Overview of the Garlic and Onion Industry in Canada

Mary Ruth McDonald
Holland Marsh, Ontario, Canada: 44° 15’ N, 79° 35’W
Fresno: 36° 45’ N, 119° 45’ W
Onions in Canada

• In 2009 there were:
  • 14,210 acres
  • which produced 242,387 tons
  • Worth $57.9 million
Onion production in Canada 2009

Total 14,210 acres

New York 10,300 acres
Onions in Canada

- Long day, yellow bulb onions
- Most are onions grown on muck soils - in Quebec, Ontario and B.C.
- Seeded April – early May, harvested Aug. & September
Onions in Canada

• About 10% of yellow bulb onions in Ontario are grown from plug transplants for the early market.
• There is a premium for early, large, cooking onions

3-4 seeds per plug
Onions in Canada

- Spanish onions are generally grown on mineral soil.
  - These are usually grown from transplants

Small acreage, but increasing interest in processing for onion rings
Cooking onions are sprayed with maleic hydrazide (MH 30) to prevent sprouting in storage

Pulled, and left in windrows to dry for 2 days - 3 weeks to field cure
Most are also put through artificial curing (80 90 °F for 1 – 3 days) then gradually cooled to 32 °F and stored at 65% relative humidity.

These onions can store for 10-12 months, usually sold within 8 months of harvest.

80% of the crop goes into storage and is sold from November- April (seeding new crop, refrigeration costs)
Onion Challenges

- Production-
  - Weed control
  - Onion thrips
  - Downy mildew
  - Onion maggot
  - Onion smut
  - Allium white rot
  - Botrytis leaf blight
  - Bacterial diseases

The Weather!
Iris yellow spot virus

- Found in Ontario in 2007 and 2008
- 2007: 7 of 8 fields in the Holland Marsh tested positive, also in set onions in other parts of the province
- 2008: 2 of 7 fields in the Holland Marsh
- 1 of 3 in Chatham/Kent and Thedford/Grand Bend
- 0 of 1 in Norfolk county
- Both years there was low incidence in the fields and no apparent yield loss resulting from the virus
- No more surveys for IYSV, but no problems have been identified
Irrigation:
Bradford usually receives 40 inches of rain a year.

Before 1988, very little irrigation of onions, then sprinkler irrigation with solid set pipe.

Now travelling low booms.
Is irrigation needed on onions on muck soil?
Sometimes we get too much water!
Onion Challenges

• Marketing-
  – Peak of the Market - Manitoba
  – Other brands:
    – Holland Marsh Growers

  – Canadian dollar compared to U.S. dollar
  – Canadian onions are exported to the Caribbean islands, some to eastern U.S.
  – 40 to 60% of Ontario onions are exported during the winter months
Garlic in Canada

In 2009 there were:

• 640 acres
• which produced 755 tons
• Worth $3.6 million
Garlic in Canada

- Garlic production is mostly small scale. The largest producer in Ontario has 150 acres.
- Most is sold at farmers’ markets and garlic festivals.
- Recently, demand has been greater than supply.
- More acres planted in fall 2010.
Garlic production in Canada

2009

Total 640 acres

New York State
240 farms, 265 acres
Garlic in Canada

• Garlic is planted in the fall
  – Mid October in Ontario, mid September on the prairies
  – Overwinters under the snow

• Harvested the following July or August

• Dried and can be stored for several months
Most is hard neck garlic, the scapes have to be removed, mostly by hand. There are some markets for scapes “garlic asparagus” or “garlic flowers”
Garlic Challenges:

Clean seed!!

Big problems with bulb and stem nematode