



## Redwood Barn Nursery

1607 Fifth Street Davis, California

### The food plants of fall and winter

#### **Our cool-season gardens begin now.**

I know it's hard to imagine, when we were just having daytime temperatures over 100, that many of the vegetables we grow for the cool season should get planted soon. All our cool season vegetables thrive when daytime temperatures are about 40 to 80 degrees, with cool nights, and all can tolerate frost. But some need several weeks of growth before they'll start producing. Others can be planted all through the fall and winter.

Cool season vegetables, compared to your summer garden, generally take less space, and require watering only until the rains begin.

- The key to success is timing: know the planting window for each crop. That includes some that we start to plant right now.
- Full winter sun is best. Leafy greens can be okay in partial shade.
- Cool-season vegetables don't need as much fertilizer as your summer vegetables. You can mulch them with a good quality compost that contains some added fertilizer or feed the young seedlings once or twice with a liquid plant food such as fish emulsion.
- Watering is much easier, as we are on the cusp of our winter rainfall season. Young transplants typically need daily water through October, then only every few days in the absence of rainfall.
- This reduced watering need makes winter vegetables much easier to grow in containers than summer crops.
- In the winter, you tend to have a lot of weeds unless you mulch liberally. There are a lot of weed species whose seeds germinate in bare soil with the first rains of the season, so either cover the soil with mulch or grow cover crops to crowd them out and improve the soil.

The leaves you rake in fall are great for mulching, by the way. Just spread them several inches deep over your vegetable beds, under your trees and shrubs, or use them to smother weed seedlings.

We can group the food plants we grow in fall and winter, and grow and harvest through winter and spring, into six categories.

#### **Brassicas**

Broccoli, Brussels sprouts, cauliflower (including Romanesco), collards, kale, and kohlrabi all arise from the same plant, *Brassica oleracea*, as strains that have been selected over many centuries for the different parts of the plant.

For most, we're eating the flowerhead before the flowers open (broccoli, cauliflower). Brussels sprouts are the buds that form in the leaf axils, while kohlrabi is a swollen stem that we use as though it were a root.



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- Those that form a big head, stem, or condensed flower stalk need time to build energy reserves before they expand and produce the edible part. Several weeks of active seedling growth in fall and early winter makes that giant head of cabbage or cauliflower, or the fractal inflorescence of Romanesco, in February. These types are one-and-done: one plant, one harvest. The bigger your plant by the beginning of winter, the bigger your harvest will be.
- Broccoli, the most popular home garden brassica, has been bred and selected for different growth habits. Varieties that form one large head are grown for a single crop, mostly by farmers. Plant in early fall for late winter harvest. Home gardeners prefer heirloom types such as DeCicco and Waltham, which produce one head and then lots of side shoots. Plant these any time August through February to harvest baby broccoli shoots into mid-spring.
- Brassicas which we grow to eat just the leaves, such as collards and kale, can be planted all through the fall and winter. Leaves can be harvested at any stage of growth, over many weeks. Likewise, pak choi and broccoli raab, related plants (*Brassica rapa*) that are grown for their leaves and stems. Gardeners who are serious about collards enrich the soil with compost and manure, space the plants 18 – 24 inches apart, and give them plenty of water. That yields great big plants that you can harvest even into early summer.

### Pest issues on brassicas

Caterpillars of the Imported cabbageworm love to eat the foliage of brassicas. Pretty much, if you see the white butterflies about, you'll have caterpillars in short order. They oviposit (lay their eggs) singly on the leaves. The eggs are easy to rub off or blast off with water quite readily. Hand-pick caterpillars that you find, spray with an organic Bt spray, or investigate floating row covers:

<https://ipm.ucanr.edu/PMG/GARDEN/VEGES/ENVIRON/protectivecov.html>

- Aphids can be a nuisance early on but become much less active as temperatures drop. Diligent vigorous rinsing can manage them until then.

Temperature affects the flavor and quality. Brassicas taste sweeter when the temperatures are cold. Frost is not harmful and often improves the flavor. Like many plants adapted to cooler climates, they convert starches to sugars as the average temperature drops. At the other end of the season, heat makes the leaves and stems tough, and the flavor gets less sweet and more bitter. Brassicas are mostly done here by April.

### Leafy greens for salads and stir-fry

These are easy! Plant seedlings anytime from October through February and start using the leaves immediately. Young transplants are available all fall and winter.

Most popular are kale, lettuce, and spinach. We are starting seed of spinach right now, as it takes a long time in the early seedling stage. Kale and lettuce can be started from seed in September.



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Other greens include chicory and endive, corn salad, fennel, mustard greens, radicchio, and arugula.

It's ok to crowd these different winter greens. They can be mixed in containers, plants just a few inches apart, with the leaves harvested frequently and judiciously to keep them from outcompeting each other.

- Head lettuces need room to develop and are more prone to pest damage. Leaf lettuces are better for our area.
- Swiss chard can be planted year-around and mixes well with the others, though it will get much bigger over time. Keep cutting it back to promote tender new growth for harvest.
- Celery can be grown as a salad or snacking vegetable. Farmers blanch them to get the tender, sweet stalks. Home-grown celery is much stronger flavored than what you buy in the store.

### Root vegetables

Beets, carrots, parsnips, radishes, and turnips can be planted from seed in September.

Some can be grown year around, but those planted in fall and grown in wintertime have crisper texture and sweeter flavor. Most root vegetables need several weeks of vegetative growth before they form the edible roots.

- Radishes can be sown any time, come up right away and grow quickly, usable within just a few weeks of sowing. The flavor in warm weather is more peppery. Radishes are sweet and tender in cold weather.
- Carrots especially get sweeter with winter chilling. The seeds can be slow to germinate, and they need steady moisture. Loose soil as in raised planters is best, and shorter varieties such as Danvers Half-long and Little Finger develop more evenly.
- I get best results with beets and turnips from seed sown in September to early October. They should have several weeks of growth before winter. I confess I have never bothered to grow parsnips.

### Legumes: peas and beans

- Fava beans are grown fall through spring, produce large beans in spring, and fix nitrogen: the plants host nitrogen-fixing rhizobial bacteria that pull nitrogen from the air and convert it to ammonium, making it available to other plants. The seeds are huge and sprout quickly, great for planting projects with kids, and fava beans are very cold tolerant. You can literally just push the seeds into mud, and I've had good results planting as late as January. The flowers are very pretty, like black and white sweet peas and sweetly scented. Mostly grown as cover crops, but some people eat the beans. Fava beans are sturdy plants with few pest problems, needing little attention.
- Peas are another matter. Whether it's the traditional shelling peas, the snap peas that you eat raw and whole, or the sugar peas that are used in stir-fry, the plants can be fussy to get going. They're very



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fragile seedlings so they're hard to transplant, but the seed will rot easily if it's just directly sown in the ground.

It's best to pre-germinate the seed on damp paper towels, and then gently set them into loose soil in the garden as soon as they start to sprout, which just takes a few days.

Snails and slugs and white-crowned sparrows can demolish pea seedlings very quickly.

Midnight pest patrols and baits work for the mollusks. Avian pests need barriers.

Peas are usually frost-hardy, but twice I've lost the young seedlings to temperatures in the low 20s. If a December hard freeze is forecast, consider covering the vines with frost blanket.

Once they get going, peas scramble quickly up onto a light trellis, fence, or netting. If you plant in September, you may harvest some in November. Those vines, and any you plant later, will yield lots of peas from about February into mid-spring.

### **Oddities and such.**

Celeriac, celtuce, oyster plant (salsify), tree kale, rutabagas.

- Salsify is naturalized and quite weedy in this area. It's that pretty blue flower you see along roadways and farm fields blooming in early summer. The flowers attract lots of pollinators, but the wind-disseminated seeds, as with dandelions, spread far and wide. The roots are said to taste like oysters.
- Celeriac and celtuce are strange varieties of celery and lettuce, respectively, grown for enlarged stems much like kohlrabi. Start the seeds in September, don't let them get crowded by other plants, and harvest in spring.
- Tree kale is just what it sounds like: it's a kale that keeps growing taller and taller until it looks like something from a Dr. Seuss story.
- Sorry, your rutabagas should have been planted in July. They take a very long season.

### **Onion family**

Garlic can be planted anytime the new crop of 'seed' garlic becomes available in September – October.

Onions are best planted from seedling plants in November. There's a short window of availability! Leeks are more commonly grown from seed or transplanted from nursery six-packs. Thin them as they grow to get better size.

Don't let the summer weather fool you: winter gardens begin now!

### **Pictures and captions:**



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A young cabbage plant in December from early fall planting. The head is just beginning to form and will be ready for harvest in February.



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Okay, they take a lot of space – 2 feet across for the plant – and the head takes a long time to develop. Picture taken here in early February from September planting. But the flowers are fascinating and they're tender like cauliflower.



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The flowers of fava beans resemble sweet peas in form and fragrance. The plants are upright and sturdy, need no support, enrich the soil, and tolerate very cold and wet conditions.



Very hungry caterpillars! Imported cabbageworm, caterpillars of a common white butterfly (*Pieris rapae*), can do a lot of damage in a very short period of time. You'll usually find the culprits on the undersides of the leaves, not far from the holes. Hand pick, rub off the eggs when you find them, or spray if necessary with organic Bt sprays. Their damage diminishes as nights get colder.



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Fragile favorites. Garden peas are very breakable seedlings, vulnerable to predation by snails and slugs and sparrows, but once they get past the seedling stage the vines can be quite vigorous and productive. Provide some light support for the vines, as they scramble up to a few feet tall quite rapidly.



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Edible? Well, kind of. The ornamental cabbage and kale plants sold at nurseries are varieties of regular cabbage and kale that have colorful leaves. But these leaves are rather tough and fibrous. Cold weather enhances the color of the leaves. They produce spikes of yellow flowers in late winter.