

# COMMON VETCH

VICIA SATIVA - WINTER ANNUAL LEGUME



## PRODUCTION GOALS

Not Effective




Very Effective

Quick Growth	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span>
Lasting Residue	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Soil Builder	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Nitrogen Fixation	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span>
Nitrogen Scavenging	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Erosion Reduction	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Compaction Reduction	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Biofumigation Potential	n/d
Weed Suppression	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span>
Forage Harvest Value	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span>
Grain Harvest Value	<span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>

Common vetch has prostrate climbing growth habit and a medium depth fibrous root. It is commonly used for green manure and in pasture mixes. Its blue-purple flowers attracts insects and pollinators.

## TOLERANCES

Flood	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Heat	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Drought	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Shade	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Low Fertility	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Salinity	<span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #006400; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span> <span style="display: inline-block; width: 10px; height: 10px; background-color: #808080; margin-right: 5px;"></span>
Optimal pH	6.0 - 8.0

## SOIL DRAINAGE CLASS

Very Well	<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; margin-right: 5px;"></span>
Well	<span style="display: inline-block; width: 15px; height: 15px; background-color: #006400; margin-right: 5px;"></span>
Moderately Well	<span style="display: inline-block; width: 15px; height: 15px; background-color: #006400; margin-right: 5px;"></span>
Somewhat Poor	<span style="display: inline-block; width: 15px; height: 15px; background-color: #006400; margin-right: 5px;"></span>
Poorly	<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; margin-right: 5px;"></span>
Very Poorly	<span style="display: inline-block; width: 15px; height: 15px; background-color: #808080; margin-right: 5px;"></span>

## AREA & ADAPTABILITY

Common vetch is a suitable annual across BC and can overwinter in areas with milder winters. Common vetch is not as winter hardy as hairy vetch but is more drought tolerant.

**Winter Hardiness Zone - 7-9**

# Seeding Considerations

Rate Drilled	Rate Broadcast lbs	Depth	Frost Seeding	Minimum Germination Temperature	Seeds
10-60 lbs/ac (11-68 kg/ha)	11-72 lbs/ac (12-80 kg/ha)	0.5-1in (1-2.5cm)	No	14°C (58°F)	54,000 /lb (12,000 /kg)

Important Note: Use a pea or vetch inoculant at planting to ensure rhizobia development.

## Management Considerations

Common vetch is a competitive cover crop that can handle some weed competition and fixes large amounts of nitrogen. If allowed to go to seed, it can volunteer with a high number of hard seeds and for multiple years. For the least risk of volunteer and highest nitrogen availability, terminate at the early bud stage.

There can be livestock poisoning risks if grazing a pure vetch stand that has set seed. If using for grazing be sure to include multiple other species and graze the crop before it reaches maturity.

<b>Inter-seeding Potential</b>	
<b>Volunteer Establishment</b>	
<b>Nitrogen Concentration</b>	2.5 - 3.8%

### Dry Matter Yield

850 - 5980 lbs/acre  
1000 - 6700 kg/ha

### Nitrogen Contribution

50 - 100 lbs/acre  
56 - 112 kg/ha

## Termination

Common vetch can be terminated by tillage, mowing, or a chemical application. Common vetch has a natural resistance to glyphosate, glufosinate and Group 2 herbicides. Terminate at the late bud stage to maximize the amount of plant available nitrogen for the next crop.

## References

- Dobb, A., S. Burton. 2013. Rangeland Seeding Manual for British Columbia. B.C. Min. Agri., Sust. Agri. Mgmt. Br., Abbotsford, B.C.
- Elmy, K. 2020. Cover Cropping in Western Canada. Friesen Press.
- Midwest Cover Crop Council. (n.d.)
- 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.

FACTSHEET DEVELOPED BY:

