Growing Pumpkins

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Why Grow Pumpkins??

- Relaxing/enjoyment
- Lower labor requirements (95 hr acre vs. tomato 960 hrs)
- Family project
- Potential to direct market
- Fairly easy to grow?
Getting started growing pumpkins:

- Soil - good drainage/no standing water after a heavy rain
- pH - 6-6.8 ideal
- Soil test for phosphate and potassium
- No perennial weed problems
- Long rotation 3-4 years
Varieties to grow & examples:

- **Miniature** (1 lb <) Jack Be Little
- **Baby** – Small size (1-7 lb) Baby Bear, Pie Pumpkins
- **Medium-** Jack-o’lantern (7-20) Connecticut field Magician (PM)
- **Medium-large** and large (20+) Howden, Howden Biggie, Aladdin (PM), Magic Lantern (PM), Gold Rush, Pro Gold 510, Camaro (PM) Warlock (PM)
- **Very large-** giant Atlantic Giant, Prize Winner, Big Max etc
- **Specialty** – Buckskin, Cinderella, Casper, Peanut
Good Characteristics:

- Vigorous, healthy vines
- Disease tolerance
- Good fruit-set
- Nice, uniform color
- Good handle
When to seed pumpkins?

- Most pumpkins reach maturity in 3-3½ months

- Have them ready by late September through October although they are showing up earlier in the market

- Seeding from around May 20-June 20

- Can also grow seedlings and set plants in the field, this will give you a 4-5 week start
Healthy transplants should have white roots.
Spacing:

- **Bush  Semi Bush** Types: 18-24” apart within the row and rows 4-6’ apart

- **Vining types** 2-5’ apart within the row and rows 4-10’ apart

- **Match spacing with the type of vine pumpkin** is important to make sure there is no bare soil where weeds can develop. It is important to know the vine type.
Irrigation?

- Pumpkins are 90% water and will respond to irrigation.

- They are naturally deep rooted and can take drought stress.

- Drought stress at flowering and early fruit set can reduce yields.
Fertilization:

- **Nitrogen:** 50-100 lbs per acre with half as a pre-plant application and half at the time the vines begin to run. Soil >3% organic matter and following a legume a side dress is not needed.
- **Phosphorus and Potassium** applied based on soil test.
- **pH:** 6-6.8 ideal 5.5-7.5 they will grow in this range
Weed Management:

- Cultivation - hand-hoe, tiller, disc, rotary hoe, cultivator prior to vines running. Cultivate lightly to conserve moisture and avoid root damage.
- Plastic
- No-till an option
- Herbicides pre-plant pre-emerge broadleaf and grass control, after planting pre-emerge, post emerge grass control.
- A combination of cultivation and herbicides works well.
Insects:

- Squash Bug
- Cucumber Beetle
- Squash Vine Borer
Cucumber Beetle - Spotted and Striped
Disease:

- Powdery Mildew
- Downy Mildew
- Black rot and other fruit rots
- Virus
Powdery Mildew
Harvest:

- The rind or skin has toughened and the stems have lost their succulence
- Cut fruit from vine with pruners
- Small pumpkins can yield 2,000-4,000 fruit/acre (10-20 tons/acre)
- Medium-Large pumpkins can yield 1500-2000 fruit/acre (15-20 tons/acre)
- A light freeze is not damaging
- Can store for a month or more
- Most harvest and marketed
Other complimentary crops/items:

- Gourds
- Squash
- Chrysanthemums
- Straw
- Corn shocks
- Honey
- Etc
Great Plains Growers Conference
January 12th – 14th, 2017
MWSU Campus St Joseph, MO
greatplainsgrowersconference.org
Information:

• Missouri Alternatives Center -
  http://agebb.missouri.edu/mac/links/

• Midwest Vegetable Production Guide for Commercial Growers 2016 -
  https://ag.purdue.edu/btny/midwest-vegetable-guide/Pages/default.aspx

• North Missouri Produce Auction LLC -
  http://agebb.missouri.edu/hort/auction/nomo.htm
Thanks, Questions/Comments?