

Home-grown Pumpkins

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Cucurbita

- *C. moschata*-pumpkins, winter squash
- *C. pepo*-summer squash, pumpkins
- *C. mixta*-cushaws, pumpkins
- *C. maxima*-winter squash, Atlantic Giant

C. muschata

- Approx 100 varieties
- Some winter squash, butternuts
- Pale field pumpkins
- “Fairytale”
- “Long Island Cheese”

C. pepo

- Summer squash, small winters
- Patty pans
- Many small ornamentals
- “Aladdin”, “Appalachian”

From the Ground Up: Soil

- Deep and well drained
- pH- mid "sixes"-best nutrient availability
- P,K - at least medium to high levels
- N- 60#/acre...400#/15-15-15 (9#/1000ft)
- Minor element deficiencies? UT \$15

Basic Test Plus

- Avoid too much early N

Organic Matter

- Crucial- most Tennessee soils low... 1 %
- “Fresh” O.M. vs compost
- COMPOST!
- 5% O.M. would be wonderful

Organic Matter

- Improves structure- inhibits slaking effect, compaction
- Improves water-holding capacity
- Improves CEC
- Provides “food” for soil flora & fauna
- Natural slow release fertilizer

Water

- Can be a high-demand crop
- Drip/soaker vs. overhead
- High demand after fruit set
- But...avoid saturation!
- Less stress=Less problems

Planting

- Count backwards
- Transplant or direct seed?
- Ideal germ temp is 85-88 degrees
- Pro-mix, Baccto, etc
- Early feeding-water soluble / Miracle-Grow

Homeowner Weed Control

- No magic bullets
- Mulch
- Cultivation

Everybody Likes Pumpkins!

Insects and Disease Too!



Squash Bug

Squash Bug

- Over-winters as adult
- Early control crucial - Piercing/sucking
- They hide!
- Possible vector for Yellow Vine Decline
- Carbaryl, synthetic pyrethroids, neem
- Check labels



Hatching



Various Nymph stages



SVB's



Squash Vine Borer

SVB's

- Sudden deadly wilt
- Overwinters as larvae/pupa
- Flights in June
- Eggs laid at stem base
- Sprays at 7 day intervals, coverage of lower stem important
- Bury vines?





Spotted, Striped Cucumber Beetles

Cucumber Beetles

- Overwinter as adult
- Adults feed above ground, larvae on roots
- Wounds from feeding can promote bacterial wilt
- Early protection important
- Exclusion by row covers



Aphids

Aphids

- Not a big cause of losses themselves
- Can vector viral diseases
- WMV
- Papaya ring-spot
- CMV
- WMD?

Disease

- Powdery Mildew
- Viral diseases
- Phytophthora blight
- Downey Mildew



Powdery Mildew

Powdery Mildew

- Hot, dry conditions
- Not if, but when
- Premature defoliation
- Scout diligently, early infestation will not look bad
- Look for pmt varieties (magician magic lantern, gladiator, many others)





TOAST!



Mosaic virus



Viral Disease

- Distorted leaves and fruit
- Damage relative to time of establishment
- Insect vectored
- Early insect control crucial
- Survives in non-cucurbit hosts

Pollination

- Monoecious- both flowers on same plant
- Male blossoms appear 1st, greatly outnumber female blossoms
- Early morning pollination is critical
- Blooms open w/92% viability, and close later in the morning with approx. 75% viability
- Next day- 10%!

PMT Varieties

- Corvette, Camaro, Mustang (the cars)
- Magic Lantern, Gladiator, Aladdin
- Many others

Semi-Bush Varieties

- Neon
- Magic Lantern
- Magic wand
- Many of the tiny pumpkin varieties have huge vines!

Sources

- Johnny's
- Territorial
- Harris
- Rupp
- Seed Saver's
- Seedway
- Baker Creek
-freeze the rest for another year



Or, Just Grow one!

Atlantic Giant

- By Howard Dill
- Best seeds direct from them
- Prune
- Shelter
- Foliar feed
- Water
- Can gain 25+ pounds per day!

Tricks of the Trade

- Gypsum
- Sulphate of potash
- T-22 Rootshield
- Mycorhyzzae
- Bacillus subtilis
- Neptunes' Harvest, North American Kelp



Gourds too

Gourds

- Less finicky
- Different genus, species, same family
- Let them run
- Go vertical
- Crazy bunches of varieties!



Questions? Thank You!!
Shameless self-promotion, I couldn't resist