

# Fall Vegetable Gardening

Ohio State Wellness Expo

August 15, 2020

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# Benefits of Fall Gardening

- Weather more favorable
- Soil moisture typically more plentiful
- Insect and disease pressure reduced
- Certain crops prefer cooler temperatures
- Taste can be different for certain crops!
- Market considerations – top prices in spring and fall
- Extend teaching opportunities at school gardens



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# What Can Be Planted for Fall?

## *Cool Season Crops:*

- Beets
- Carrots
- Lettuces, greens, chard
- Parsnip
- Cauliflower

## *Warm Season Crops:*

- Beans
- Peppers
- Squash, cukes, melons
- Corn
- Tomato
- Eggplant



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# Cool Season Crops Which Tolerate Hard Frost

- Broccoli
- Brussel Sprouts
- Cabbage & Mustard Greens
- Collards
- Kohlrabi
- Kale
- Carrots
- Onion
- Leek
- Parsley
- Peas
- Radish
- Spinach
- Turnip



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# Vegetable Families

- Solanaceae – tomatoes, peppers, eggplant
- Amaryllidaceae – onions, leeks, chives
- Brassicaceae – cabbage, broccoli, cauliflower, collards
- Asteraceae – lettuce, sunflower
- Chenopodiaceae – beets, swiss chard
- Curcubitaceae – zucchini, pumpkins, squash, cucumber
- Leguminosea – peas, beans
- Umbelliferae – carrots, parsley, dill



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# Containers Work for Fall Crops



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# Consideration for Containers

- Use potting soil not garden soil
- Use fresh soil
- Water and fertilize more frequently
- Size of pot



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# Planting Dates

- Know average date of first killing frost
- Know average days to harvest for cultivars
- Do the math!



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# Columbus Frost-Free Period:

## May 15 – Oct 15

*On average!!*



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# When to Plant Carrots?

- Average date of first killing frost is Oct. 15 in Columbus
- Days to harvest is 60
- Plant by August 16



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# Tips for Success

- Select fast maturing cultivars
- Know soil fertility
- Remove crop residues and weeds
- Seed deeper
- Know soil temperature
- Monitor soil moisture and crusting
- Add some organic matter



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# Seeds or Seedlings?

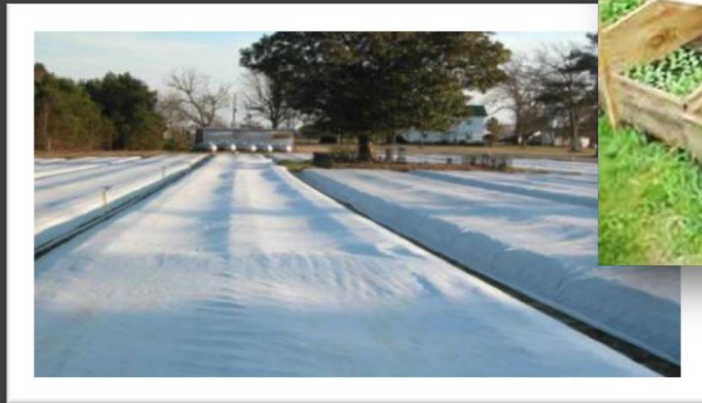
- It depends
  - Easy of starting from seeds
  - Length of growing season
- Seeds will work for
  - Carrots, lettuce, spinach, turnips, beets
- Better to start with seedlings from a nursery or garden center
  - Broccoli, Brussels sprouts, cabbage, cauliflower, chard, collards greens, endive, escarole, kohlrabi, parsley



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# Season Extension Techniques



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# Cold Frame

- Simple, inexpensive homemade structures used to grow cool season crops
- Used to harden young seedlings started indoors in early spring or protect fall crops from frost
- Space and crop dependent
- Heat is provided by the sun's rays penetrating the clear top cover
- Insulation can be provided by burying the part of the frame in the soil or putting straw around the sides
- Ventilation critical on sunny days
- Watering important



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# Mulches



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# Why Mulch?

- Reduce soil erosion, crusting
- Increase penetration of water into soil
- Improve soil structure
- Suppress weeds
- Conserve water
- Moderate soil temperatures
- Winter insulation



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# Types of Mulches

- Straw
  - Contains grain seeds, lowers nitrogen as it decomposes, renew yearly
- Shredded leaves
  - High in carbon and nitrogen
- Pine needles
  - Acidify soil
- Wood chips
  - High carbon to nitrogen ratio, only mulch every 2-3 years
- Saw dust
  - Compresses, needs fluffed up, reduces nitrogen



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# Row Covers



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# Row Covers / Low Tunnels

- Two fold purpose: depends on the weight of the cover
  - Protect the crop from frost damage
  - Insect barrier

Row covers provide a micro climate for the crop underneath by allowing sunlight, water, and air to reach the crop. Depending on the crop row covers may not need support, however tomatoes and other medium to tall crops may need row covers to be supported by wires or “mini hoops.”



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# Row Covers Advantages

- Insect barrier
- Heavier covers used for frost or freeze protection
- Higher quality produce
- Higher yields



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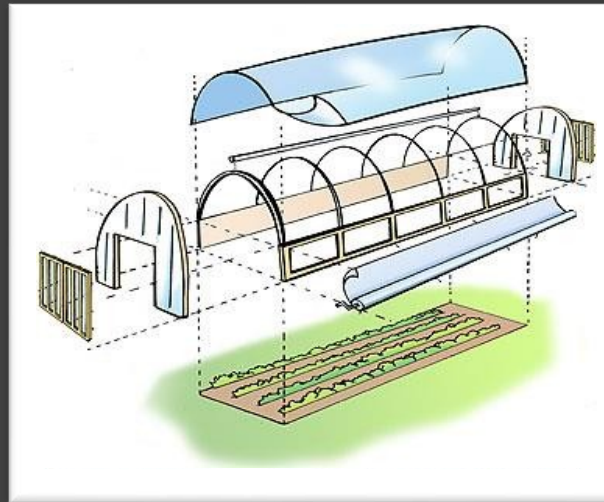
# Low Tunnels / Mini Hoops



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# High Tunnel / Hoop House



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# High Tunnel / Hoop House Advantages

- Allow crops to be grown throughout the year
- Control quality of produce
- Efficient use of space
- Increased management of nutrients and water



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# High Tunnel / Hoop House Disadvantages

- Increased management required, especially for pollination
- Cost to purchase and erect
- Maintenance cost
- May need zoning permit
- High wind and hail damage possible



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# Other Fall Gardening Opportunities

- Spring flowering bulbs
- Best time to re-seed cool season grasses
- Cover crops for areas not planted in fall
- Great time to add organic matter
- Excellent time to soil test and add nutrients



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# Questions?



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