



# Brassica Care

New Farms for New Americans  
2010



# What is a Brassica?



- Large group of plants in the mustard family
- Includes cauliflower, broccoli, cabbage, Bok choy, Brussels sprouts, collards, daikon, kale, mustards, turnips, radishes and rutabagas



# Brassicaceae = Mustards = Cole Crops

- Brassicaceae is also called mustard or Cruciferae. Often called “cole crops”
- Many weeds in the mustard family as well as cultivated and ornamental plants
- Mustard weeds can share bugs and disease with vegetable crops and compete for water, nutrients and light
- Important to remove mustard weeds from fields regularly
- All Mustards are edible; but not all taste good!



White Mustard

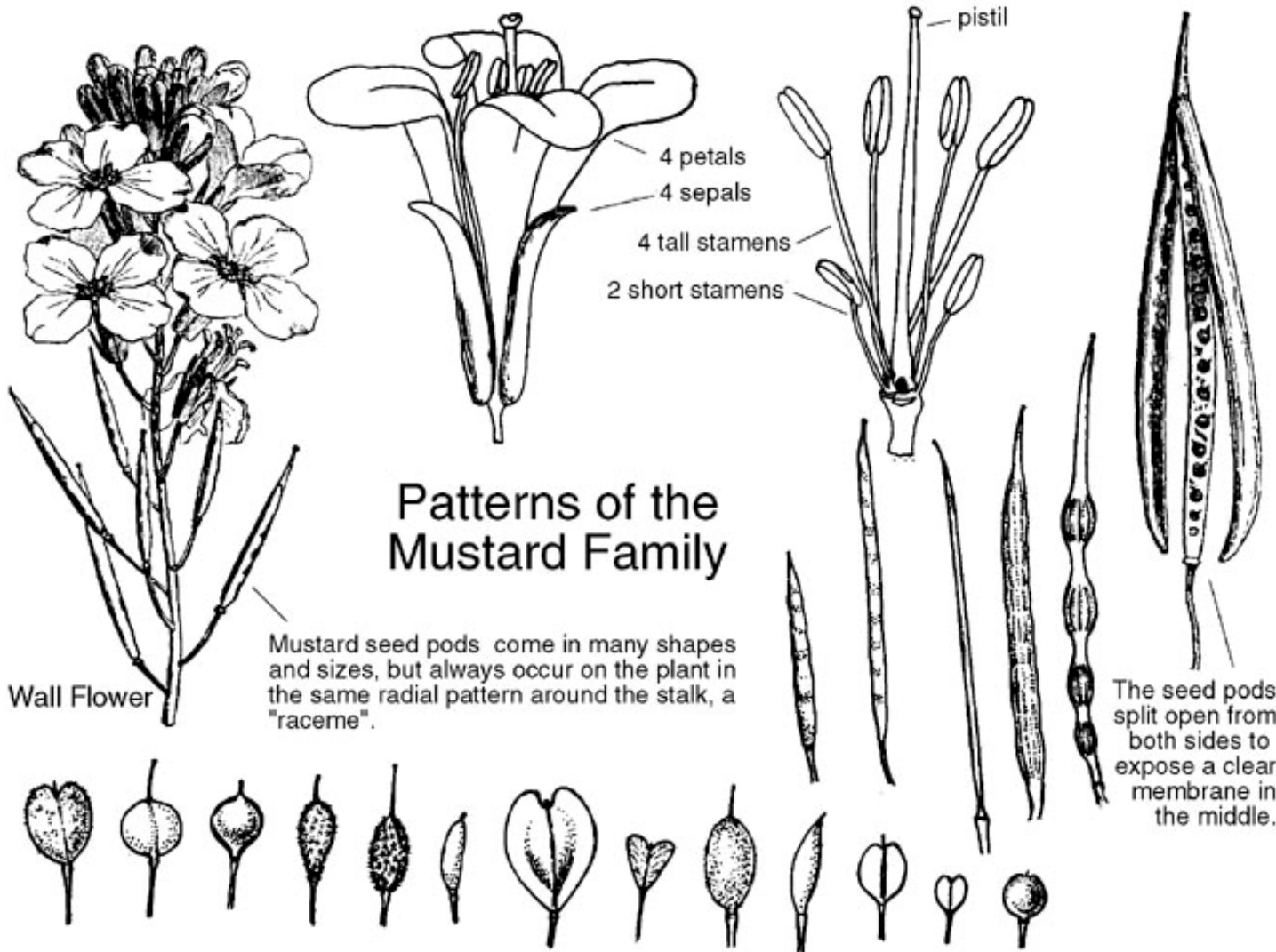


Rocket



Hoary Allysum

# How to Identify Brassicas



# Brassica Basics



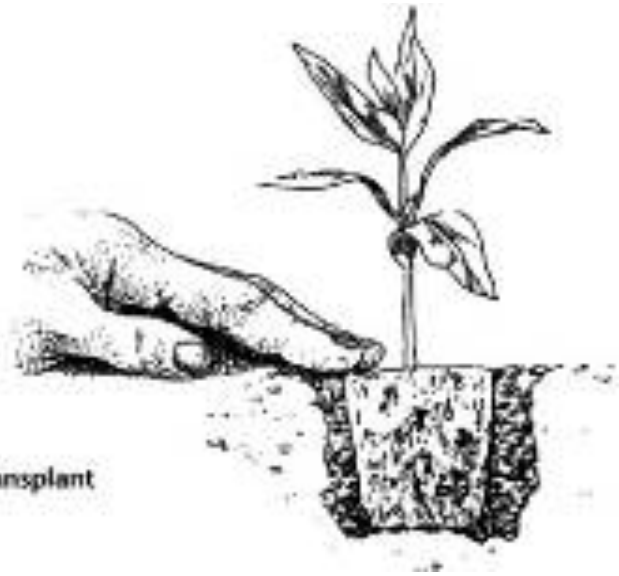
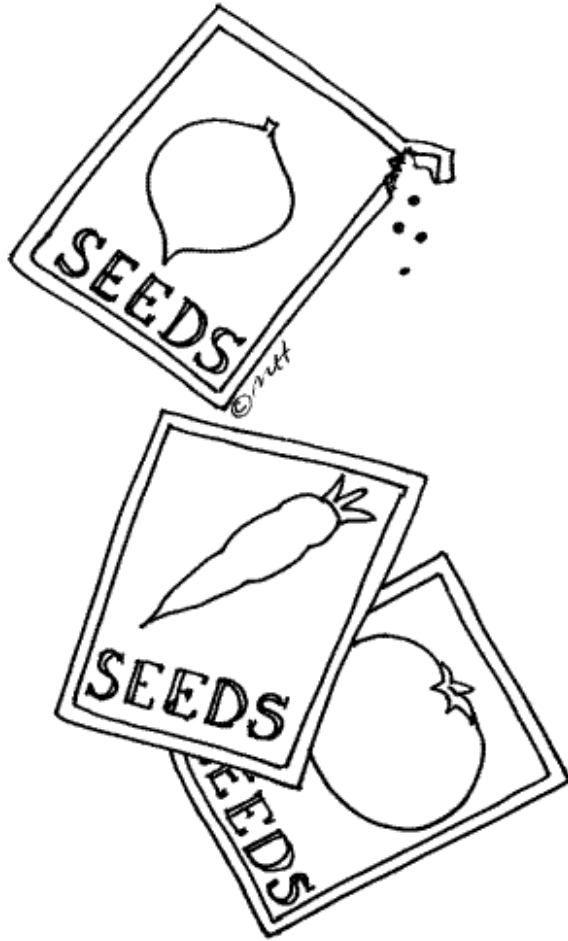
- Considered “cool season” crops
  - Best growing temperature is 60-65 degrees F
- Plants are closely related and share pests but care for each kind of plant can vary greatly
- Organic production of brassicas should focus on the soil
  - Cover cropping, composting, crop rotation, fertilizers
- Brassicas need Nitrogen, Phosphorus and Potassium

# Planting Brassicas



1. Often direct seeded. Optimal soil temperature is 65-75 degrees F.
2. Cauliflower and Brussels sprouts often start in the greenhouse because they have special needs.
3. Keep the soil moist around young plants.
4. Protect young plants from bugs by using floating row cover (reemay).

# Seeds Versus Starts



# Reemay – Floating Row Covers



Lightweight  
Protect plants from cold  
weather and bugs





# Brassicas and Water

- Too much water can cause problems with diseases and weeds
- Too little can cause stress
- Rule of thumb: vegetables need 1 inch of water per week.
- Water young plants from above and established plants at soil level



# Monthly Rain Averages in Burlington

- June 3.43in.
- July 3.97in.
- August 4.01in.
- September 3.83in.
- October 3.12in.



How much should you anticipate watering?

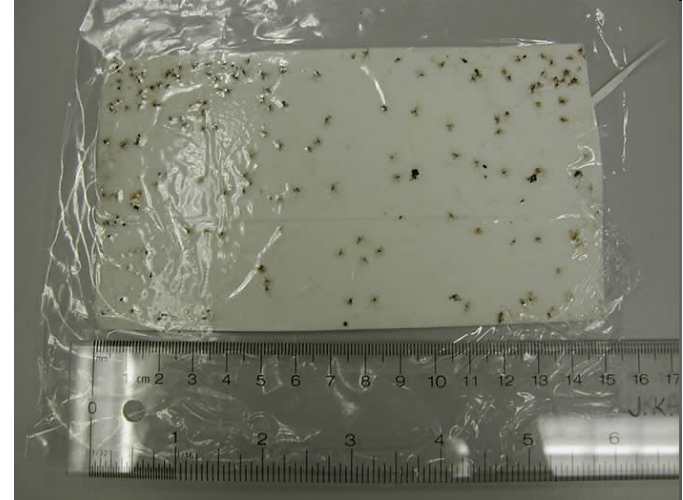
# Brassicas and Pests

- To keep pests away
  - Protect young plants with row cover
  - Keep weeds under control
  - Consider crop rotation
  - Scout for bugs and kill them every time you are on the farm
  - Remove plants that are infected



# Swede Midge

- Common but new pest in Vermont that can be very difficult to control
- Adults lay clusters of eggs on youngest plant tissue
- Larvae are tiny and clear to creamy yellow-white
- Adults are tiny light-brown flies
- Love cabbages and broccoli
- Can overwinter in the soil
- Crop rotation effective because they don't like wind and don't travel too far
- Scout for them early, destroy or remove plants after harvest and control weeds



# Cabbage Worm

They eat cabbage, cauliflower, broccoli, Brussels sprouts, turnips, radishes, kale, lettuce and weeds of the mustard family.

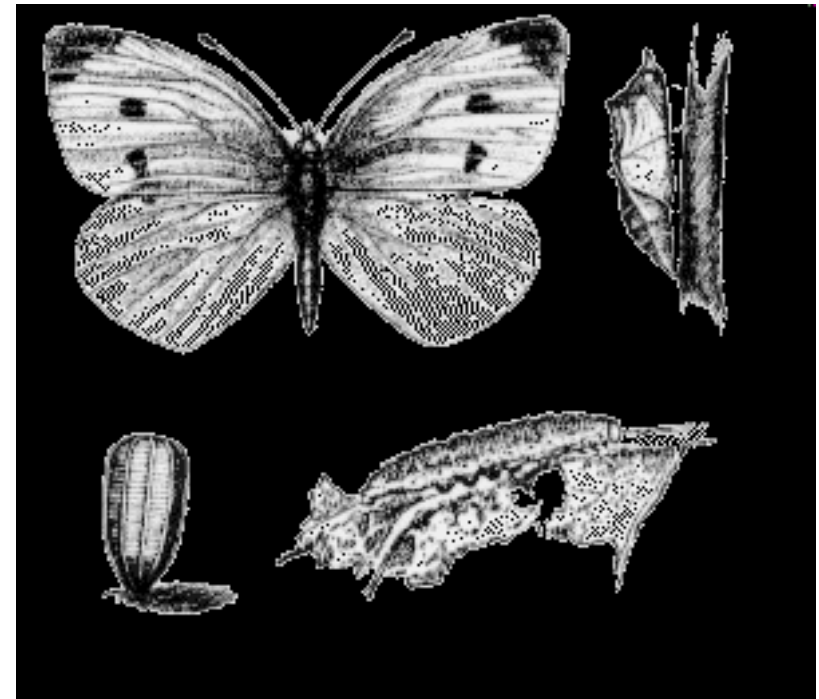
The first sign is the 1 1/2 inch white butterfly in the early spring.

Eggs are yellowish, elongated eggs, singly, on the underside of leaves.

Larva are velvety green caterpillars with a thin yellowish-orange stripe down the middle of the back. Most common in July and August.

Pupa is greenish-brown and hang from the bottom of leaves.

Control mustard weeds, removing plant remains at the end of the season, fall plowing and hand picking worms and larvae can significantly reduce damage.



*From Maine Extension*

# Snails

- Slimy long snail pests
- Like shade, so control them by removing shade and close cutting nearby grass
- Sand or anything scratchy is a natural barrier to them
- Generally, they dry up in the sun and are eaten by birds



# Flea Beetle



Jumpy little bugs

Adults spend winter in the woods and lay eggs in the soil in spring

Eat young, tender cabbages, broccoli, Brussels sprouts, radishes, tomatoes

Can use row covers to keep beetles out or put down mulch

Control weeds, delay planting, hoe near plants and do not compact soil

Know that you will have some flea beetle damage but they rarely kill plants

# Aphids

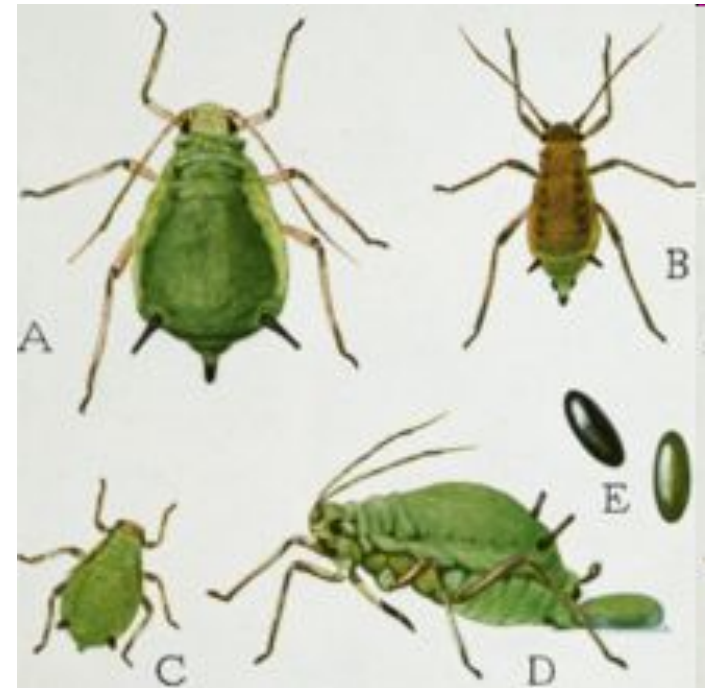
Small, very destructive insect that sucks the sap out of plants

Usually greenish throughout life stages

Lady bugs, hoverflies and other insects eat them

Protect plants by controlling ants, spraying onion or garlic water and creating good habitat for beneficial insects

It's good to dispose of significantly infested plants to save other plants.





# Harvesting Brassicas



## USE ICE with Broccoli

- Cabbage heads should be firm and solid. Pack according to size.
- Cauliflower heads should have white firm curds 6-8 inches in diameter. Be gentle and keep leaves around the heads to protect them.
- Broccoli should have tight, 5-7 inch heads. Leave a 6 inch stem. Keep cold.



# Harvesting Brassicas



- Brussels sprouts should be picked from the bottom up.
- Kale and collards should be picked in bunches when leaves are 8-14 inches long.
- Bok choy can be harvested a few leaves at a time or as a whole head. Be careful – leaves can be brittle and wilt.



# Keep Brassicas Cool

