



Fall Vegetable Gardening

Welcome!
Please type your name and city into the chat box.



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Master Gardener Program



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Agenda

- Gardening Basics
- Planting Methods
- Fall Vegetables
- Harvest Methods
- IPM





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Gardening Basics



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Sun and Water Source

- 6-8 hours sunlight for most plants
 - Leafy, root vegetables 4-6 hours ok
- Have a nearby water source
 - Use drip or soaker hose irrigation



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Watering



- Make sure seeds, seedlings, and transplants get enough water.
- Keep soil moist, including the root ball!
- **Water regularly.**
 - Sporadic watering can cause problems for the plant.

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Fertilizing

- Use a **slow or time-release fertilizer.** OR
- Water soluble fertilizer.
- Follow directions
 - Never add more fertilizer than the directions state, as this can “burn” your plants.
 - Water seedlings at ½ strength after 2 weeks.



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Soil Preparation

- Add 4-6" of compost to your garden and mix in
- Containers: use good-quality potting mix
 - Avoid using outdoor soil which may contain
 - Weed seeds, diseases, or other pests
 - Garden soil can make containers heavy and hard to move



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Container Gardening

- Clay, plastic, metal, wood, etc., all work well.
- **Drill holes if missing.**
- Large containers are best.
- Choose light colored containers to help reflect heat.



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Container Concerns

- Heavy containers.
 - Use a pot trolley underneath.
- Pots may stain your porch or patio.
 - Use saucers underneath.
- Empty saucers.
 - Don't allow container to sit in water.
 - Sitting water could become a mosquito pond!

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Creative Containers

- Wagons or wheelbarrows
- Kitty litter bins
- 5-gallon buckets
- Rubber maid tubs
- Kiddie pools
- Milk jugs (1 gallon)
- Anything else you can think to use!



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Watering & Containers

- Containers may dry out quicker than mulched plants in the ground.
- Test moisture with your finger to a few inches deep, water as needed.
- During warm weather, daily water may be needed or even 2x a day depending on temperature and container size.



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Questions?



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Planting Methods

- Transplants (4-6 weeks old)
 - Recommended for beginning gardeners
 - Preferred choice for certain vegetables
- Seeds



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What is a transplant?

- A plant that is 6 weeks old or older.
- A plant that can quickly help you establish your garden.
- Many fall garden transplants are available.
 - Use seeds is the most inexpensive choice.
 - Sometimes transplants are easier for new gardeners to establish rather than seeds.



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Planting Transplants

- Take plant out of container and examine "root ball."
- Pull apart circling, overgrown roots.
- Make a hole the same size of root ball.
- Set plant into hole.
- Fill in around root ball gently.
- Water well, is the root ball saturated?



photo: mantis.com

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Plant Seeds Now? But it's HOT!!



- Protect seeds by keeping soil evenly moist
- Take advantage of shade
 - Keep plants in 50% shade until germinated and established
 - Place cardboard over planting, check daily for sprouts, then remove



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Label what you plant!

- Purchase labels
- Repurpose mini blinds
- Popsicle sticks
- Paint sticks
- Milk carton strips
- Use a permanent marker



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Seed Packet Instructions

<h3>LETTUCE</h3>	
<p>Now you can grow a complete salad mix all in the same row. This Spicy Salad Mix is a custom blend of green and red lettuces with spicy greens like Arugula and Curly Cress. Succulent baby leaves can be cut every few weeks for a table-ready treat.</p>	<p>SEED DEPTH 1/8" (3mm)</p> <p>PLANT SPACE 12" (30cm)</p>
<p>PLANTING Lettuce prefers cool weather. Select a location with full sun or partial shade in hot areas. Sow in early spring, or fall/winter in mild climates. Keep soil evenly moist for best growth. Thin regularly - lettuce does not like to be crowded.</p>	<p>ROW SPACE 15" (38cm)</p> <p>SPROUTS IN 7-14 days</p> <p>MATURES IN 45-70 days</p>
<p>NOTE For "cut and come again" harvest, cut young leaves 1/2" from the ground. Cut several times each</p>	



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Why didn't my seeds come up?

- You might have buried them too deeply.
- You didn't water them consistently to keep soil moist.
- The seeds expired (past date).



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What is thinning?

- 3 weeks after plants sprout, choosing which seedlings to keep, and which to remove.
- Removing some seedlings so plants have enough space.
- Necessary practice that can be DIFFICULT to undertake.
 - Why? We want to keep ALL the seedlings!



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Thinning



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Questions?



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What are you going to plant?

- Artichokes
- Asparagus
- Beets
- Bok Choy
- Broccoli
- Brussels Sprouts
- Carrots
- Cabbage
- Cauliflower
- Collard greens
- Fava beans
- Lettuce
- Mustard greens
- Peas
- Potatoes
- Radishes
- Spinach
- Swiss Chard
- Turnips



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Fall Vegetables

- So many choices!
- Plant in fall or winter
- Harvest in fall, winter, or spring
- Depends on crop and when you plant.



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Artichoke

- **Transplants:** fall or winter
- **Harvest:** spring
- Plant in the ground – grows too large for containers
- Plants may reach 4' tall and wide
- Perennial crop



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Asparagus

- **Transplants or roots:** winter
- Best grown in the ground, ok in a large trough
 - Roots need 3-6' depth for development
- Wait 3 years until plant is mature to harvest
- **Harvest:** spring



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Broccoli & Cauliflower

- **Seeds:** July/August
 - Winter harvest
- **Seeds:** December
 - Spring harvest
- **Transplants:** fall
 - Winter harvest
- Use 5-gallon container/plant
- Protect cauliflower heads in spring; use leaves to cover



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Brussels Sprouts



- **Seeds or transplants:** summer
- **Harvest:** winter to early spring
- Use a 5-gallon container per plant
- Grows to 2 ½ feet tall



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Cabbage



- **Seed:** July/August
 - Give 50% shade during germination & establishment
- **Transplant:** fall
- **Harvest:** winter
- 5-gallon container/plant



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Root Vegetables




- Prepare soil well.
- **Use Seeds**
 - Avoid 6 packs
- Use 1-2' deep container.
- Rectangular containers work well.
- Space according to seed packet directions.
- Thin, thin, thin!
- Plant in succession for frequent harvest.



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Beets

- **Seed:** October
 - Winter harvest
- Red, yellow, and striped varieties available
- Thinned young greens can be used in salads



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Carrots

- **Seeds:** July/August (winter harvest)
- **Seeds:** fall (winter/early spring harvest)
- Winter harvested carrots are exceptionally sweet!




Photo by Manuel Jimenez, UC Davis.

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Radishes

- Don't thrive in hot weather
- **Plant seeds:** fall every 2 weeks
- **Harvest** in 30 days or less!
- Daikon radishes take 60 days



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Peas

- **Seeds:** fall
 - Harvest in spring
- Use 14-16" deep pot
- **Transplants available**
 - Seeds are less expensive
- Plant near a trellis for support



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Fava Beans

- **Seeds:** end Oct-mid Nov
 - Plant in rows for cover crop
- **Harvest:** March – mid April
- Help replenish the soil with nitrogen
- Great place for lady bugs (lady beetles) to overwinter!



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Questions?



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Leafy Greens

- Plant from seed, most economical
- Don't forget to thin
- Purchase as 6 packs
- Use 9-12" deep pot
- Follow spacing directions



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Bok Choy

- **Seeds or transplants:** late summer or early fall
 - Seeds most inexpensive
- **Harvest:** fall/winter
 - Harvest baby greens OR
 - Cut plant to 1" tall, will regrow



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Mustard & Collard Greens

- **Seeds :** fall
- **Harvest:** fall and winter
- **Collards** Harvest
 - Harvest young leaves as needed
- **Mustard Greens** Harvest
 - Cut plant back to 4" tall OR
 - Harvest leaves as needed



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Lettuce

- **Seeds or transplants:** fall
 - Seeds most inexpensive
- **Harvest:** fall/winter
- Leaf lettuce easier for beginners
 - Harvest by pinching off outer leaves which will regrow



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Spinach

- **Seeds or transplants:** fall
 - Winter harvest
- **Seeds:** winter
 - Spring harvest
- Pinch off young leaves to harvest



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Swiss Chard

- **Seeds or transplants:** fall
 - Winter harvest
- **Seeds:** winter
 - Spring harvest
- Pinch off young leaves to harvest



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Potatoes



- **“Seed” potatoes:** winter
- **Harvest:** spring
- **Purchase from nursery or garden center**
 - Do not use store bought potatoes!
- **Cut 2” pieces with 2-3 “eyes,” let dry out.**
 - Plant 3” deep in 5-gallon bucket or larger
 - To harvest, just dump bucket!
 - In the ground, gently use a mattock to harvest to avoid piercing taters.

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Onions



- **Seeds:** winter
 - Spring harvest
- **Transplants:** fall or spring
 - Late spring harvest
- **Bulbs**
 - Not always successful
- **Harvest Instructions**
 - May; stop watering and allow tops to flop over and turn brown.



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Garlic



- **Bulbs:** fall
 - Spring harvest
- **To plant:** open garlic bulb, pull apart cloves. Plant 3” deep, 4-6” apart.
- **Harvest Instructions**
 - May; stop watering and allow tops to flop over and turn brown.



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Questions?



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Did you decide to try something new after watching this class?

- Artichokes
- Asparagus
- Beets
- Bok Choy
- Broccoli
- Brussels Sprouts
- Carrots
- Cabbage
- Cauliflower
- Collard greens
- Fava beans
- Lettuce
- Mustard greens
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- Spinach
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- Turnips



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Help Us Grow!
You'll receive an email survey in 3 months!


Please take it to help grow the quality of our program.

Thank you!



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Use IPM!
(Integrated Pest Management)

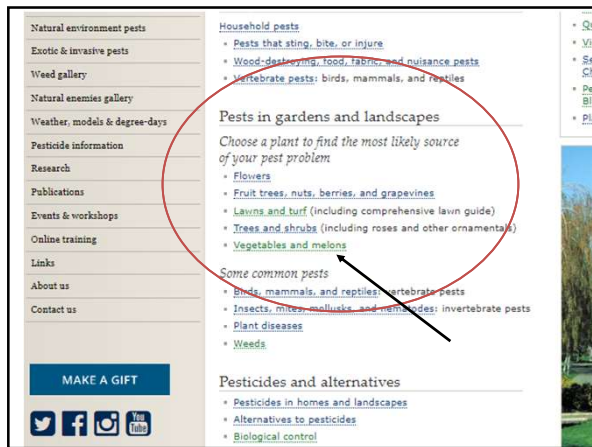


- First, identify the pest.
- Insects
 - Spray off with water or knock into a bucket of soapy water.
 - Use a less toxic pesticide such as a horticultural soap or oil.
 - Always read pesticide labels!
- Weeds: pull as soon as you see them.

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References

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- **Vegetable Gardening in Containers.** Joseph G. Masabni. Texas A&M Agrilife Extension <https://cdn-ext.agnet.tamu.edu/wp-content/uploads/2016/05/EHT-062-vegetable-gardening-in-containers.pdf>
- **Types of Containers.** University of Maryland Extension Home and Garden Information Center. <https://extension.umd.edu/hgic/topics/types-containers>



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Thank you!



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