BERSEEM CLOVER

TRIFOLIUM ALEXANDRINUM - COOL SEASON ANNUAL LEGUME

PRODUCTION GOALS

Not Effective — Very Effective

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

Berseem clover has an upright to semi-upright growth habit. Its shallow taproot causes berseem to be susceptible to drought. Berseem uses soil nitrogen in the first third of its lifecycle before supplying nitrogen in the later parts of its lifecycle. Berseem can make a high quality animal feed when planted with oats.

TOLERANCES

Flood	▮▮▮▯▯
Heat	▮▮▮▮▯
Drought	▮▮▮▯▯
Shade	▮▮▮▯▯
Low Fertility	▮▮▮▯▯
Salinity	▮▮▮▯▯
Optimal pH	6.2 - 7.0

SOIL DRAINAGE CLASS

Very Well	▯
Well	▮
Moderately Well	▮
Somewhat Poor	▮
Poorly	▯
Very Poorly	▯

AREA & ADAPTABILITY

Berseem clover is suitable as an annual across British Columbia. It is the least cold-hardy of all the clovers but is more tolerant to high salinity soils than alfalfa or red clover.

Winter Hardiness Zone - 8-9

Seeding Considerations

Rate Drilled	Rate Broadcast	Depth	Frost Seeding	Minimum Germination Temperature	Seeds #
8-15 lbs/ac (9-17 kg/ha)	15-20 lbs/ac 17-22 kg/ha	0-0.5 in (0-1.25 cm)	Yes	6°C (42°F)	140,000 /lb (63,500 /kg)

Inoculant: Use a berseem or crimson clover inoculant to ensure rhizobia development and adequate nitrogen fixation.

Management Considerations

Berseem clover is the tallest of the annual clovers but does not tolerate shading. Its performance at interior locations has been lower than anticipated.

As a grazing species, berseem clover has low risk of bloat, but does not tolerate close grazing and heavy traffic and should be managed accordingly.

Inter-seeding Potential ▮▮▮▮▯

Volunteer Establishment ▮▮▮▮▮

Nitrogen Concentration 2.5%

Dry Matter Yield

6000-10,000 lbs/acre
6720-11,200 kg/ha

Nitrogen Contribution

75-200 lbs/acre
84-224 kg/ha

Termination

Berseem Clover can be terminated through tillage, mowing or a chemical application. It is easily winterkilled in most parts of B.C.

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.

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