

BUCKWHEAT

FAGOPYRUM ESCULENTUM - COOL SEASON ANNUAL NON-LEGUME BROADLEAF



PRODUCTION GOALS

Not Effective
 Very Effective

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

Buckwheat has an upright growth habit and medium depth taproot. Buckwheat is commonly used for attracting pollinators, weed suppression and organic matter addition on summer fallow ground. Buckwheat needs warm conditions but has little tolerance for drought or excessive heat and water-logged soils. It is known to increase availability of phosphorus for the next crop.

TOLERANCES

Flood	
Heat	
Drought	
Shade	
Low Fertility	
Salinity	
Optimal pH	5.0 - 7.0

SOIL DRAINAGE CLASS

Very Well	
Well	
Moderately Well	
Somewhat Poor	
Poorly	
Very Poorly	

AREA & ADAPTABILITY

Buckwheat is adapted to all areas of the province as a summer annual

Winter Hardiness Zone - Does not overwinter


Seeding Considerations

Rate Drilled	Rate Broadcast	Depth	Frost Seeding	Minimum Germination Temperature	Seeds #
30-70 lbs/ac (34-78 kg/ha)	50-90 lbs/ac (56-101 kg/ha)	0.5-1.5 in (1-4 cm)	No	10°C (50°F)	20,000 /lb (9072 /kg)

Management Considerations

Buckwheat has the ability for quick growth which can be advantageous as a summer smother crop, especially in areas with a short growing season. Its ability to set seed quickly needs to be considered to avoid volunteer issues. It does not tolerate wet, saturated soils or drought conditions, but its quick growth may avoid drought conditions.

Inter-seeding Potential 

Volunteer Establishment 

Nitrogen Concentration No data

Dry Matter Yield

1000 - 2500 lbs/acre

1120 - 2800 kg/ha

Termination

Can be terminated through tillage, mowing or chemical means. Buckwheat sets seed quickly so termination should occur before seeds are viable to prevent volunteer establishment.

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

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