# Growing Great Garlic

- Garlic Varieties
- Soil Preparation and Planting
- Growing and Harvesting
- Disease
- Curing & Storage
- Eating



### Reference Material

- U of M Extension article written mostly by Dr. Carl Rosen -- Google "U of M Growing Garlic"
- Book Growing Great Garlic by Ron L.
  Engeland (1991)
- Book The Complete Book of Garlic by Ted Jordan Meredith (2008)
- PlumCreekGarlic.com Look at Resources tab



### Garlic Varieties

- Hardneck garlic
  - Develops a flower stalk (scape)
- Softneck garlic
  - Does not develop a flower stalk
  - Not as hardy here in central MN
- Varieties within each type
- Examples we grow
  - Music
  - Chesnok Red
  - Georgian Crystal
  - Siberian
  - German Extra Hardy



### Where to Buy 'Seed Stock?

- Locally of course!
  - Plum Creek Garlic
  - MN Grown
  - MN Garlic Festival
    - Hutchinson, MN
    - 2<sup>nd</sup> Saturday in August
- But watch out for Nematodes
- 'Store' garlic is typically a softneck from either China or California

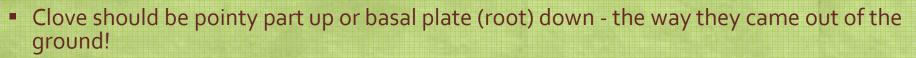






## Soil Preparation & Planting

- Lots of organic matter ideally
- Should drain well ideally
- pH should be slightly acidic (6.5 to 7) ideally
- Plant 2-4 weeks before ground freezes solid ©
  - Around mid-October here
- Spacing is highly variable
  - Four to eight inches is common
- Depth is also highly variable and depends on mulch
  - Heavy soils about ½ to 1" below surface
  - Light soils 'thumb' deep





# Soil Preparation & Planting --Continued

#### Mulch

- Similar to tulip or other bulbs
- Straw, grass, leaves
- Watch for weeds (and other stuff)
- Remove in spring for earlier warm-up and easier fertilizing
- Leave on for less weeding and to incorporate at end of season for soil building

#### Fertilizer

- Garlic is a heavy nitrogen feeder
- U of M recommends 1/3 in fall and 2/3 incorporated in spring before Memorial Day





# Growing and Harvesting

- Hardnecks have Scapes
  - Usually ready in mid-June
- Weed regularly
- Water only if dry and cut back as you move into July
- Harvest when 3-4 leaves have dried or 3-4 are still green for hardnecks
- Softnecks flop over when ready







### Disease

- Bloat Nematode deadly when brought on farm
- Fusarium managed via rotation
- Viruses in all garlic, usually not too serious
- Various 'surface' diseases both pre and post harvest
- Aster Yellows hope and prayer





### 2012 Aster Yellows in upper Midwest



## Curing & Storage

- Dig or pull (carefully)
- Bundle and hang (carefully) or put on screens
- Moisture is your enemy
- Air circulation is critical
- Ideal drying takes place in warm, dry conditions
- Cut roots and leaves when dry (2-4 weeks)
- Remove one or two wrappers for good looks
- Long term storage cool, dry and out of the sun



### Eating

- Have fun trying different methods raw and cooked
  - Cut ¼" off top (not roots) and roast for ½ hour in 350 degree oven with olive oil until soft and then squeeze onto crackers or bread – yum!
  - Put whole cloves in with root vegetables and bake
  - Add to stir fry at the last minute
- Time changes flavor of the bulb
- Cooking time determines 'heat'
- Don't forget the scapes in June!



