



Hairy Vetch

Vicia villosa

Hairy vetch is a winter hardy annual legume. It is one of the best nitrogen fixersⁱ and is reported to be more efficient at nitrogen fixation than peasⁱⁱ. This makes it useful in vegetable crop



rotations. Since it is slow to establish it is generally sown with a nurse crop. Once established Hairy vetch is good at weed suppression and soil conditioning.

Land preparation

Prepare a well drained seed bed free of weeds and clumps of soil. Hairy vetch performs poorly on compacted soils. It has high P and K requirements.ⁱ Test soil for available P 40 lb/ac and K 120 lb/ac.ⁱⁱ Hairy vetch will tolerate a wide range of pHⁱⁱⁱ.

Seeding rate

Drilled 15-20 lb/ac. Drilling is preferred for uniformity
Broadcast 25-40 lb/ac^{iv}
When seeding with winter rye, plant Hairy vetch at 20-30 lb/acⁱⁱⁱ and winter rye at 70 lb/ac. Hairy vetch can be used as a nurse crop with Oats. In late summer sow Oats with Hairy Vetch at Oats 80 lbs./acre and Vetch 40 lb/acⁱⁱⁱ.

Seeding date

Late August through September.

Seed sources

Local farm seed dealers, Ernst Conservation Seeds

Maintenance

None

Control

Mow or crimp at flowering, in late May, to kill without herbicide. Since most N fixation occurs in May earlier control is not usually desirable. Incorporation will also control hairy vetch^{iv} 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.

Tips

It is slow to establish and often needs a nurse crop. 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 hairy vetch is planted in combination with small grains.^vHairy vetch can serve as an

alternate host for white mold^{vi}.

ⁱ Sideman, E. Maine Organic Farmers and Gardeners Association, Fact Sheet #10, Using Green Manures,

ⁱⁱ 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

ⁱⁱⁱ Johnny's Selected Seeds. 1997. Green Manures, A Mini-Manual. 12 pp.

^{iv} Clark, A. 2007. Managing Cover Crops Profitably, 3rd ed., Sustainable Agriculture Network. p.145.

^v 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.

^{vi} L.J. Stivers et al. 1998. Cover Crops for Vegetable Production in the Northeast. Information Bulletin 244. p.4