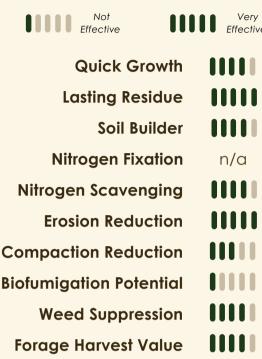
WINTER BARLEY

HORDEUM VULGARE - WINTER BIENNIAL GRASS



PRODUCTION GOALS



Grain Harvest Value

Winter barley is capable of being used as a cover crop, forage or brought to maturity for grain. It can produce high levels of biomass for forage production, ground cover or plow down. It also has potential use as a spring seeded nurse crop as a component of a blend. Winter and spring barley belong to the same species but winter barley varieties tend to produce more biomass and often require exposure to a cold period for flowering.

TOLERANCES

Flood
Heat
Drought
Shade
Low Fertility
Salinity

Optimal pH

6.0 - 8.5

SOIL DRAINAGE CLASS

Very Well
Well
Moderately Well
Somewhat Poor
Poorly
Very Poorly

AREA & ADAPTABILITY

Winter barley is a suitable fall seeded crop for areas of BC with milder winters and/or adequate snow cover for insulation.

Winter Hardiness Zone 5-9

Seeding Considerations

Rate Drilled	Rate Broadcast	Depth	Frost Seeding	Minimum Germination Temperature	Seeds #
50-125 lbs/ac	80-150 lbs/ac	0.5-2 in	No	3°C	6170 /lb
(560-140 kg/ha)	(90-168 kg/ha)	(1-5 cm)		(38°F)	(13,600 /kg)

When fall seeded, winter barley should be seeded earlier than other fall cereals by up to two weeks to ensure enough growth to avoid winterkill.

Management Considerations

A range of winter barley varieties are available with characteristics including 2 row or 6 row heads, smooth or rough awns and various expected growth heights. Winterhardiness is a concern in much of BC with variable success in the southern interior.

Cereals can accumulate nitrates after a period of stress (e.g. drought or killing frost) and/or high nitrate levels in the soil and should be tested before feed out.

Inter-seeding Potential Volunteer Establishment Nitrogen Concentration



Dry Matter Yield

2000 - 5000 lbs/acre 2240 - 5600 kg/ha

Termination

Winter barley can be terminated by tillage, moving after stem elongation and by chemical means. Though a biennial, it will still winterkill in the majority of the province and provide good winterkilled mulch.

References

- Elmy, K. 2020. Cover Cropping in Western Canada. Friesen Press.
- Midwest Cover Crop Council. (n.d.)
- Northeast Cover Crop Council. (n.d.)
- Odhiambo, J., Temple, W.D., A. Bomke. 2012. Managing Cover Crops for Conservation Purposes in the Fraser River Delta, British Columbia. In: Crop Management - Cases and Tools for Higher Yield and Sustainability.
- Sustainable Agriculture Research and Education (SARE). 2012. Managing Cover Crops Profitably: 3rd Ed. National Institute of Food and Agriculture, USDA, University of Maryland & University of Vermont.
- U.S. Department of Agriculture. (n.d.). Pacific Northwest Cover Crop Selection Tool.

Disclaimer



The information contained in this document is true and accurate to the best of our knowledge without guarantee or warranty of its correctness or completeness. The content is intended to be a general guideline, but the performance of the cover crop(s) may differ from what is described in the document depending on environment and farm operation and may vary between years. The Government of British Columbia and its directors, agents, employees, or contractors will not be liable for any claims, damages, or losses of any kind whatsoever arising out of the use of, or reliance upon, this information.

AgriServiceBC



FACTSHEET DEVELOPED BY:



