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Home Gardening is Booming!

- 18.3 million new gardeners
- 55% of Americans engage in home gardening
- Avg of \$48 spent in lawn and garden

- Ref: National Gardening Association, 2021

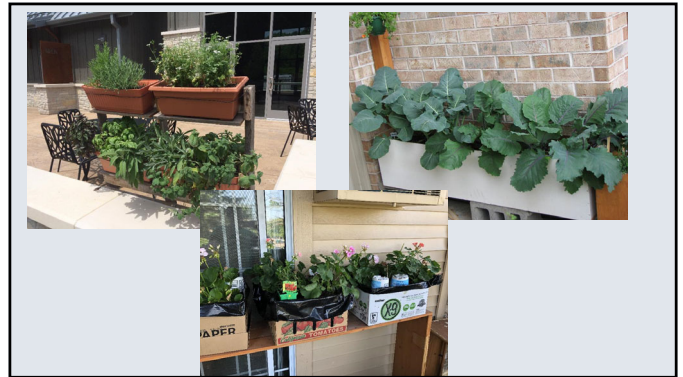


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Garden Versatility



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Successful Gardening:

- Sunlight: 6-8 hours
- Well drained, organic rich soil
- Nutrients – organic or synthetic
- Proper Planting Time
- Proper Spacing
- Water

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Think Big, Start Small – Plan Your Garden



- Favorite crops
- Avg frost free days – 110
- Choosing best varieties
- Shop – Seeds or transplant

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Garden Seed Varieties - Resources

- Standard varieties:
- "Vegetable Gardening in the Midwest" by C.E. Voigt and J.S. Vandemark, University of IL Extension
- <http://urbanext.illinois.edu/veggies/directory.cfm>

- All American Selections: - New & Proven Varieties
- <https://all-americaselections.org/>

- Disease Resistant Varieties:
- <https://www.vegetables.cornell.edu/pest-management/disease-factsheets/disease-resistant-vegetable-varieties/>

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Seed Starting: When to start

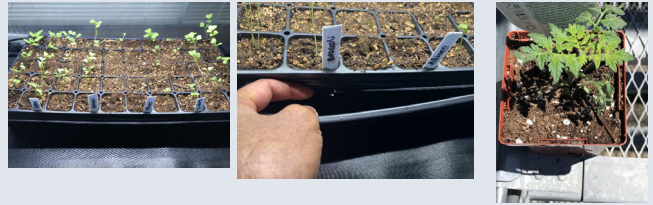
- Cool season crops like Cole crops
 - 6-8 weeks before the last spring frost
 - Mid – late March
- Tomatoes, peppers, eggplants, and okra
 - 6-8 weeks before transplanting date.
 - Mid – late April
- Pumpkins, watermelons, sunflower, and beans are best to be directly seeded outdoors after last frost.

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Fertilize after 2-3 sets of true leaves



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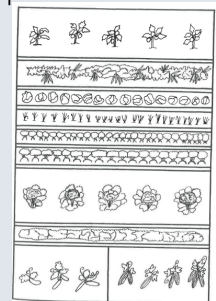
Hardening Process: 7-10 days process



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Sketch a simple garden map

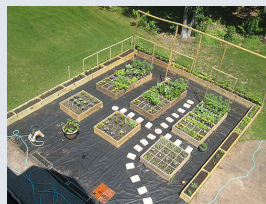
- Perennial vegetables
 - Asparagus, rhubarb, berries
 - Plant at a side of the garden – North, North west
- Group by vegetable families—legume, cabbage, cucurbits
 - Plant taller crops to the north
- Row Orientation – East to West
- Arrange by height
- Determine spacing between plants



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Choosing Site Location

- Full sun (6-8 hours)
- 50' away from black walnut
- Clearance from lawn
- Avoid low lying spots
- Proximity to your house



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Shade Tolerant Crops

- Heavy shade (3 hours or less) – Arugula, herbs, lettuce, parsley, salad greens, spinach, scallion
 - Anise hyssop, chervil, chives, cilantro, parsley and lemon balm, and even basil tolerate some shade. Sweet woodruff grows in full shade.
 - Green salad -Bok choy, tatsoi, endive, and sorrel
- Part shade (4-6 hours) – Beets, carrots, chard, kale, radish, turnips

Reference: Home Garden Seed Association

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Garden Soil

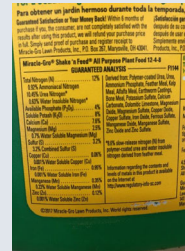
- Raised beds: Top soil + Compost (1:1)
- Conventional garden: Compost, 4-6 inches
- Container Gardens: Potting Mix
- Planter Boxes: Top soil + compost/peat (1:1)
- Spring – not too wet and not too dry



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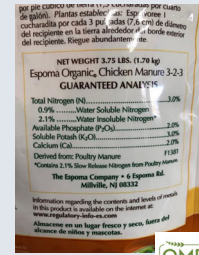
Fertilizer

• Synthetic



Fertilize a week before planting
Halfway during plants growth
Tomato, cucumber have begun to set fruit

• Organic

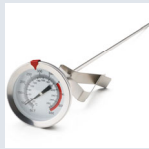


Fertilize two week before planting
Halfway during plants growth
Tomato, cucumber have begun to set fruit

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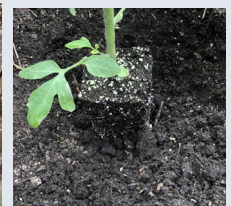
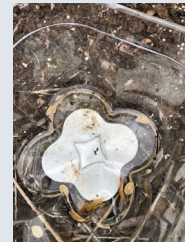
When to plant?

- Know your soil and air temperature
- Cool season crops – Late April-May 1st week, soil temperature 50°F
- Warm/tender vegetable crops – Last week May-June 1st week, soil temperature (60-70°F), night temperature above 55°F
- Pumpkins, melons, sun flower – Soil temperature 70-75 F, night temperature above 60 F, First week in June



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Soak large seeds /water transplants before planting



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Spacing: Refer to seed packet, transplant tag

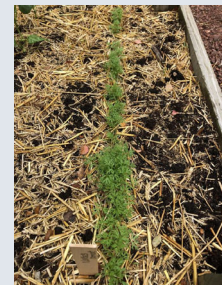
- Small size maturing plants –4" to 1' beets, radish, mustard, leaf greens, chard
- Medium size maturing plants – 1' to 2'
 - Broccoli, cabbage, cauliflower, kale, brussel sprouts, potatoes, sweet corn
- Large maturing plants – 3' to 5'
 - Tomato, cucumbers, pumpkins, melons, squash



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Planting Depth – Ref to seed packet

- Small seeds – ¼ - ½ inch
- Large seeds – 1 inch



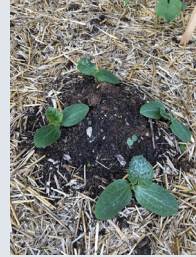
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Planting



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Planting in Mounds



Planting transplants



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Dealing with Frost, cold soil?

- Floating Row Cover
- Black plastic mulch – warming effect, 5-10°F
 - Early spring planting
 - Warm loving vegetable crops



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Water & light mulching

- Organic mulches-

Clean straw, clean hay, untreated grass clippings, crushed corncobs, peat, rice hull, compost, sheets of newspaper



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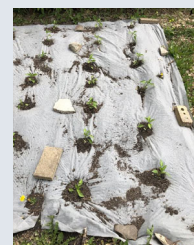
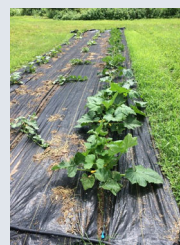
Dealing with weeds



Layer of cardboard sheet and shredded bark/wood chip

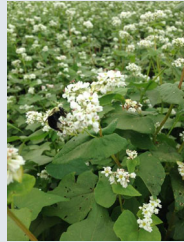
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Plastic mulch, degradable fabric, landscape fabric



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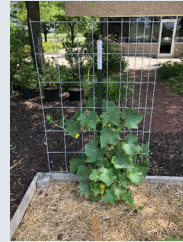
Intercropping – Squash, pumpkins, cover crops



Buckwheat

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Trellis & Cages



Hog Pen Fence



Concrete Wire Mesh

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Companion Plantings

- Maximize the yield
- Deter pest by providing habitat for predatory insects
- Planting style – Intercrop, trap crop

- Trap crop for flea beetle - Spicer brassica : Arugula, napa cabbage, mustard
- Cabbage looper – Onion, thyme, nasturtium
- Diamond black moth in Brussel sprouts – Sage, thyme
- Intercropping tomato and basil
- Blue hubbard squash as trap crop – cucumber beetle, squash bug, squash vine borer
- Marigold, nasturtium – squash bug, cucumber beetle



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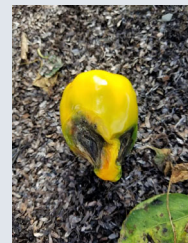
Pests & Diseases

- Proper Diagnosis

- Plant Health Advising Office:

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- <https://hort.extension.wisc.edu/>



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