Galia melons are an exotic, hybrid muskmelon from Israel. Melons commonly referred to as cantaloupe are, in fact, muskmelons (*Cucumis melo*, Reticulatus group). Small melons belong to three main botanical groups. The first is the Cantaloupis group with fruits that are medium sized, with a netless, warty rind. The true cantaloupe and French Charentais melons belong to this group. The second is the Reticulatus group with fruit that has netting and a thick flesh that can be orange, white, or yellow. Eastern and western muskmelons and Persian melons belong to this group. Lastly is the Inodorus group with fruits that lack the typical musky flavor of muskmelons (casaba, crenshaw, and honeydew melons). Rind appearance and flesh color depend on the type of melon.

### Commercial Types of Muskmelons

Commercially, four types of cantaloupe (muskmelon) are recognized. Western cantaloupes are egg-shaped, totally covered by a net, have no sutures, and weigh 2 to 3 pounds each. Eastern cantaloupes are round or elongated, have marked sutures, a light to medium net, and weigh 4 to 7 pounds each. Melons in the third group of commercial cantaloupes are called French Charentais. Although this group is of smaller economical importance than the eastern and western groups, its popularity is increasing due to the delicate flavor of French Charentais melons. Finally, honeydew melons are without net or suture, white-creamy in color, and weigh between 2 and 6 pounds each.

Management of insect pests in melons is very dependent on cultural practices used for melon production; with management of insect pests varying drastically between drip irrigated melons (plasticulture) and melons grown on the soil.
Galia Muskmelon Insect Pests

**Cucumber Beetles**

**STRIPED CUCUMBER BEETLE, Acalymma vittatum**

**Identification:**

Adult striped cucumber beetles are oblong, yellowish-green in color, about 1/4 inch long, and marked by three slate-black stripes. The head and antennae are dark colored. Wings are covered with very small punctures clearly seen under magnification.

Eggs are light yellow or orange colored, and round to oval shaped. Larvae are worm-like
and about 3/8 inch long when full grown. Larvae are white with a dark head and have three pairs of legs on the thorax. Pupae are whitish-yellow and about 1/4 inch long.

Life Cycle and Habits:

Adult beetles over winter and leave their hibernating quarters in the spring when temperatures reach 65 degrees F or more. When cultivated cucurbit plants begin to emerge through the soil surface, large numbers of beetles may suddenly appear and feed on the seedlings or crawl into soil cracks in reach of sprouting seed. Beetles soon mate and continue feeding throughout the season. Eggs are laid 8-25 days after mating. Females deposit 225-800 in small clusters or singly into soil cracks at the base of cucurbit plants.

Eggs hatch 5-8 days later, with larvae spending about 15 days feeding on the roots and stems of fruit that is in contact with the soil. The pupal period is 6-7 days. The time from egg to adult for the first generation of beetles requires about 1 month and slightly longer for succeeding generations.

After cucurbit plants mature and cool autumn weather approaches, beetles migrate to wooded, bushy areas, crawling under litter to over winter. Some may over winter a mile from the hatching site.

SPOTTED CUCUMBER BEETLE, Diabrotica undecimpunctata howardi

Identification:

The adult beetles are about 1/4 inch long and 1/10 inch wide. The spotted cucumber beetle is pale green with a black head and legs, and has 12 black dots on its back, arranged in three rows.

Eggs are light yellow or orange colored, and round to oval shaped. Larvae are worm-like and about 3/8 inch long when full grown. Larvae are white with a dark head and have three pairs of legs on the thorax. Pupae are whitish-yellow and about 1/4 inch long.

Life Cycle and Habits (Essentially the same as the striped cucumber beetle):

Adult beetles over winter and leave their hibernating quarters in the spring when temperatures reach 65 degrees F or more. When cultivated cucurbit plants begin to emerge through the soil surface, large numbers of beetles may suddenly appear and feed on the seedlings or crawl into soil cracks in reach of sprouting seed. Beetles soon mate and continue feeding throughout the season. Eggs are
laid 8-25 days after mating. Females deposit 225-800 in small clusters or singly into soil cracks at the base of cucurbit plants.

Eggs hatch 5-8 days later, with larvae spending about 15 days feeding on the roots and stems of fruit that is in contact with the soil. The pupal period is 6-7 days. The time from egg to adult for the first generation of beetles requires about 1 month and slightly longer for succeeding generations.

After cucurbit plants mature and cool autumn weather approaches, beetles migrate to wooded, bushy areas, crawling under litter to over winter. Some may over winter a mile from the hatching site.

**Cucumber Beetle Damage:**

Both the spotted and stripped cucumber beetles aggregate in the spring and can cause significant damage to the leaves as well as minor root pruning and damage to the surface of melons.

The significant damage done by cucumber beetles is not from the feeding but from the damage done by the bacterium *Erwinia tracheiphila* the casual agent of bacterial wilt in cucurbits, which can result in yield loss.

If "stringy" sap (bacterial growth and associated resins) extends between the cuts of freshly cut sections of a stem, the plant has bacterial wilt.
Cucumber Beetle Management:

**Trap cropping:** Planting of a more preferred host plant can alter the status of insect pests in primary crops like melon crops. You should rotate your vine crop plantings to help lower beetle populations and for disease management. They tend to colonize cucurbit plants on the edge of the field first, before spreading across the field, so concentrate your scouting on plants near the margin.

**Cultural measures:** Early plowing-discing removes vegetation and discourages egg laying. Delayed planting (more favorable germinating conditions) and heavy seeding rates ensure a good stand. These pests are usually not as troublesome in sandy soils.

**Plant resistant melon cultivars:** Plant bacterial wilt resistant varieties or varieties less preferred by cucumber beetles

**Use of Chemical Insecticides:** Several chemical insecticides are available for controlling cucumber beetles in cucurbits. Virginia Tech vegetable entomologist Tom Kuhar ([Eastern Shore AREC](https://www.esarec.org)) has conducted recent chemical field trials in melons grown in both plasticulture and traditional melon plantings to manage cucumber beetles. See the Virginia pest management guides for tips to protect pollinators when spraying.
Aphids

Green peach aphid, *Myzus persicae*

**Identification:**

Typical of other aphids, this species is pear-shaped, with long antennae and a pair of cornicles ("tailpipes") extending from the posterior end of the body. Wingless adults (see right) and nymphs are yellowish-green with three darker green lines on the top of the abdomen. Winged adults also have a yellowish-green abdomen, but the head and thorax (area where wings attach) is dark. Adults are about 1/10 inch (2 mm) in length. Eggs measure about 0.6 mm long and 0.3 mm wide, and are elliptical in shape. Eggs initially are yellow or green, but soon turn black.

**Life Cycle and Habits:**

This aphid has a complex life cycle with numerous forms. It overwinters in the mid-Atlantic region primarily as wingless females in protected places in bordering areas. Development can be rapid, often 10 to 12 days for a complete generation, and with over 20 annual generations reported in mild climates. In the spring, soon after the plant breaks dormancy and begins to grow, the eggs hatch and the nymphs feed on flowers, young foliage, and stems. After several generations, winged dispersants deposit nymphs on summer hosts. All generations except the autumn generation culminating in egg production are parthenogenetic (non-sexual).

Green peach aphid feeds on hundreds of host plants in over 40 plant families. However, it is only the viviparous (giving birth to living young) summer stages that feed so widely; the oviparous (egg producing) winter stages are much more restrictive in their diet choice. In temperate latitudes the primary or
overwintering hosts are trees of the genus *Prunus*, particularly peach and peach hybrids, but also apricot and plum. During the summer months the aphids abandon their woody hosts for secondary or herbaceous hosts, including vegetable crops in the families Solanaceae, Chenopodiaceae, Compositae, Cruciferae, and Cucurbitaceae. Vegetables that are reported to support green peach aphid include artichoke, asparagus, bean, beets, broccoli, Brussels sprouts, cabbage, carrot, cauliflower, cantaloupe, celery, corn, cucumber, fennel, kale, kohlrabi, turnip, eggplant, lettuce, mustard, okra, parsley, parsnip, pea, pepper, potato, radish, spinach, squash, tomato, turnip, watercress, and watermelon. Field crops such as tobacco, sugar beet, and sunflower also are attacked. Numerous flower crops and other ornamental plants are suitable for green peach aphid development. Stone fruit crops such as peach are sometimes damaged before the aphids leave for summer hosts. Crops differ in their susceptibility to green peach aphid, but it is actively growing plants, or the youngest plant tissue, that most often harbors large aphid populations. In warmer climates the aphids do not seek out overwintering hosts, but persist as active nymphs and adults on hardy crops and weeds throughout the winter months.

**Melon Aphid, *Aphis gossypii***

**Identification:**

The wingless (apterous) parthenogenetic females are 1 to 2 mm in length. The body is quite variable in color: light green mottled with dark green is most common, but also occurring are whitish, yellow, pale green, and dark green forms. The legs are pale with the tips of the tibiae and tarsi black. The cornicles also are black (see right). Small yellow forms apparently are produced in response to crowding or plant stress. Winged (alate) parthenogenetic females measure 1.1 to 1.7 mm in length. The head and thorax are black, and the abdomen yellowish green except for the tip of the abdomen, which is darker. The wing veins are brown. The egg-laying (oviparous) female is dark purplish green; the male is similar.

**Life Cycle and Habits:**

The life cycle differs greatly between north and south. In the north, female nymphs hatch from eggs in the spring on the primary hosts. They may feed, mature, and reproduce parthenogenetically (viviparously) on this host all summer, or they may produce winged females that disperse to secondary hosts and form new colonies. The dispersants typically select new growth to feed upon, and may produce both winged (alate) and wingless (apterous) female offspring. Under high-density conditions, deterioration of the host plant, or upon arrival of
autumn, production of winged forms predominates. During periods stressful to the host plant, small yellow or white forms of the aphid are also produced. Late in the season, winged females apparently seek primary hosts, and eventually both males and egg-laying (oviparous) females are produced. They mate and females deposit yellow eggs: eggs are the only overwintering form under cold conditions. Under warm conditions, a generation can be completed parthenogenetically in about seven days.

In the south, and at least as far north as Arkansas, sexual forms are not important. Females continue to produce offspring without mating so long as weather allows feeding and growth. Unlike many aphid species, melon aphid is not adversely affected by hot weather. Melon aphid can complete its development and reproduce in as little as a week, so numerous generations are possible under suitable environmental conditions. The duration of the adult's reproductive period is about 15 days, and the post-reproductive period five days. These values vary considerably, mostly as a function of temperature. The optimal temperature for reproduction is reported to be about 21 to 27 degrees C. Viviparous females produce a total of about 70 to 80 offspring at a rate of 4.3 per day.

**Aphid Damage:**

Aphids feed by sucking sap from their hosts. The undersides of leaves are preferred, other leaf surfaces and flower buds are its next choice, but the entire host may be covered when populations are large. Infested leaves often become cupped downwards and may appear wrinkled. Heavy infestations on some hosts may result in wilting. Young plants may have reduced or stunted growth. Like other soft bodied insects such as leafhoppers, mealybugs, and soft scales, aphids produce honeydew. Copious amounts of honeydew, a sweet and watery excrement, may be produced. Honeydew serves as a medium on which sooty mold grows. Sooty mold blackens (see left) the leaf and decreases photosynthetic activity. When found on the fruit, honeydew and sooty mold reduces the marketability of the fruits. Growers respond by washing fruit before marketing them. Unfortunately, fruits often becomes unmarketable or of a lower grade because the fungus is difficult to wash off.

Aphids vector many plant diseases, which cause substantially greater losses than damage caused by direct feeding injury. This is often the most damaging feature of an aphid infestation. The melon aphid is an important vector of over 50 plant viruses. It is able to vector both P (PRSV-P) and W (PRSV-W) strains of Papaya Ringspot Virus. PRSV-P manifests
itself on cucurbits and watermelon. PRSV-W is also called Watermelon Mosaic Virus 1 (WMV-1). This aphid also transmits Watermelon Mosaic Virus 2 (WMV-2). Cucumber Mosaic Virus (CMV) is transmitted by more than 60 species of aphids, and the most significant vector is the melon aphid. CMV can be acquired in 5-10 seconds and be transmitted in less than 1 minute. The ability of CMV to be transmitted declines after about 2 minutes and is usually lost within 2 hours. The melon aphid also vectors Celery Mosaic Virus.

Aphid Management:

Biological Control: There are several biological control options for aphid management in melons. Some common biological control agents (BCAs) include green lacewings (*Chrysoperla carnea, C. rufilabris, Chrysopa* spp.), aphid midges (*Aphidoletes aphidimyza*), parasitic wasps (*Aphidius colemani* and *Aphidius matricariae*) and lady beetles (*Hippodamia convergens*). See your local biological control supplier for options in your area.

Cultural Methods:

- Optimize planting date(s) to escape times of the year with high aphid populations
- Plant sufficient number of plants to ensure an adequate and uniform stand coverage
- Avoid excessive nitrogen by fertilizing based on soil test
- Delay insecticidal control of aphids until aphids exceed economic threshold levels

Use of Chemical Insecticides: Labeled products for use in cucurbits to control aphids include the use of Admire 2F or Platinum 2SG at planting. Rescue foliar applications can be done with Actara 25WDG (neonicotinoid), Fulfill 50WP (pymetrozine – feeding inhibitor), Lannate LV, Metasystox-R, Thionex 3EC. Ensure that insecticide coverage is complete on lower plant parts. See the Virginia pest management guides for tips to protect pollinators when spraying.
**Squash vine borer, *Melittia cucurbitae***

**Identification:**

The squash vine borer overwinters as a fully-grown larva in cocoons in the soil, 2 to 15 cm (1 to 6 inches) deep. It pupates in the spring and the adult (a moth) emerges in June. Moths are active during the daytime and in the evening they rest on leaves. This is different than the behavior of most moths, which are active at night. The moths fly slowly in zig-zags around plants, and lay eggs singly on stems; eggs are usually found on the main stem near the base, but are also found on leafstalks or on the undersides of leaves. Moths are active for about one month.

There are 2 generations of squash vine borer with the 1st flight from April - June, and the 2nd flight from July- Sept, with overlap. Female moths lay eggs that hatch in 9 to 14 days. Larvae enter the stem at the plant base within a few hours after hatching from the eggs. Larvae feed inside the stem for 4 to 6 weeks. Fully-grown larvae leave the stems and crawl into the soil to pupate. There is usually one generation per year, but a partial or complete second generation is possible.

**Squash Vine Borer Damage:**

Attack by squash vine borer is characterized by sudden wilt of the plant. Larvae bore within stems, usually in the lower one meter (three feet) of the stem. Borers can girdle stems, which prevents water and nutrients from circulating in the plant (see right). The point where a borer enters a stem is marked by a hole with yellow granular or sawdust-like *frass* exuding from it. Injured vines often decay and become wet and shiny. Infested plants may be weakened or they can die; the ultimate effect on the plant depends on the number of borers and their location. Over 100 larvae have been found in a single plant.

**Squash Vine Borer Management:**

**Trap cropping:** Planting of a trap crop of very early-planted Hubbard squash can be used to alleviate pest pressure from other cucurbits.
Cultural Control:

- Destroy vines soon after harvest to destroy any larvae still inside stems.
- Disk or plow the soil in fall or spring to destroy overwintering cocoons.
- Cover vines at leaf joints with moist soil, to promote formation of secondary roots that will support the plant if the main root and stem are injured.

Physical Control:

The following are suitable in small plantings:

- Borers can be removed from vines if detected before much damage is done. Examine stems in early summer; 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, to prevent egg laying.
- Catch and destroy the moths, especially at twilight or in early morning when they are resting on the upper side of leaf bases.
- Hand-pick the eggs before they hatch.

Use of Chemical Insecticides: If insecticides are used they must be in place before or during oviposition. Use of water pan or pheromone traps may aid in detecting moth activity to determine the best time to apply chemical. Weekly applications begin when vines begin to run (2-4 appl.). Coverage of stems with chemical is critical to protect stems from the borers. Labeled products for use in cucurbits to control squash vine borer include the use of Asana, Capture, Thionex 3EC, and SpinTor (aids in control). See the Virginia pest management guides for tips to protect pollinators when spraying.
Squash Bug, *Anasa tristis*

Identification:

Adult squash bugs are brownish-black insects about 5/8 inch long. Both adults and nymphs have a disagreeable odor if crushed. Newly hatched nymphs have a reddish head and legs and green bodies, which change and darken as they age.

Life Cycle and Habit:

The squash bug overwinters as an adult in protected areas. The adults emerge in mid June, although they will often not enter a host field until the vines begin to "run". The adults may continue ovipositing eggs for more than a month and for this reason nymphs and adults will often be present in the field throughout the summer. Emerging adults will feed, mate and begin oviposition in approximately 10 days. The eggs (see below) will hatch in 1 to 2 weeks and it requires 4 to 6 weeks for the nymphs to pass through the 5 larval instars before becoming an adult. The squash bug does not have a pupal stage, instead each nymphal instar appears more like the adult. After completing the 5th instar the nymph goes into a resting stage where it completes its growth into an adult. The squash bug has only one generation per year.

Squash Bug Damage:

Like all true bugs the squash bug has piercing-sucking mouthparts. Both adults and nymphs feed on the host plant by piercing the plants epidermis and sucking out the sap. While it is unclear if the squash bug injects a plant toxin, feeding can cause extensive amounts of damage. The physical process of squash bug feeding removes sap, which interferes with normal nutrient transfer in the plant. Certain varieties of squash are nearly impossible to grow in some areas of the country. Squash bug feeding first appears as yellow spots (see above), which later turn black. Vines, which have been fed upon, will often turn black and dry out. For this reason squash bug feeding may be mistaken for bacterial wilt. Feeding can completely destroy small plants and vines.
Squash bug Management:

Cultural methods: You can significantly reduce squash bug populations by minimizing the probability that populations will increase to damaging levels. Removing debris after harvest from around the field can kill overwintering squash bug, reducing the following year's population. Often it is possible to trap squash bugs for manual extermination. Placing old boards in the field before cool nights will often attract squash bugs to spend the night under these structures. Early the next morning the bugs can be captured and eliminated.

Plant resistant melon cultivars: Use of resistant varieties of vines can significantly reduce damage by squash bugs.

Use of Chemical Insecticides: Labeled products for use in cucurbits to control squash bug include the use of permethrin (Ambush, Pounce), Asana, Capture, azadirachtin (e.g. Aza-Direct, Neemix), and Sevin. Use of chemical against nymphs is easiest. Sprays should target base of plants where insects hide. Early season applications are most effective before the dense canopy forms and large populations build up. See the Virginia pest management guides for tips to protect pollinators when spraying.

Pickleworm, *Diaphania nitidalis*

Identification:

The pickleworm moth is about 1/2 inch long (see right), with a wingspan of approximately 1 inch. The body and wings are a yellowish brown color with a purplish sheen, and the wings have a broad, light brown border. The tip of the abdomen contains dark, brushlike hairs that are waved in the air when the moth is resting. The closely related melonworm moth is similar in appearance, but the wings are predominantly silvery or pearly white in color. Pickleworm moths fly mostly between dusk and early morning and are not usually seen in fields during the day. Female moths lay eggs on leaf and flower buds, leaves, stalks, and young fruit.

Young pickleworm larvae are a pale (see left), yellowish green with black spots; older larvae are yellowish green or coppery without spots and a brown head. Mature larvae are about 3/4 inch long. Larvae go through five growth stages before pupation and metamorphosis into adult moths.
Life Cycle and Habits:

These insects overwinter in semi-tropical areas such as southern Florida. Therefore, infestations depend upon flights of moths from the South. The first pickleworms of the summer usually appear any time from mid-June to mid-August (usually early July in most years). By August the number is increased and they continue to increase until low temperatures kill plants, insects, or both. There are two full generations of pickleworms, with a partial third, if food is available and there is no early frost. Of interest also is that survival of all stages of the pickleworm declines at temperatures above 85 degrees F. The adult is an active night-flying moth that is seldom observed. Moths reared in cages spend most of their time during the day resting on the walls of the cages with their hind wings partly exposed and the tips of the front wings touching the walls. The tip of the abdomen bears a tuft of long hairlike scales. It is held aloft and waved slowly in a circular movement. This gives the impression that it is the creature's head bearing a shaggy mane.

Pickleworm Damage:

The pickleworm is one of the most damaging insect pests of cucurbits in the western hemisphere. In the United States, pickleworm problems are most severe in the South Atlantic and Gulf Coast states because the pickleworm does not overwinter in latitudes north of southern Florida. However, adult moths from overwintering populations in the south migrate northward and have been found as far north as Connecticut. Because pickleworm is a migratory species, greater infestations are found in later-planted cucurbits in the more northern states, and early plantings may escape damage. Pickleworm development is mostly restricted to cucurbit crops (that is, squash, cucumber, zucchini, and melons) and to weeds in the cucurbit family.

Pickleworm may damage summer and winter squash, cucumber, cantaloupe, and pumpkin. Watermelon is an unusual host. The blossom is a favored feeding site, especially for young larvae. In plants with large blossoms, such as summer squash, larvae may complete their development without entering fruit. They may also move from blossom to blossom, feeding and destroying the plant's capacity to produce fruit. Very often, however, the larva burrows into the fruit. The larva's entrance is marked by a small hole, through which frass is extruded. The presence of the insect makes fruit unmarketable, and fungal or bacterial diseases often develop once entry has occurred. When all blossoms and fruit have been destroyed, larvae will attack the vines, especially the apical meristem. Cantaloupe is not a preferred host, and larvae often seem reluctant to burrow into the fruit. Rather, they feed on the surface or "rind," causing scars. Thus, pickleworm is sometimes referred to as "rindworm," though their feeding is not restricted to the surface and they sometimes burrow into the fruit.
Melonworm, *Diaphania hyalinata*

**Identification:**

The Melonworm adult moth's wingspan is about 2.5 cm. The wings are pearly white centrally, and slightly iridescent, but are edged with a broad band of dark brown. Moths frequently display brushy hairpencils at the tip of the abdomen when at rest. The eggs of Melonworm moths are oval, flattened eggs in small clusters, averaging two to six eggs per egg mass. Initially they are white or greenish, but soon become yellow in color. They measure about 0.7 mm in length and 0.6 mm in width. Hatching occurs after three to four days. Newly hatch larvae are colorless, but by the second instar larvae assume a pale yellow-green color. In the fifth instar, larvae have two subdorsal white stripes extending the length of the body. The stripes fade or disappear just prior to pupation, but they are the most distinctive characteristic of the larvae. The pupa is 12 to 15 mm in length, about 3 to 4 mm in width, and fairly pointed at each end. It is light to dark brown in color.

**Life Cycle and Habits:**

The melonworm can complete its life cycle in about 30 days. It is present throughout the year, where it is limited mostly by availability of host plants. It disperses northward annually, usually arriving in southeastern states in July, where no more than three generations normally occur before cold weather kills the host plants. Melonworm moths remain in the crop during the daylight hours. While they are generally inactive during the day, they will fly short distances when disturbed. They deposit their eggs at night on buds, stems, and the underside of leaves. Second instar larvae construct a loose silken structure under leaves, which serves to shelter them during the daylight hours. Prior to pupation, larvae spin a loose cocoon on the host plant, often folding a section of the leaf for added shelter. The pupal stage persists for nine to 10 days.

**Melonworm Damage:**

Melonworm feeds principally on foliage, especially if foliage of a favored host plant such as summer or winter squash is available. Usually the leaf veins are left intact, resulting in lace-like plant remains. However, if the available
foliage is exhausted, or the plant is a less preferred species such as cantaloupe, then the larva may feed on the surface of the fruit, or even burrow into the fruit. Growers sometimes refer to these insects as "rindworms" because they cause scars on the surface of melons. In a study of melonworm damage potential to summer squash conducted in south Florida, melonworm caused a 23% yield loss due to foliage damage (indirect loss) and a 9 to 10% yield reduction due to fruit damage (direct loss).

Pickleworm/Melonworm Management:

Trap Cropping: Planting of a more preferred host plant can alter the status of insect pests in primary crops like melon crops. Use of squash plantings as a trap crop can reduce pickleworm damage in melon.

Use of chemical Insecticides: The best management scheme is to monitor plants at least weekly beginning when the first developing leaf buds and terminals are formed. If present, young larvae can be detected by pulling apart the leaf terminals or buds. Although larvae may also be found in flower buds, the majority will be located in the developing leaf tissue. Newly-hatched larvae are only about 1/8 inch long and blend in with the green plant tissue, but they can be detected with a bit of practice (a hand lens helps). Larval treatment thresholds have not been developed for pickleworm. Therefore, the current recommendation is to begin a weekly spray program with a recommended insecticide if any larvae are found on the plants. Labeled products for use in cucurbits to control pickleworm/melonworm include the use of Asana, Capture, permethrin (Ambush, Pounce), Sevin, Thionex 3EC, and SpinTor. Be careful that ends of rows and rows adjacent to woods or ditch banks are well covered with insecticides. See the Virginia pest management guides for tips to protect pollinators when spraying.
product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical. For assistance, contact your county Virginia Tech Cooperative Extension Service agent.

Useful links

Muskmelons and Specialty Melons - Vegetable Crops (Purdue Univ.)

Control Strategies for Vine Crops (Penn State)

Virginia Cooperative Extension Vegetable, Small Fruit, Specialty Crops Newsletter

Virginia Pest Management Guides