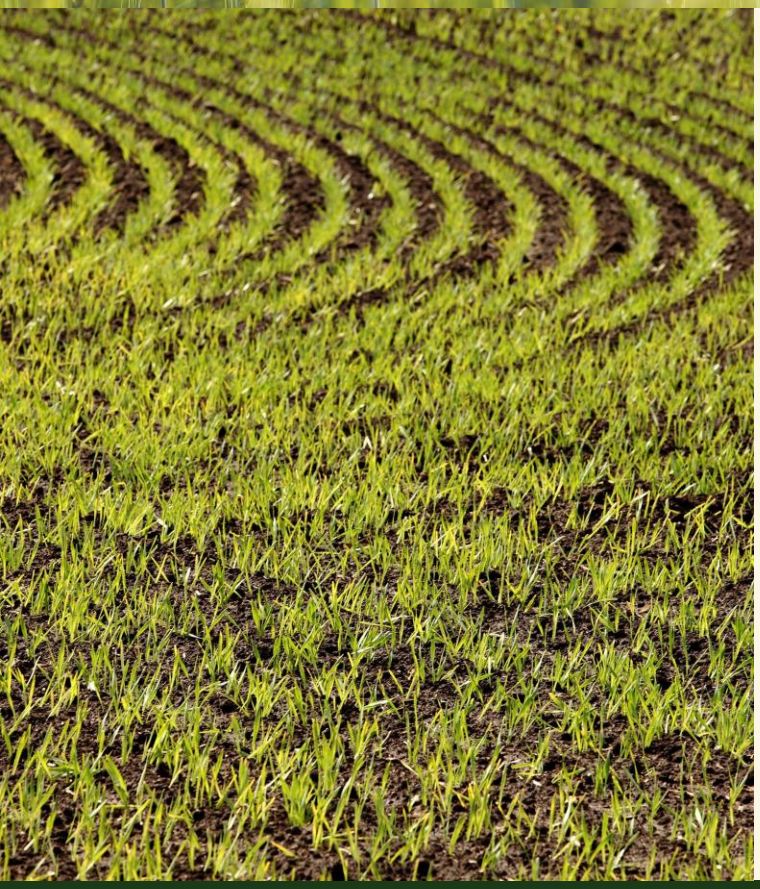
WINTER WHEAT

TRITICUM AESTIVUM - WINTER BIENNIAL GRASS



PRODUCTION GOALS

Not Effective — Very Effective

Quick Growth	
Lasting Residue	
Soil Builder	
Nitrogen Fixation	n/a
Nitrogen Scavenging	
Erosion Reduction	
Compaction Reduction	
Biofumigation Potential	
Weed Suppression	
Forage Harvest Value	
Grain Harvest Value	

Winter wheat has an upright growth habit and a medium depth fibrous root system. Winter and spring wheat are the same species but some winter wheat varieties must overwinter before stem elongation, flowering and grain fill can occur (vernalization) but are better weed suppressors. Winter wheat can provide an excellent quality forage.

TOLERANCES

Flood	
Heat	
Drought	
Shade	
Low Fertility	
Salinity	
Optimal pH	5.5 - 8.0

SOIL DRAINAGE CLASS

- Very Well
- Well
- Moderately Well
- Somewhat Poor
- Poorly
- Very Poorly

AREA & ADAPTABILITY

Winter wheat is a suitable fall seeded biennial for all regions of British Columbia. It is very winter hardy and can tolerate wet conditions and some flood tolerance.

Winter Hardiness Zone - 4-9

Seeding Considerations

Rate Drilled	Rate Broadcast	Depth	Frost Seeding	Minimum Germination Temperature	Seeds #
63-125 lbs/ac (70-140 kg/ac)	75-150 lbs/ac (85-168 kg/ac)	0.5-2 in (1-5 cm)	No	3°C (38°F)	6800 /lb (15,000 /kg)

Winter wheat can be seeded late in the fall and requires little growth to overwinter. Higher seeding rates should be used for later planting dates. When seeded in fall, planting date impacts N scavenging ability, and early seedings have the opportunity to take up more N before fall/winter precipitation.

Management Considerations

Winter wheat has high forage quality if harvested at a vegetative stage, and is often blended with Italian ryegrass in areas where the ryegrass will overwinter for additional yield and quality.

When seeding later than the optimal seeding date, higher seeding rates can be beneficial to increase the stand density. There is a wide range of winter wheat varieties available with varying disease resistance and winterhardiness.

Inter-seeding Potential

Volunteer Establishment

Nitrogen Concentration 0.75 - 4.5%

Dry Matter Yield

1500 - 8500 lbs/acre
1680 - 9520 kg/ha

Termination

Terminate in the early stem elongation phase to minimize nutrient immobilization. Winter wheat can be terminated through a chemical application, tillage (multiple passes may be required) or mowing.

References

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