

Vetting Vetch

In areas like the Pacific Northwest where winter rainfall is high, valuable water-soluble nutrients (nitrogen, calcium) easily leach out of unprotected topsoil. The root activity of green manures, cover crops, or overwintering vegetables can hold those nutrients in the topsoil. When a crop is turned under or properly composted and used in the garden, the nutrients are returned to the soil.

A green manure is a crop grown to be incorporated into the soil at a less-than-mature ("green") stage, to improve the soil. A cover crop is used to protect the soil from wind and water erosion and compaction, to control weed growth, and eventually, to build organic matter in the soil. The roots of the cover crop hold the soil; its top growth helps diminish damage from splashing and surface runoff and also shades the ground, suppressing weed growth.

Non-legumes are good cover crops because their vigorous early growth helps suppress weeds and holds soil in place. Legumes are good for improving fertility. The non-legumes have a relatively higher carbon content, so they break down more slowly and, as a result, add more organic matter to the soil.

Many gardeners plant a combination fall cover crop which includes a non-legume and a legume - winter rye and hairy vetch, for example. Before you purchase seeds for your fall cover crops, investigate the advantages and disadvantages of the crop(s) by doing some reading and talking with fellow gardeners. We offer you here a good deal of information about some of the vetches, as well as some sources for you to consult.

Vetches are annual viney legumes which grow well in cool weather and in a wide variety of soil types, as long as there is adequate moisture. Vetches don't require as much lime as most legumes, and hairy vetch can be planted later than any other legume - from August to mid-October, depending on one's latitude (mid- to late September in Clark County). Because it is a slow starter, hairy vetch is usually combined with a "nurse" crop (winter rye or oats) which controls weeds until the vetch is established (and, if necessary, protects the vetch against cold temperatures). Vetch grows vigorously in the spring, shading out many pesky weeds.

Hairy vetch (*Vicia villosa*) and common or white vetch (*Vicia sativa*) are both winter annuals. Hairy vetch, which was brought from Europe to be a rotation crop, has escaped and is now a common weed along roadsides and on idle land, partially because of its hard dormant seeds. It has two non-standard names: woolly vetch and winter vetch. Common vetch, which is not hard seeded, is less likely to become a weed problem if plants go to seed before being tilled in, or if one misses some plants at the edges of the garden. It has larger seeds and leaves and makes better fall growth than hairy vetch. Both flower around May in most zones in the United States, hairy vetch producing delicate sprays of lavender and violet. Hairy vetch puts on viney growth with stems up to six feet long, is somewhat drought tolerant, and may be grown at colder winter temperatures (USDA zone 5) than common vetch (USDA zone 7). Both are seeded at the rate of one-half cup per 100 square feet, and covered to a depth of three-fourths of an inch.

Vetch, rye, or a combination of the two can be mowed or left to die back naturally (due to the end of its life cycle, or winter cold) to act as a mulch that controls weeds and retains moisture. At planting time, the gardener either tills a planting strip through the mulch or uses a bulb planter or similar tool to punch holes into the mulch for transplants.

Hairy vetch is said to contain chemicals which inhibit the germination of seeds – a plus when considering weed suppression, but a potential problem considering vegetable and flower seed germination. If you're planning to direct seed vegetables or flowers, turn the vetch under and give it a few weeks to break down before you sow.

References

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Managing Cover Crops Profitably. (\$19 – check or money order, shipping included - from Sustainable Agriculture Publications, Hills Building, Room 10, University of Vermont, Burlington, VT 05405-0082)

Using Cover Crops in Oregon, EM 8704, Oregon State University. (\$5.50 from Publication Orders, Extension and Station Communications, Oregon State University, 422 Kerr Administration, Corvallis, OR 97331-2119; Fax: 541-737-0817)