

WINTER BARLEY

HORDEUM VULGARE - 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 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 (560-140 kg/ha)	80-150 lbs/ac (90-168 kg/ha)	0.5-2 in (1-5 cm)	No	3°C (38°F)	6170 /lb (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 No data

Dry Matter Yield

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

Termination

Winter barley can be terminated by tillage, mowing 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.)
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- 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

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