



# Hairy Vetch

*Vicia villosa*

**H**airy vetch is a winter-hardy, annual legume. It is one of the best nitrogen-fixers,<sup>1</sup> superior to peas and equal to red clover.<sup>2</sup> It is most useful in vegetable crop rotations when sown in late summer. Since it is slow to establish, it is usually sown with a nurse crop. Once established, it is good at weed suppression and soil conditioning.



<i>Land preparation</i>	Prepare a well-drained seedbed free of weeds and clumps of soil. Hairy vetch performs poorly on compacted soils. Soils low in phosphorus, potassium, or sulfur may need fertilizer for effective nitrogen fixation. Tolerates a wide range of pH. <sup>3</sup>
<i>Seeding rate</i>	Drill 15-20 lb/ac. Drilling is preferred for uniformity. Broadcast 25-40 lb/ac. <sup>1</sup> When seeding with winter rye, plant hairy vetch at 20-30 lb/ac <sup>2</sup> and winter rye at 70 lb/ac. Vetch can also be used as a nurse crop with oats. In late summer, sow oats with vetch at oats 80 lb/a and vetch 40 lb/ac. <sup>3</sup>
<i>Seeding date</i>	Late August – early September.
<i>Seed sources</i>	Local farm seed dealers, Ernst Conservation Seeds. King’s Agriseed (Purple Prosperity) and Albert Lea (Purple Bounty) mature 1-2 weeks earlier than common seed.
<i>Maintenance</i>	None.
<i>Control</i>	Incorporate, <sup>4</sup> mow, or crimp at flowering in late May to kill without herbicide. Since most nitrogen fixation occurs in May, earlier control is not usually desirable. Hairy vetch can become a weed problem if allowed to go to seed. Do not use in rotation with small grain because the hard seed of vetch will germinate in later years and contaminate the grain.
<i>Tips</i>	Hairy vetch is slow to establish and often needs a nurse crop, usually oats or rye. Wait a minimum of three years before another legume crop is planted because hairy vetch supports root rot and lesion nematodes. Root rot is not aggravated, however, when it is planted in combination with small grains. <sup>5</sup> Hairy vetch can serve as an alternate host for white mold. <sup>6</sup>

---

**References:**

- <sup>1</sup> Sideman, E. Maine Organic Farmers and Gardeners Association, Fact Sheet #10, Using Green Manures,
- <sup>2</sup>Undersander, N.J. Ehlke, A.R. Kaminski, J.D. Doll, K.A. Kelling. 2000. Hairy Vetch. In: Alternative Field Crops manual. [www.hort.purdue.edu/newcrop/afcm/vetch.html](http://www.hort.purdue.edu/newcrop/afcm/vetch.html)
- <sup>3</sup>Johnny's Selected Seeds. 1997. Green Manures, A Mini-Manual. 12 pp.
- <sup>4</sup>Clark, A. 2007. Managing Cover Crops Profitably, 3rd ed., Sustainable Agriculture Network. p.145.
- <sup>5</sup>Abawi G.S. and T.L. Widmer, 2000. Impact of soil health management practices on soilborne pathogens, nematodes and root diseases of vegetable crops. Applied Soil Ecology 15:37-47.
- <sup>6</sup>L.J. Stivers et al. 1998. Cover Crops for Vegetable Production in the Northeast. Information Bulletin 244.p.4

**Disclaimer**

This fact sheet reflects the current (and past) authors' best effort to interpret a complex body of scientific research, and to translate this into practical management options. Following the guidance provided in this fact sheet does not assure compliance with any applicable law, rule, regulation, or standard, or the achievement of particular discharge levels from agricultural land.

**Please cite as:**

Björkman, T. and J.W. Shail. 2010. Cornell cover crop guide for hairy vetch. Cornell University. 2pp. Ver. 1.100716

For more information



Cornell University  
Cooperative Extension

Horticulture Extension  
<http://covercrop.net>

Thomas Björkman  
Department of Horticulture

2010