

Control of Pumpkin and Squash Insects



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The Big Three



Squash Vine Borer

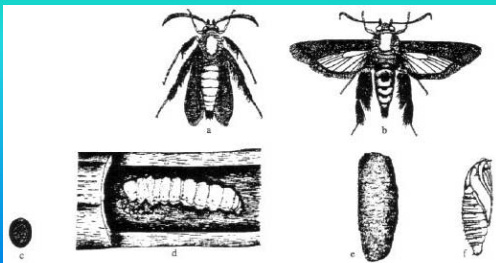


Squash Bug



Cucumber Beetles

Life stages of squash vine borer

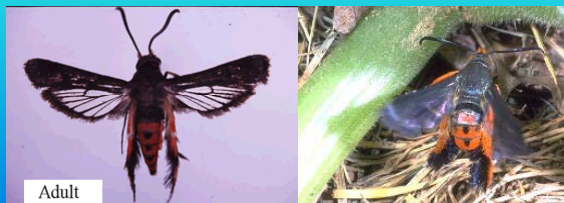


adult male (a), adult female (b),
egg (c), larva (d), earthen cell (e), pupa (f).



Squash Vine Borer
pupal case adult

Squash Vine Borer Adults



Can be active from end of June until
early August

Universal Moth Trap



• Pheromone Trap Suppliers

- Traps and pheromones are available from some of the following suppliers. Reference to specific companies or products is not intended to be an endorsement to the exclusion of others, which may have similar uses.
- Gempler's Pest Management Supply
P.O. Box 270
Mt. Horeb, WI 53572
Tel: 1-800-382-8473 Fax: 1-800-551-1128
www.gemplers.com
- Great Lakes IPM
10220 Church Rd. NE
Vistaburg, MI 48891-9746
Tel: 517-268-5693 or 517-268-5911 Fax: 517- 268-5311
www.greatlakesipm.com
- Trece, Inc.
P.O. Box 6278
Salinas, CA 93912 Tel: 831-758-0204 Fax: 831-758-2625
www.trece.com



Damaging Stage



Spray about one week after moths emerge and weekly for 3-5 weeks or until no more moth activity.

Or

When damage to vines first noted and every 5-7 days for about 4 weeks.

Insecticides

Carbamates

Thiodan

Inorganic Fluorides

Kryocide

Pyrethroids

Pounce, Ambush, Asana, Capture, Mustang

Organic

Sabadilla?, Bt ?, Surround ?

Cultural Controls

- Remove Vines After Harvest
- Disk or plow in fall or spring
- Rotation
- Keep plants well fertilized
- Use a trap crop of early planted Hubbard
- Staggered planting dates
- Less susceptible varieties

Susceptibility to Squash Vine Borer

- Most Susceptible

Hubbard Types – Blue Hubbard,
Boston Marrow, Golden Delicious

Connecticut Field Pumpkin
Small Sugar Pumpkin, Atlantic Giant

Susceptibility to Squash Vine Borer

- Moderately Susceptible

White Bush Scallop, Acorn,
Summer Crookneck
Dickenson Pumpkin

- Least Susceptible

Green Striped Cushaw and Butternut

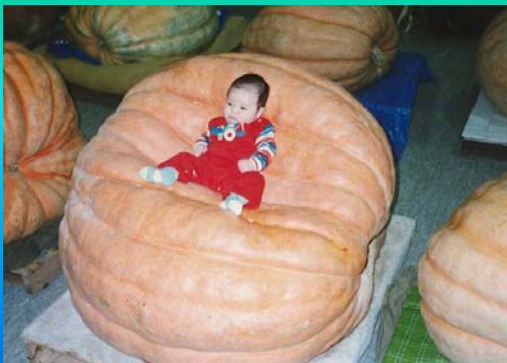
Physical Controls

Examine stems; once holes are detected, slit the stem longitudinally with a fine sharp knife, remove the borer, then cover the wounded stem with moist soil above the point of injury to promote additional root formation.

Stems can be covered with a barrier, such as strips of nylon stockings or aluminum foil, to prevent egg laying.

Physical Controls

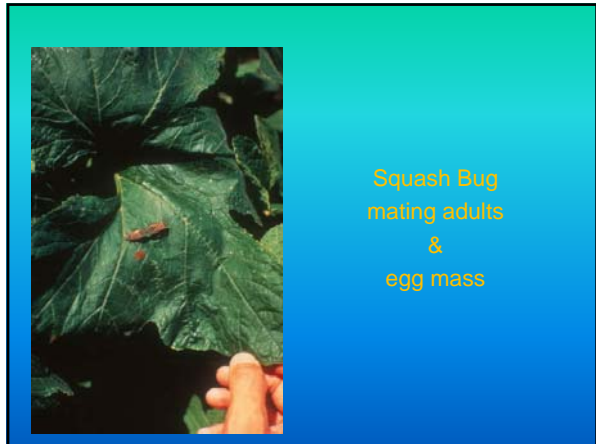
- Catch and destroy the moths, especially at twilight or in early morning when they are resting on the upper side of leaf bases.
- Use row covers over plants until female flowers begin to bloom.
- Hand-pick the eggs before they hatch.



Successful Squash Vine Borer Control

Squash Bug Adult





- ### Insecticides
- Carbamates
 - * Thionex, Furadan*, Sevin*
 - Inorganic Fluorides
 - Kryocide
 - Neonicotinoid
 - Admire*
 - Pyrethroids
 - Pounce, Ambush, Asana, Capture, Mustang, Danitol*
 - Organic
 - Sabadilla?, Bt ?, Surround ?
- * Cucumber beetle only

Minor Squash Insects

- Aphids (Outbreak in 2007 in Iowa)
- Leafhoppers
- Mites (Dry weather or over use of Sevin)
- Thrips

Sometimes you need to think how to put inside the box.



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