Upcoming Webinars

• March 14 – The Health Benefits of Gardening
  – Julie Garden-Robinson, Food and Nutrition Specialist

• March 21 – Developing and Selling Food Products That are Safe and Tasty
  – Cliff Hall, Professor, Food Science, NDSU
FSMA Produce Safety Grower Training Workshop

– April 5, 8 am to 5 pm

– Held at ND Farmers Union in Jamestown, ND

– Trainers: Connie Landis-Fisk; Holly Mawby; Julie Garden-Robinson

– Register online on the NDSU “field to fork” website
  • www.ag.ndsu.edu/fieldtofork
  • $25, including meals and snacks
Zoom Controls

Meeting Topic: Field2Fork - Tom Kalb Growing Vegetables
Host: Extension FCW
Invitation URL: https://zoom.us/j/609371435
Participant ID: 22

Controls:
- Mute/unmute
- Join Audio
- Share Screen
- Invite Others
- Open chat box

Question/Answer Controls

Chat box
Please Complete the Survey

• Please complete the short online survey that will be emailed to you after today’s webinar. It will take just a couple minutes!

• Be sure to sign up for an opportunity to win a prize in the drawing. After submitting the survey, a form to fill out with your name/address will appear.

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Gardening in Small Spaces

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Website:
https://www.ag.ndsu.edu/piercecountyextension
Gardening in Small Spaces

3 Common Methods
• Raised bed
• Square foot
• Container
Container Selection

• Many possibilities!
  – Clay, wood, plastic, metal

• BUT should be:
  – Able to support mature plants
  – Hold soil without spilling
  – Have adequate drainage
  – Never have held products that would be toxic to plants or people

Retrieved from https://www.flickr.com/photos/canarsiebk/3808146974/
Soil Mix

• Very important
• Do not use soil from the garden
  – Holds too much moisture when wet, high clay
  – Pulls away from pot sides when dry, crusting
  – Harbors plant disease pathogens
• Container medium needs to be light and porous
  – Roots need air & water

Retrieved from https://www.flickr.com/photos/msscacti/3758204257/
Soil Mix Recipes

Dave Franzen’s Mix
• 1/3 high clay soil
• 1/3 kids play sand
• 1/3 sphagnum peat moss

Soil Mix 2
• 1 part peat moss
• 1 part potting soil
• 1 part clean coarse builder’s sand or perlite
Watering

• Quick to dry out
• Daily watering likely
  – Possibly more depending on container size, type, and location
• Water until water comes out drainage holes
  – Don’t want standing water or soggy soil → root rot
• Group containers (leaf canopy), mulch or use windbreaks
Fertilizing

• No hard & fast rules for container gardens
• Depends on:
  – Soil mix & if added to mix
    • Generally lasts 8-10 weeks
  – Types of plants
  – Type of fertilizer used
    • Liquid or granular
• Match fertilizer with kind of plants grown (fruit vs leaf)
• Various formulations
  – N-P-K

## Light Requirements

<table>
<thead>
<tr>
<th>Part Sun Veggies (4-6hrs)</th>
<th>Full Sun Veggies (&gt;6hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Root crops i.e. beets, radish, carrots</td>
<td>• Tomatoes</td>
</tr>
<tr>
<td>• Peas</td>
<td>• Eggplant</td>
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<tr>
<td>• Cucumber</td>
<td>• Cabbage</td>
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<tr>
<td>• Lettuce &amp; Spinach</td>
<td>• Broccoli</td>
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<tr>
<td>• Onion</td>
<td>• Corn</td>
</tr>
<tr>
<td>• Winter Squash</td>
<td>• Beans</td>
</tr>
<tr>
<td>• Most herbs (6 hrs)</td>
<td>• Melons</td>
</tr>
<tr>
<td></td>
<td>• Summer Squash</td>
</tr>
</tbody>
</table>
Plant Spacing

• Use spacing guidelines indicated on seed packet or plant label

• Crowding
  – Increases competition for light and nutrients
  – Also increases likelihood of disease (air circulation)

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Type of Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, Beets, Spinach, Lettuce, Carrots*, Onion</td>
<td>5 gal window box</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>1 plant / 5 gal pot</td>
</tr>
<tr>
<td>Peppers</td>
<td>1 plant / 2 gal pot</td>
</tr>
<tr>
<td>Eggplant</td>
<td>1 plant / 5 gal pot</td>
</tr>
<tr>
<td>Cucumber</td>
<td>1 plant / 1 gal pot</td>
</tr>
<tr>
<td>Broccoli, Brussel Sprouts, Cabbage</td>
<td>1 plant / 5 gal pot</td>
</tr>
</tbody>
</table>
Plant Selection

- Can grow most annual vegetable in containers
- Some exceptions are:
  - Corn (pollination)
  - Vining crops such as pumpkin, squash, melons
    - Small fruited cultivars
    - Bush varieties (compact)
- Determinate tomato cultivars work best

Container Gardening Advantages

• Grow plants where in-ground gardening isn’t possible/practical
• Mobile
• Control soil composition
• Add visual appeal to outdoor spaces

Retrieved from https://pigletinportugal.com/tag/growing-fruit-trees-in-containers/
Container Gardening Challenges

- Frequent watering
  - Nutrient leaching
  - Increased fertilizer
  - “Baby-sitter” if on vacation

- More expensive
  - Containers
  - Soil mix components
  - Frequent watering & fertilizing

- Container Weight

- Only suitable for certain crops
Other Small Space Options

Raised Bed

Square Foot


References


References Continued


Questions?
www.ag.ndsu.edu/fieldtofork