

# Cover Crops in the High Desert Garden

---

## What are cover crops?

Cover crops are plant varieties that are sown in order to improve soil fertility, increase organic matter in the soil, offer a protective soil layer in harsh winter conditions, suppress weeds, and prevent soil erosion.

They are mulched into the garden before they produce seeds, either manually by hand pulling or cutting them down, or by being mowed.



Fava Beans

## Why should we use them?

Cover crops "feed" the soil when the garden isn't in use and can help reduce weed growth.

For example, legume cover crops, such as beans, vetch, peas, and clover, capture nitrogen from the atmosphere and return it to the soil as their plant bodies decompose.

In this way, they naturally feed the soil for future growing seasons.

## When is the best time to plant them?

The best time to plant cover crops depends on your garden and maintenance needs, but you might find you want them if:

- You're preparing the garden beds for summer annual plants (early spring planting).
- You know the garden beds won't be maintained for the summer (early summer planting) .
- You've harvested your crops, want to care for the soil, and have kids engage in the garden (fall planting) .
- You want to get ahead of the spring weeds and have an early crop (winter planting).



Flowering Hairy Vetch



### **Clover**

(Legume) Plantings in fall mature in late spring or early summer. Captures and adds nitrogen to the soil, while flowers attract pollinators. Can spread in a dense mat. Different clover types grow to different heights.



### **Hairy Vetch**

(Legume) Plantings in summer can overwinter and mature in late spring, depending on variety. Weed suppressant, especially for spring weeds if the plant overwinters. Captures and adds nitrogen to the soil.



### **Daikon Radish**

Thick and long roots break up compact soil, draw nutrients from deep in the soil, and aerate it. It can overwinter if planted in the spring or summer. Roots can reach 20in and thick foliage shade out weeds when planted close together



### **Fava Beans**

(Legume) Early spring plantings can mature in mid or late summer. Deep roots loosen compact soil and add nitrogen. Grows tall, so plant in clusters for wind support. Produces edible pods and seeds, as well as flowers for pollinators.



### **Winter Rye**

Late summer plantings can mature in fall or early winter. It is drought resistant. Has allelopathic effects, in that it exudes compounds that inhibit other seeds' germination and growth.



### **Oats**

Early summer sown plants can mature in the fall. It has a quick germination rate. Provides shade and structure for slow-growing cover crops, such as legumes. Offers biomass and weed suppression for summer soils.

## **Resources**

Sustainable Agriculture and Research Education (SARE)

Rodale Institute

OSU Extension

