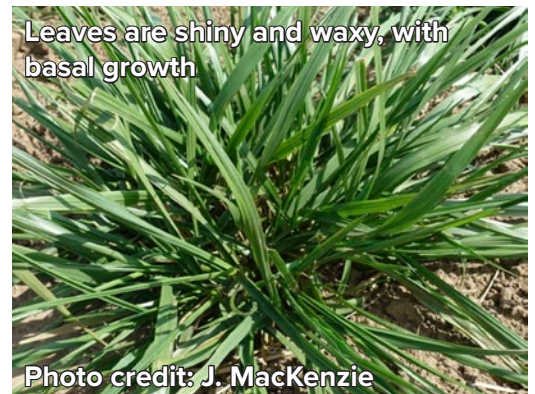


Photo credit: J. MacKenzie

good to know

It is important to choose endophyte-free forages. Endophyte-infected tall fescue produces ergot-alkaloid compounds, which can be a life-threatening toxin within the plant. Ergot-alkaloid toxicity leads to constricted blood flow that interferes with the animal's ability to regulate body temperature.

Tall fescue head



Photo credit: J. MacKenzie

kura clover

Potential: At first glance, Kura clover (*Trifolium ambiguum*) sounds like the perfect legume addition to pastures. Like other clovers it can cause bloat but otherwise has the following advantages:

- One of the longest-lived clovers.
- Good winter hardiness comparable to some of the hardest alfalfas.
- Better drought tolerance than other clovers.
- High yielding and very palatable.
- Tolerates multiple grazings per season.

What's holding it back

- Very slow and difficult to establish.
- Competes poorly with other plants during establishment year.
- Produces little seed, which makes it an expensive seed.
- Requires an inoculant different from other common clovers.



Photo credit: Interlake Forage Seed

non-bloat legumes

Potential: Bloat from alfalfa and clovers can be lethal if not managed properly. Non-bloat legumes may be a preferred option. Available non-bloat legumes which are suited to various soils across the BNFFG regions include (also see the factsheet on non-bloat legumes for more details on each):

- Birdsfoot trefoil (*Lotus corniculatus*)
- Cicer milkvetch (*Astragalus cicer*)
- Sainfoin (*Onobrychis viciifolia*)

What's holding them back

Looking at forage seed catalogues, you will notice that alfalfa and clovers are still preferred over non-bloat legumes. Some of the reasons include:

- Lower yields compared to alfalfa (birdsfoot trefoil).
- Slow establishment (cicer milkvetch).
- Seed cost (sainfoin).
- Variable persistence (birdsfoot trefoil and sainfoin).
- Lack of species-specific rhizobium inoculant (sainfoin).



Photo credit: T. Mulhern Davidson

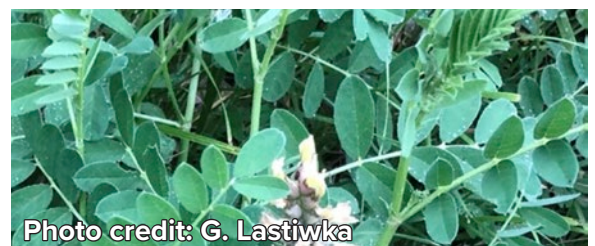


Photo credit: G. Lastiwka



Photo credit: T. Mulhern Davidson

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Funding for this project has been provided in part by the governments of Canada and British Columbia under the Canadian Agricultural Partnership, a federal-provincial-territorial initiative. Additional support has been provided by the Regional District of Bulkley-Nechako and the Regional District of Fraser-Fort George. The program is delivered by the Investment Agriculture Foundation of BC.

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