

Tried and True Cover Crops

Best Bets to Enrich Soil (page 1 of 2)

Best Bets: Plants
for Particular Uses
in the Mid-Atlantic

Cover crops are often transition plantings used in crop rotation or before establishing more permanent landscaping to improve soil texture, water infiltration, or fertility. They can be used in barren areas where soil is depleted, compacted, or eroded, but they also can serve as green mulch in beds. Many store nitrogen in soil, which promotes growth of later plantings.



Winter Cover Crops*	Images**
<p>Crimson Clover (<i>Trifolium incarnatum</i>)</p> <p>Plant from late August through September, alone or with winter rye or other cover crops. Produces dense green carpet by early winter and crimson blossoms by early May. Fixes nitrogen. Builds soil. Shade tolerant. Attracts beneficial insects. Does not multiply with runners. Cut at soil level when blooms start to fade and before seeds form. For a green manure, till cut tops into soil 2–3 weeks before planting something else. Alternatively, use cut tops as mulch around subsequent plantings and till into soil at the end of season.</p>	
<p>Field Peas (<i>Pisum sativum subsp. arvense</i>)</p> <p>Plant from late summer to early fall, alone or with oats or other cover crops. Excellent nitrogen source. Hardy to 10 degrees. Good choice for areas planted in early spring, especially with oats. Oats add biomass, hold plant nutrients, and, like field peas, are fairly easy to till into soil. Turn under 2–3 weeks before planting something else.</p>	
<p>Oats (<i>Avena sativa</i>)</p> <p>Plant from late summer to early fall alone or with field peas or other legumes. Suppresses weeds, prevents erosion, adds biomass, and captures excess nutrients. May be killed by cold in winter, making it easier to till into the soil in spring for early crops.</p>	
<p>Winter Rye (<i>Secale cereale</i>)</p> <p>Plant September to October with nitrogen fixing cover crops such as crimson clover or hairy vetch. Adds plentiful organic matter, enhances soil life, and suppresses weeds. Extensive root system improves soil structure. Does not fix nitrogen, but captures excess nitrogen and other nutrients. May be tilled under in spring while still succulent about four weeks before planting another crop. Rye tends to regrow when it is tilled under at less than 12 inches tall. For more organic matter, cut after flowering, but before seeds form and use tops as mulch for later crop. Best used in areas where later season crops will be planted.</p>	
<p>Hairy Vetch (<i>Vicia villosa</i>)</p> <p>Plant with winter rye or other cover crops in early fall. Excellent nitrogen source. Grows slowly in fall, then rapidly in spring. The combination with rye ensures good ground cover over the winter and the rye allows the vetch to climb in spring. Cut Hairy Vetch to terminate growth before or as soon as you see its purple flowers. It can easily become a weed if allowed to produce seed.</p>	
<p>*The planting schedules described above are for winter cover crops in USDA Plant Zone 7. **Images show field peas in November, oats in February, and winter rye and hairy vetch in May.</p>	

developed by Master Gardeners of Northern Virginia, serving Arlington and Alexandria

Images by IDFG.Idaho (crimson clover) and by Judy Salvesson, Potomac Overlook Organic Vegetable Demonstration Garden (field peas & oats) and private garden (winter rye & hairy vetch), Arlington, VA



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