



## Why garden year round?

- Fresh vegetables year round
- Efficient use of garden space
- Less watering needed thanks to rain and lower temperatures
- Fewer pests and diseases
- Slow growth, long holding time, root vegetables are “refrigerated” right in the ground

## Frost protection

- Some crops taste better after light frost (cabbage family: broccoli, cauliflower, kale, etc.)
- All can tolerate light frosts (28–32°F) typical of central Santa Clara County
- For a hard frost (<28°F), cover chard, beets, carrots, parsnips, Asian greens, peas, lettuce
- Mulch around root vegetables to protect from freezes

## Planning

- What does your family like to eat?
- What gives good return for the garden space?
- Can plant in the ground, in raised beds, or in containers

## Sun: Where and how much

- Need full sun, at least 6 hours. More hours of sunlight for healthier plants, better production
- Shorter days, overcast, lower sun path
- More shade from buildings, but less shade from deciduous trees

## When to plant

- Mediterranean climate: warm, dry summer and cool, wet winter
- Get started early, late summer through early fall
- Some can be planted in early spring, February and March
- Transitioning from the summer garden
- Starting seeds and seedlings
  - No extra heat needed
  - Starting outdoors: dappled shade, morning sun, shaded from hot afternoon sun
- Transplants allow you to start seeds while other crops are still in beds

## A guideline calendar *(Detailed vegetable planting chart on website)*

July/August	Start seeds in containers for cole crops
August/September	Start seeds in containers for greens, beets, peas
September/October	Transplant cole crops, greens, peas, beets Seed peas, carrots and beets in place Start onion seeds in containers
October/November	Continue transplanting greens
November/ December	Plant garlic and shallot bulbs, onion seedlings. These will grow into summer, must plan for no water at end

# Cool Season Vegetables

## Salad greens

- Lettuce – Butterhead, Batavian (crisphead), romaine, leaf, mixes (mesclun)
- Plant closely for cut & come again or 6–10" apart for heads
- Start in pots 4–6 weeks ahead of time or direct seed
- With heads, harvest outer leaves continuously. Harvest heads when full and firm
- Will bolt and go to seed when weather becomes too warm or with age, gets bitter
- Pests: snails & slugs
  - Night patrol, especially first few weeks
  - Check hiding places: cool, damp, shaded. Set out boards, bricks, flowerpots
  - Many insects eat snail eggs
  - Use copper foil as a barrier
  - Use iron phosphate; don't overuse
- Pests: birds
  - Irregular holes in leaves, not just on edges
  - Protect seedlings with netting or row cover
- Arugula – Direct seed, succession
- Frisée & escarole – Tie up or cover to blanch about 2 weeks before harvest

## Peas

- English/shelling, sugar snap, snow peas (pea pods)
- Start in pots 3–4 weeks ahead of time or direct seed 3–4" apart
- Need trellis support, even short varieties. Run trellis north–south if possible
- Have clinging tendrils, so need thin supports. Can't twine around poles like beans
- Harvest shelling and sugar snaps when pods are full, but before they become lumpy and starchy. Harvest snow peas when full size but still flat
- Powdery mildew: For best results, plant peas in fall, not spring. Full sun
- Pests: Slugs, snails, and birds nip off emerging seedlings

## Broccoli

- Cabbage family (cole crops, brassicas), includes cabbage, cauliflower, kohlrabi, Brussels sprouts and more
- Start seeds in pots 4–6 weeks ahead
- Transplant into garden in September–October, 12–24" apart
- Harvest main head when full but not spreading
- Harvest sideshoots for 2–3 months afterwards
- Pests: Imported cabbageworm
  - Larva of imported cabbage butterfly
  - Same color as plant, often found along rib
  - Handpick, grow under row cover, encourage predators, use Bt
  - Generally only a problem when plants are young
- Bt: *Bacillus thuringiensis ssp kurstaki*
  - Naturally occurring soil-dwelling bacteria, non-toxic to people, pets, wildlife
  - Spray on leaves, caterpillars eat leaves then die
- Pests: Bagrada bug
  - Member of stinkbug family, much smaller than green or harlequin stinkbugs
  - Especially attracted to cabbage/mustard family, including alyssum and arugula
  - Handpick, remove susceptible plants

- Pests: Downy mildew
  - Fungal disease: cool nights, cool wet days
  - Yellow-brown patches on tops of leaves, dark or white powdery spores on underside
  - Mostly only a problem for young seedlings
  - Plant resistant varieties, ensure good air circulation,
  - Plant in fall, not spring

### **Other cabbage family plants**

- Cauliflower: One head no side shoots, needs 2–3 foot spacing
- Kohlrabi: Delicious raw, leaves tasty too. Plant closely, 6" apart
- Brussels sprouts: Needs to start early, transplant in mid-July, August at latest

### **Chard**

- Start in pots 4–6 weeks ahead of time or direct seed 10–12" apart
- Pick outer leaves (pull rather than cut) and continue harvesting over a long period of time
- Eat both leaves and ribs. Ribs require longer cooking
- Pests: leafminers
  - Look for trails in leaves or straight, snow white eggs on underside of leaves
  - Cut off and throw away (not compost) infected leaves
- Pests: aphids
  - Look for curled leaves, sticky surfaces, ants. Population builds in spring
  - Don't over-fertilize; aphids are attracted to tender growth
  - Use row cover
  - Wash off with sharp spray of water or compost infected leaves
  - Can use insecticidal soap for bad infestations, but many beneficial insects that prey on aphids may also be killed: Lady beetle, syrphid fly, lacewing, parasitic wasps

### **Spinach**

- Start in pots 4–6 weeks ahead of time or direct seed 6–12" apart
- Loves cool weather, bolts in hot weather
- Harvest individual leaves and continue harvesting over a long period of time
- Pests: Leaf miners (see chard)

### **Other greens**

- Kale, collards, mustard, Asian

### **Root crops**

- Beets, carrots, parsnips, radishes, turnips, rutabagas, potatoes (Feb–Aug)
- Grown mainly for their roots, some have edible greens
- Like loose soil that allows roots to penetrate easily and grow straight
- Can be harvested when needed, over weeks or months
- Beet or turnip greens can be harvested but leave at least half

### **Fennel**

- Feathery fronds grow tall, 3–6 feet
- Great beneficial attractor, especially flowers, which are also tasty

## **Fava beans**

- Plant seeds in fall or early spring
- Harvest very young to eat whole, larger for shelling beans, or allow to dry
- If using as a green manure (soil amendment) for nitrogen fixing, cut down and incorporate into soil when flowers appear. Plants store nitrogen in root nodules, but use it when forming the beans

## **How to prevent or control problems**

- Provide good air circulation, well-drained soil, enough sun
- Plant resistant cultivars
- Attract beneficial insects with ornamentals
- Cats & birds – Cover seedlings with row cover or wire cages

## **Websites**

**UC Santa Clara County Master Gardener website:** [mgsantaclara.ucanr.edu](http://mgsantaclara.ucanr.edu)  
Garden Help, Beginning Vegetable Gardening, Container Gardening, Help Desk, and more

**UC Integrated Pest Management:** [ipm.ucanr.edu/PMG/menu.homegarden.html](http://ipm.ucanr.edu/PMG/menu.homegarden.html)

## **Publications**

*Pests of the Garden and Small Farm*, UC ANR Publication 3332

*Natural Enemies Handbook*, Mary Louise Flint and Steve Dreistadt, UC Press

*Golden Gate Gardening*, Pam Peirce

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