

Cover Crops for Home Gardens

Dr. Lois Berg Stack
University of Maine

What is a cover crop?

A crop is grown on otherwise fallow land, to “cover” the soil. When cover crops are tilled in, they’re often called “green manures” because they decompose to add organic matter and nutrients to the soil.

Why should every home gardener use cover crops?

Cover crops can outcompete weeds, add nutrients, conserve water, preserve soil structure, enhance microbial action in the soil, contribute organic matter, and more.

Which cover crops work best for Maine gardeners?

The answer depends on purpose, timing and tools ... see back of page.

Where can you find more information?

<http://www.extension.org/article/18524>

Connection to many articles, including:

“How Cover Crops Suppress Weeds”, “Plant and Manage Cover Crops for Maximum Weed Suppression” and “Using Native Flowering Plants to Attract Beneficial Insects”.

<http://www.attra.org/attra-pub/covercrop.html>

Extensive information about uses of cover crops and green manures.

Includes connections to many other cover crop websites, books and articles.

<http://www.sarep.ucdavis.edu/ccrop/>

Very comprehensive database of cover crop information.

This website provides everything you could possibly want to know about more than 40 individual cover crops (including some that would not perform well in Maine). Presents a very long list of information specific to each cover crop, including: available cultivars on the market; seed/seedling/mature plant information; geographic range for growth; water/temperature/pH/soil/light requirements; seed establishment guidelines; need for inoculant; seed cost and availability; maintenance needs; harvesting guidelines; uses; use in cover crop seed mixes; effects on fertility/water/soil; pests ... and on and on.

<http://www.mofga.org/Publications/FactSheets/tabid/133/Default.aspx>

Link for downloading MOFGA’s fact sheets, including:

“Controlling Garden Weeds” and “Using Green Manures”.

Cover Crops for Maine Gardens

Cover Crop <i>Major Reasons for Use</i>	Lbs per 1000 sq. ft.	Lbs per acre	When to Sow	When to Incorporate; <i>Tools for Incorporation</i>
Alfalfa <i>Adds nitrogen</i>	1.5 – 2.5	12 – 15	Spring	After two years; <i>Tractor or large tiller</i>
Buckwheat <i>Controls weeds; fast growth in heat</i>	2.0 – 3.0	50 – 60	Early summer	Late summer; <i>Tiller; can also spade in by hand</i>
Clover, Berseem <i>Full-summer cover crop</i>	2.0	15 – 20	Spring	Late summer to fall (while green); or let crop winterkill and till in following spring; <i>Tiller or spade (may mow first)</i>
Clover, Crimson <i>Quick summer cover crop</i>	2.0 – 3.0	30 – 40	Spring	Late summer to fall (while green); or let crop winterkill and till in following spring; <i>Tiller or spade (may mow first)</i>
Clover, Red <i>Adds nitrogen; adds organic matter</i>	1.0 – 2.0	8 – 12	Late spring / Summer	Following spring / Following fall <i>Tiller; can also spade in by hand</i>
Millet, Japanese <i>Controls weeds, adds organic matter</i>	2.0 – 3.0	30 – 40	Late spring / Summer	Late summer / Fall <i>Tractor</i>
Oats <i>Winter cover crop; controls weeds</i>	4.0 – 5.0	90 – 100	Early summer / Late summer	Fall / Following spring <i>Tiller; can also spade in by hand</i>
Oat-Pea-Vetch Mix <i>Adds nitrogen, adds organic matter</i>	5.0	200	Spring / Summer	Late summer / Late summer <i>Tiller</i>
Rye, Winter <i>Winter cover crop; drought-tolerant; can be seeded later than others</i>	4.0 – 5.0	90 – 100	Late summer / Early fall	Spring / Spring <i>Tractor or large tiller</i>
Rye, Annual (also called Italian Rye) <i>Winter cover crop; controls weeds</i>	2.0 – 3.0	25 – 35	Spring / Fall	Fall / Spring <i>Tiller</i>
Sudan grass or Sorghum-Sudan grass <i>Control weeds; add organic matter; heat- and drought-tolerant</i>	2.0 – 3.0	30 – 40	Early summer / Summer	Fall / Fall <i>Tractor</i>
Vetch, Hairy <i>Adds nitrogen; drought-tolerant</i>	2.0 – 4.0	50 – 60	Spring / Fall	Fall / Spring <i>Tractor or large tiller</i>

Adapted from *GardenPro Answer Book*, 2002.