

Intro to Cover Crops for Urban Gardens

Cover your bases with cover crops!



Figure 1: Cover Crops grown in a garden. [3]

Introduction and Benefits

Using cover crops for your garden is one of the most effective practices that can address many gardeners' objectives. In short, a cover crop is a name given to any plant or mixture of plants, like crimson clover, rye, oats, or hairy vetch, which is strategically grown benefit the garden in one or multiple ways.

Cover Crop Benefits

- Enhance soil fertility and quality
- Protect against erosion
- Increase soil porosity
- Adds organic matter
- Removes excess nitrogen
- Significantly suppresses weeds
- Attract beneficial insects
- Increases wildlife habitat and biodiversity
- Improves aesthetics
- Limits water evaporation from soil
- Is a natural mulch further suppressing weeds
- Helps to control pests and disease

Moreover, the benefits are noticed within following planting season and improve with continued use!

When to Plant

While cover crops can be grown almost any time of year except winter, they are typically planted and grown in the fall around September, after your vegetables have finished producing harvest, grow through the winter, and are terminated in the spring. They can also be grown alongside your vegetables in certain applications.

See Figure 4, Approximate Seeding Periods, below to learn more.

What to Plant

Deciding which cover crop to plant depends upon your goals and objectives as well as with the type of soil you have, what was grown and/or what will be grown the following year.

You can plant pure stands, all one type of crop, or mixtures, which involves mixing several types of cover crops.

See Figure 3 below for more information on strengths of individual cover crops.

You can learn more about the individual benefits of each type of cover crop here: <http://tinyurl.com/heslo8n>



Figure 2: "This rye-vetch cover crop mulch delayed weed growth sufficiently to prevent significant weed competition against the broccoli. The mulch effect effectively blocked most annual weeds...Figure credit: Mark Schonbeck, Virginia Association for Biological Farming." (Source: <http://articles.extension.org/pages/18524/how-cover-crops-suppress-weeds>)

How to Plant

Once you have purchased your seeds, simply scatter them onto the area you wish to plant and rake over gently. There is no need to till or drill.

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Care

There is little care needed while your cover crops are growing. However, it is important to terminate the cover crops prior to when they seed. See the following 'Q&A' section to learn more.

Terminating Cover Crops

Terminating a cover crop, or stopping its growth, is important especially if you do not wish for them to seed and therefore become another weed in your garden. For many urban gardeners, the best way to terminate a cover crop is by cutting, mowing, rowing, or sickling immediately after they flower and definitely before they seed. Herbicides can also be used.

Where can I buy seeds?

In addition to purchasing online, you can find cover crop seeds at these locations within Hamilton County:

| Name and Location | Contact | Notes |
|--|--|---|
| Urban Farmer Seeds 120 E 161st St., Westfield, Indiana 46074 | (317) 600-2807 www.urbanfarmerwestfield.com | Carries a large variety of seeds and can purchase in bulk. They have a local storefront or you can purchase online at www.ufseeds.com |
| Habig Garden Shops 15311 North Meridian Street Carmel, Indiana 46033 | (317) 896-2828 www.habiggardenshop.weebly.com | Carries crimson clover and rye only. Can order additional varieties. |

Q & A

Technical Assistance

Contact the Hamilton County Soil and Water Conservation District to schedule a site visit and learn more about which cover crop plan will meet your needs!

Can this be used in no-till gardens?

Yes, it can. There are several methods to “terminate” the plant if you choose not to till or use herbicide. The two main ways are *cutting* or *rolling*. Both of these should occur immediately after the cover crop flowers and before it seeds. You can then use the cover crop as a mulch to further suppress weeds and retain moisture in the soil.

Does using cover crops interfere with anything?

There may be some interference if you plan to grow an early or late season crop. Intercropping vegetables with cover crops is an option.

In addition, some cover crops, like annual rye, leave a chemical in the ground that weeds and some vegetables do not like to grow in the following year. A simple plan or assistance from your local urban agriculture conservationist can eliminate this issue.

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Additional Recourses

About Individual Cover Crops, USDA via Mother Hubbards Cupboard
<https://drive.google.com/file/d/oB4s4XpORNGLVQWd3cWZ1RzdmSoU/view>

Cover Crop Growing Info, Urban Farmer Seed -
<http://www.ufseeds.com/Cover-Crop-Growing-Info.html>

Cornell University: Cover Crop Decision Tool
<http://covercrops.cals.cornell.edu/decision-tool.php>

Cover Crops for NYC Urban Gardens, Cornell University

http://blogs.cornell.edu/gep/files/2013/08/Cover-Crop-Handouts-PACKET_Zone-7b_English-o8z197.pdf

Cover Crop Basics, Mother Hubbards Cupboard

http://blogs.cornell.edu/gep/files/2013/08/Cover-Crop-Handouts-PACKET_Zone-7b_English-o8z197.pdf

How Cover Crops Suppress Weeds

<http://articles.extension.org/pages/18524/how-cover-crops-suppress-weeds>

Cover Crop Uses

| BENEFICIAL INSECTS | CHICKEN FORAGE | COMPACTION CONTROL | DEER ATTRACTANT | EROSION CONTROL | FORAGE | GREEN MANURE | NITROGEN FIXATION | NITROGEN SCAVENGER | NO TILL | ORGANIC MATTER | WEED SUPPRESSION |
|--------------------|----------------|--------------------|-----------------|-----------------|------------|--------------|-------------------|--------------------|------------|----------------|------------------|
| Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa | Alfalfa |
| Barley | Chicory | Clover | Chicory | Barley | Chicory | Barley | Clover | Barley | Barley | Barley | Barley |
| Clover | Clover | | Clover | Clover | Clover | Buckwheat | Cowpeas | Flax | Buckwheat | Buckwheat | Buckwheat |
| Buckwheat | Cowpea | | Cowpea | Cowpea | Forage Pea | Cowpea | Forage Pea | Rye | Clover | Flax | Clover |
| Chicory | Flax | | Forage Pea | Oats | Rape | Flax | | Ryegrass | Flax | Forage Pea | Forage Pea |
| Cowpeas | Forage Pea | | Rape | Rye | Turnips | Forage Pea | | Vetch | Forage Pea | Oats | Oats |
| Flax | Rape | | Turnips | Wheat | Vetch | Oats | | Wheat | Oats | Rye | Rye |
| Vetch | Turnips | | Vetch | | | Rye | | | Rye | Ryegrass | Ryegrass |
| | Vetch | | | | | Ryegrass | | | Ryegrass | | Vetch |
| | | | | | | Vetch | | | Vetch | | Wheat |
| | | | | | | Wheat | | | Wheat | | |

Figure 3: Cover crop uses. Credit: Urban Farmer Seeds [1]

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Approximate Seeding Periods [2]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|---|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Frost Seeding – red clover | | | | | | | | | | | |
| | | | | | | | | | | | |
| Early Spring – annual rye grass, barley, oats, field pea, hairy vetch | | | | | | | | | | | |
| | | | | | | | | | | | |
| Spring – oats, alfalfa, field pea, red clover, mustards, oilseed radish, rapeseed/canola, turnip (forage type) | | | | | | | | | | | |
| | | | | | | | | | | | |
| Summer – millets, sorghum-Sudangrass, Sudangrass, alfalfa, berseem clover, crimson clover, sweet clover, buckwheat | | | | | | | | | | | |
| | | | | | | | | | | | |
| Late Summer/Early Fall – annual rye grass, barley, oats, alfalfa, field pea, hairy vetch, winter pea, mustards, oilseed radish, rapeseed/canola, turnip (forage type) | | | | | | | | | | | |
| | | | | | | | | | | | |
| Fall – rye, wheat | | | | | | | | | | | |
| | | | | | | | | | | | |

Figure 4: You can seed cover crops nearly any time of year depending on your goals and objectives.

Works Cited

- [1] Urban Farmer Seeds, "Cover Crop Growing Guide," [Online]. Available: <http://www.ufseeds.com/Cover-Crop-Growing-Info.html>.
- [2] Midwest Cover Crops Council, Midwest Cover Crops Field Guide, Indiana: Purdue Agriculture Communication, 2012.
- [3] @owgarden, "Cover Crops Basics - What Are They - And How And Why To Use Them For A Great Garden!," 3 July 2016. [Online]. Available: <http://oldworldgardenfarms.com/2013/09/03/cover-crops-basics-what-are-they-and-how-and-why-to-use-them-for-a-great-garden/>. [Accessed 19 December 2016].
- [4] M. Schonbeck, "How Cover Crops Suppress Weeds," 12 June 2015. [Online]. Available: <http://articles.extension.org/pages/18524/how-cover-crops-suppress-weeds>.