

Chapter 11 - Electric Shock

Electric shock occurs when the human body becomes part of an electric current. The electricity enters at one point, for example your hand, is conducted through the body, and exits at another point like your left foot.

Everyday at work you may encounter electrical hazards in a number of ways:

- Using damaged electrical tools
- Bad electrical grounds
- Spraying onto or drilling into live electrical lines
- Directly contacting live wires such as in crawl spaces, attics, or in industrial accounts
- Indirectly contacting overhead wires with aluminum or other metal ladders

Injuries are varied and include direct effects such as burns, muscle and tendon damage, seizures, respiratory arrest, ventricular fibrillation (a deadly heart rhythm disturbance), and death. The extent of the injuries depends on the size and duration of the current flow, electrical resistance, and the pathway through the body. Conduction from arm to arm or arm to foot is common in occupational accidents; it is also the most dangerous because the pathway leads through the heart. Even low voltage ranging 110-220 volts traveling through the heart for a fraction of a second can induce a dangerous and even deadly ventricular fibrillation. Indirect effects are also common. People shocked may fall and injure themselves, or let go of something and injure someone else.

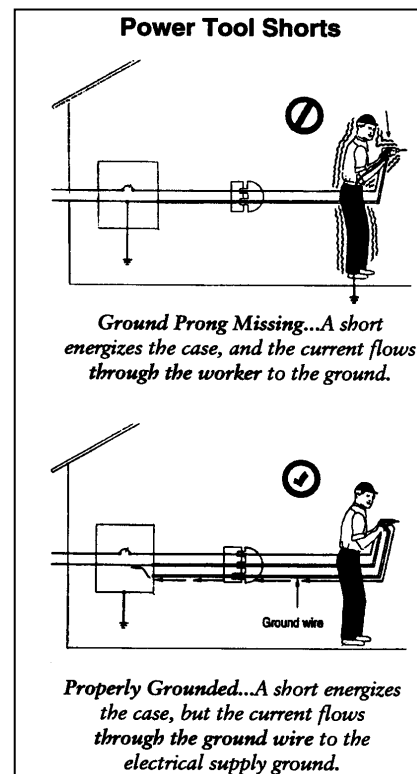
Grounded Equipment

Most industrial power tools are grounded through a third wire that runs from the casing to a grounding prong on the plug. If the casing of the tool you are holding becomes energized because of a short, the ground is “the path of least resistance”. It carries the current through the cord to the ground wires in the electrical system, and ultimately into a cold water pipe or a ground rod.

But if the grounding prong is missing from the plug, or if the receptacle is ungrounded, your body becomes the path of least resistance. You can get a shock, perhaps a fatal one.

Precautions When Using Electric Tools

- NEVER remove a grounding prong or bypass the ground.
- Use only grounded tools.



Chapter 11 - Electric Shock

- Inspect all tools and cords prior to use.
- DO NOT use a tool with a damaged cord or with a cracked outer case.
- Use professional extension cords that are fully grounded.
- Be sure that plugs are completely inserted into receptacles.
- If you feel a mild shock, stop using the tool and DO NOT use it again until it is checked by a trained service person.
- Report any electrical problems to your supervisor.
- Use a ground fault interrupter (GFI) if you are working in a wet area.

Contacting Electrical Circuits When Drilling Through Concrete

Whenever you drill through concrete during a termite treatment, you face some degree of risk of contacting a live electrical line. ***ALWAYS plug your drill or hammer-drill into a ground fault interrupter (GFI) whenever you are drilling during a termite treatment.*** Plug the GFI (also called a drill stop or stop box) into a grounded circuit then plug the drill cord or the extension cord into the GFI. It is best not to place the GFI right at the tool. Instead, place it as far back towards the power receptacle as possible so that the extension cord, as well as the tool, is protected. The GFI will monitor the flow of current to the ground in the circuit. When a ground fault occurs, such as when an electrical line is drilled into, or if the tool or cord contacts water, the GFI cuts off the power within a fortieth of a second, protecting you from serious shock.

Connecting Plugs

DO NOT plug or unplug electrical tools or extension cords if either your hands or the plugs are wet. When using locking-type plugs, make sure that they are completely locked.

Contacting Electrical Circuits During Application

Water conducts electricity, so do not apply water-based pesticides near live electrical circuits. Application equipment may conduct electricity as well, so the tips of sprayers and dusters should be kept away from electrical receptacles and wiring. Dusters should be equipped with plastic or rubber tips that isolate you from any live electrical lines.

Aluminum Ladders

Portable aluminum ladders are electrical conductors. Electrocutions occur when an aluminum ladder comes in contact with energized overhead power lines. Here are some basic rules regarding ladders and electric shock:

1. Do not use portable metal or conductive ladders where they may touch electrical conductors.

Chapter 11 - Electric Shock

2. Tie, block, or otherwise secure aluminum or other conductive ladder to prevent it from falling or sliding onto an energized line.

Overhead Power Lines

Many homes and buildings are served by overhead power lines. You may at times be working near these power lines. You could be using an extension pole to treat, or be up on a ladder controlling birds, removing wasp nests, inspecting roofs, installing vents, etc.

Take a minute to look overhead. Check out the location of the power lines. Be careful that your ladder, a tool, or a tree branch, does not touch a live wire. That wire could have bad or broken insulation and you could be electrocuted. Allow plenty of room between power lines and you.

First Aid for Electrical Shock

- Call 911 and wait for assistance if you cannot walk or drive.
- Tell the nearest person to you what happened and have them observe you for at least 20 minutes for possible after effects.
- Call the Service Center and let them know you were shocked.
- Follow the company policy for reporting your injury.



Massey Services Pest Prevention Programs

Massey Services' Pest Prevention Programs are well rooted in the concepts of IPM, Integrated Pest Management. Integrated Pest Management puts emphasis on inspection, trapping, removal and exclusion which are major points of focus in all Massey Services' Pest Prevention Programs. Fundamentally, Pest Prevention is a holistic approach to insect and rodent pest management. Each pest program has been designed so that a Technician will be able to provide a customized service of a property based upon inspections throughout the entire interior and exterior of that property. Whether it's treatment for mosquitoes, rodents or any indoor pests, Massey's Technicians are taught to begin each service with an inspection of the structure and property to identify Conditions that are conducive to pests, Avenues of entry for pests and Sources of pest activity. Technicians are also educated to identify cultural and environmental elements in and around the structure that contribute to the success of the pests and how to communicate to the Customer ways to eliminate these issues. When baits, dusts, granular and/or liquid remedies are required, use of these materials is directed by Massey's Training & Technical Department. They have created and regularly review a seasonally adjusted annual material use program which includes environmentally responsible pest specific treatment protocols.

The development of all Team Members starts with structured training to Pest Prevention standards. Individuals new to the industry as well as experienced pest management professionals all complete the Massey Services Initial Training Program and attend three days of classroom training at Massey Services Basic Training. The information and principals learned in these two efforts are reinforced through weekly training classes held at the Service Center level as well as training events held by our Training & Technical Department.

The principals of Pest Prevention are utilized on behalf of the customer through the collaboration of the Technician and Service Manager. The Service Manager is responsible for assigning each day's work to the Technicians under his charge. The time, tools and materials required to meet the needs of each customer serviced is assigned by the Service Manager to Massey's Pest Prevention Technicians. At the end of each day the Service Manager meets with each Technician to verify the day's assignments were completed successfully, review results, adjust resources and schedule Pro Active Follow Up Services. Pro Active Services are additional services scheduled at the discretion of the Technician or Service Manager to ensure expected results are attained.

Massey Services is consistently recognized as an innovative and environmentally responsible industry leader. From our decision in 1986 to eliminate the use of organophosphate pesticides from our product mix to the more recent awards and recognition from both state and national organizations for environmental excellence, including the Orange County Florida Environmental Excellence Award and two-time recognition by the E.P.A. for Pesticide Environmental Stewardship, environmental responsibility remains a hallmark of Massey Services.



Massey Services Technicians are trained and equipped to follow service strategies that support their efforts to provide responsible Pest Prevention Services. This includes Inspection, Pest Removal, Population Reduction, Environmental Modification, Exclusion, Customer/Occupant Education and finally material application.

Massey Technicians are regularly equipped as follows:

Inspection

- a) Flash Light
- b) Small metal spatula
- c) Extendable mirror
- d) Screwdrivers
- e) Pliers

Removal – Population Reduction

- a) HEPA Vacuum
- b) PrevenTech/Massey Insect Detection Traps (IDTs)
- c) Rodent traps
- d) Food scent & pheromone attractants
- e) **Rodent Removal & Prevention Materials**
 - a. T-Rex & snap traps
 - b. Repeating mouse traps
 - c. Rodent glue trap
 - d. Secured rodent bait stations and baits where warranted on building exterior and perimeters.

Exclusion

- a) Caulk and caulk gun
- b) ¼ inch hardware cloth
- c) Screen material
- d) Staple gun & adhesive
- e) Copper Stuf-Fit and/or foam



Material Application Tools & Equipment

- a) Bait gun or syringe plunger, bait tube extensions
- b) Hand duster – Pro Blow or Centro Bulb
- c) Compressed air sprayer and backpack sprayer
- d) Secured tamper resistant rodent bait stations

Service Documentation & Education Materials

- a) Pest Prevention Service Report
- b) Pest Prevention Graphs or Site Maps
- c) Pest Specific Service Protocols
- d) Pest Specific Fast Facts educational materials
- e) Customer/Occupant Service Preparation Instructions and Checklists for in-depth services.

Approved Pest Prevention Materials

- a) Seasonally adjusted material rotation plan
- b) Low impact baits, dust and containerized materials utilized as materials choice

The **Service Procedures** detailed below are intended to first impact the pest population present at the time of service and then influence the environment through trapping, exclusion and/or baiting to prevent establishment of new pest populations. A thorough inspection followed by a detailed service will establish a level of influence that will ensure performance of our Pest Prevention Program and customer satisfaction.

Service Procedures:

- 1) Service Overview:
 - a. Interior –Frequency of inspections/services will be based on current pest pressures and incidence of past pest activity. Services typically are scheduled on a monthly, every other month or quarterly cycle. Service actions are directed by needs identified during inspections and the current level of pest activity. Crawling insect populations will be addressed through population reduction, trapping, exclusion and the application of approved contact materials. When appropriate, containerized baits, gel baits, and/or crack & crevice residual materials may be applied.
 - b. Exterior –Crawling insect services include inspections to identify Sources of current and potential crawling insect populations and the available Avenues for their entry. Crawling insect populations will be addressed through exclusionary services and the application of approved baits, granules or contact materials.

Frequency of rodent inspections/services will be established based upon the level of rodent activity.

- c. Perimeter –Crawling insect services include inspections to identify Sources of current and potential crawling insect populations. When appropriate these populations will be addressed through the application of granular materials including baits. Frequency of rodent inspections/services will be established based upon the level of rodent activity.

2) Interior Inspection & Applications:

a. Bathrooms/Water Closets/Utility Areas

- i. Dust wall voids with boric acid based dust, seal cracks & crevices with caulk including where plumbing lines exit walls.
- ii. Dust void spaces of counters with boric acid based dust and seal cracks & crevices with caulk.
- iii. Place dated insect detection traps in concealed areas, such as in or behind cabinets and storage counters. Use food or pheromone attractants as appropriate.
- iv. When pest activity warrants, apply German cockroach baits into, under and behind equipment, cabinets and storage counters in accordance with the Massey German Roach Protocols.

b. Kitchens & Break/Vending Areas

- i. Dust wall voids with boric acid based dust, seal cracks & crevices with caulk.
- ii. Dust void spaces of counters and equipment with boric acid, seal cracks & crevices with caulk.
- iii. When pest activity warrants apply approved material(s) as crack & crevice and/or spot applications.
- iv. Place insect monitors where they can be concealed inside and behind cabinets, pantries and appliances. Use food or pheromone attractants as appropriate.
- v. When pest activity warrants apply German cockroach baits into cracks & crevices inside voids of non-food producing equipment and storage counters.

3) Building Exterior

- i. Locate Avenues and potential Avenues of pest entry (cracks, crevices or holes) into structure to be dusted and sealed. Note: large openings or structural deficiencies will be documented on the Service Report for the Customer to address.

- ii. When pest activity warrants, apply granular baits according to label directions to the exterior of the structure and up to 10 feet away from the foundation.
 - iii. When rodent activity warrants, place secure rodent bait stations inside the dumpster corral area and every 30 feet of the building exterior. Regularly adjust rodent equipment around the structure as dictated by rodent activity.
- 4) Building Perimeter
 - i. When pest activity warrants, apply granular baits up to 50 ft. away from the structure into plant bed areas, around the base of trees, around trash cans, light posts and signage according to label directions.
 - ii. Add rodent equipment to property perimeter or around the structure as required by rodent activity.
- 5) Service Completion & Documentation
 - i. Complete the Customer Service Report detailing:
 - 1. Actions taken and reason(s) why
 - 2. Materials used
 - 3. Structural or landscape issues that will contribute to insect or rodent pest activity
 - 4. Recommendations for customer to do to further help prevent pests
 - 5. Expectations following the treatment
 - ii. Meet with the location management or residential customer to review service results and date of the next scheduled service.

Common Millipedes and Their Management



There are over 6,500 species of millipedes, most living in tropical climates where some species reach a length of 8 inches. Contrary to their name, millipedes do not have 1000 legs. Their class name Diplopoda is more accurate - they have two



pairs of legs on each body segment. Most millipedes possess 30-40 body segments, bringing the average number of legs to a total of only 120-160 legs.

This arthropod's legs are found on the underside of its cylindrical body. Each segment is covered by a hard chitinous exoskeleton. As the millipede grows, it sheds its old, too small exoskeleton, emerging from the old wearing the new. One of nature's scavengers, millipedes eat decaying plant matter, finding its way about with its antenna, chewing up food with its single pair of jaws. When frightened, the millipede curls itself into a tight flat spring-like coil, with its head tucked neatly, and inaccessibly, in the middle.

Centipedes, members of the class Chilopoda, are often misidentified as millipedes and vice versa. Centipedes are venomous carnivores, killing their prey by injecting venom when biting with their one or more mouthparts. Centipedes have only one pair of legs per body segment; the largest centipede may have up to 173 body segments for a total of 346 legs. Centipede bodies are flat in shape, and their legs emerge from the sides of each segment. Unlike millipedes, centipedes move very fast.

Of the many species of millipedes in Florida and Georgia, only 2 species, the greenhouse millipede and the tropical millipede (upper left photo) are common enough around homes to cause indoor complaints. Each species, fully grown, is about an inch in length and brownish in coloring. Both often occur in large numbers.

Although they may proliferate around homes and drop into swimming pools by the dozens, they do not cause any damage, and their soil conversion activities greatly outweigh any nuisance they may cause. These Diplopods only become an issue when high moisture levels create an environment overly conducive to their development. Homeowners usually notice them after periods of very high rainfall.

Life Cycle and Habits

Larvae pass through several molts that look similar to adults, but washed out in color. Millipedes overwinter in the soil and eggs are deposited in clusters of 17 to 300 or more within a gelatinous fluid that keeps them in the cluster. As the young molt, additional segments and legs are added. The greenhouse millipede breeds in decaying leaf litter and the tropical millipede breeds in lawn grass thatches. Although larger millipedes may produce an irritating secretion, these do not. The adults are most prevalent at night in the fall when they mate and are often forced out of their breeding areas and into the shelter of the home by heavy rains.

Management Strategies

SEEK OUT THE SOURCE!

It should not be hard to search the outdoor surroundings and seek out the breeding sites for these millipedes. Look in leaf litter and under thatch, under compost piles, mulch, trash, wood, and other moist, protected areas.

DRY OUT THE SOURCE!

Once the sources are located, simply rake over the mulch or leaf litter to aid in the drying process. Removing excess organic debris can also remove the actual breeding sources. Recommend watering less frequently and only in the early morning, or, stop irrigating completely when ground stays moist. Early morning watering allows the yard to dry out during the day and quickly reduce the millipede habitat. Heavy late day thunderstorm activity may negate the effects of this control measure or delay control. Mow and edge and rake the lawn frequently to reduce their habitat. These practices will also help dry out their nesting areas.

EDUCATE AND COMMUNICATE! SEAL UP AND VACUUM!

It is important to explain to customers that millipede activity inside is a temporary problem associated with the excess moisture conditions outside. Any millipedes that find their way inside through gaps or cracks will quickly die from desiccation. If they find any inside the best thing to do is just vacuum them up. Residual liquid sprays and granules are basically ineffective against this occasional pest because of their hard exoskeleton. They will not feed on granules and any residual activity will be greatly delayed due to the necessity for long-term exposure before a lethal dosage is achieved. As doors and windows age, the grommets and seals tend to shrink just enough for a number of small pests to enter. This may necessitate a recommendation for replacement of door sweeps or weather-stripping. If any materials are used to manage large populations, 1.5 oz of Lemon Joy for each 3-gallon fill-up of synthetic pyrethroid labeled for millipedes in a 20-foot band surrounding the structure aids in chasing them up rapidly to kill them.



NAME : _____ Date : _____

PRE & POST TESTS

Circle all correct answers! (Miss more than one answer, take quiz again!)

1. Millipedes are:
 - a. insects
 - b. crustaceans
 - c. isopods
 - d. diplopods
 - e. chilopods
2. Local indoor millipede pests eat:
 - a. plant bark
 - b. insect eggs
 - c. small insects
 - d. decaying vegetation
 - e. succulent plant growth (leaves)
 - f. all of the above
3. Millipedes are most active (when)_____.
4. Local indoor-invading millipedes :
 - a. sometimes sting
 - b. possess 2 tail-like appendages
 - c. are called "hundred-leggers"
 - d. can cause indoor damage
 - e. easily killed with insecticides
 - f. none of the above
5. Millipedes:
 - a. begin as an egg cluster of about 17-300 eggs
 - b. may be found **under** rocks, trash, boards, & mulch.
 - c. have eggs that hatch in a pouch.
 - d. have 2 pair of legs per body segment
 - e. b & d only
 - f. b,c, & d
 - g. a, b, & d
 - h. all of the above
6. Treatment for millipedes includes:
 - a. finding the harborage areas and drying them out
 - b. mowing the lawn
 - c. sealing around windows and doors
 - d. raking leaves
 - e. c & d
 - f. all of the above

PRE & POST TEST ANSWERS

CORRECT ANSWERS ARE UNDERLINED! EACH INCORRECT ANSWER DEDUCT 17 POINTS.
Only one wrong answer allowed to pass!

1. Millipedes are:
 - a. insects
 - b. crustaceans
 - c. isopods
 - d. diplopods
 - e. chilopods
2. Local indoor millipede pests eat:
 - a. plant bark
 - b. insect eggs
 - c. small insects
 - d. decaying vegetation
 - e. succulent plant growth (leaves)
 - f. all of the above
3. Millipedes are most active (when) at night.
4. Local indoor-invading millipedes :
 - a. sometimes sting
 - b. possess 2 tail-like appendages
 - c. are called "hundred-leggers"
 - d. can cause indoor damage
 - e. easily killed with insecticides
 - f. none of the above
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 - f. all of the above



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Topic Category: Tree and Shrub

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the basics of Chili thrips and broad mites and our control procedures.

Length of lesson: Approx 30 minutes.

Materials needed:

- GreenUp Pest Specific Protocols (GreenUp Reference Materials\GreenUp Protocols\Individual Protocols\Shrub Care):
 - Chili Thrips
 - Broad Mite
- Pre and Post tests

Training Guidelines:

- Make copies of the tests and training materials for all Team members attending.
- Collect samples of Chili Thrips and Broad Mite damage from the field if possible.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the pre-test
 - Allow a few minutes for Team members to complete the pre-test.
 - Collect the pre-test and hand out the Verifiable training form
- Distribute and review the training materials. Use the Training outline as a guide for key points.
 - Encourage active participation from all Team members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
 - Collect the pre-test and discard.
- Hand out the Post-tests. When complete, have each Specialist pass their test to another Specialist for grading.
- Grade the tests as a group and discuss the answers.
- Collect the tests
- End the training session.
- Record the post test scores on the VTRF for each Team Member.
- Place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly Training topics through Massey University.

Training Outline

1. Review the protocols for Chili thrips and broad mites. Provide special emphasis on the following:
 - a. How recently these insects have become pests in our markets.
 - b. The ID characteristics of the damage patterns. It is the damage pattern and not the ID of the insect that makes it possible to correctly identify these pests.
 - i. Control of the pests is not difficult as long as they are correctly identified.
 - c. Control measures. At least two applications are needed.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test

1. T or F Chili thrips became a pest of ornamentals in Florida in 2002.
2. T or F Chili thrips prefer to attack tender new growth.
3. T or F Broad mites are easy to see as they are only 1/32" long.
4. T or F Ligustrum are great plants to install as their only pest issue is leaf spot.
5. T or F Chili thrips damage causes leaves to turn bright red and become enlarged.
6. T or F Control of Chili thrips is best achieved using Bifenthrin as a foliage spray.
7. T or F Chili thrips damage is often mistaken as an edema.
8. T or F Broad mites can be controlled with a single application of Bifenthrin.
9. T or F Broadmites are controlled with Forbid or Avid.
10. T or F A good ID characteristic of broad mite damage is enlarged claw like buds.
11. T or F The eggs of broad mites are visible under a hand lens.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test Answer Key

1. T or ☒ F Chili thrips became a pest of ornamentals in Florida in 2002.
2. ☒ T or F Chili thrips prefer to attack tender new growth.
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11. ☒ T or F The eggs of broad mites are visible under a hand lens.

PEST SPECIFIC PROTOCOL

Chili Thrips

Chili Thrips

Scirtothrips dorsalis

Identification:

- Adult: They are 0.5 to 1.2 mm long and off white to yellow in color (Figure 1). Due their small size, a hand lens with 40 to 80x magnification will be required to see them.
- Larva: There are two larval stages that last for 6-7 days. Larvae are off white.
- Eggs: These are 0.075 mm long and 0.70 mm wide and are inserted into the plant tissue. The eggs last for 6-8 days.

Habitat:

Chili thrips are common to the tropics and have been a serious pest in the West Indies. In October 2005, chili thrips became a pest in Florida and are now found as far north as Atlanta Georgia. They have been found attacking many species of plants, see list below.

Damage:

Chili thrips typically attack tender new growth. The most common damage pattern is a deformity of the leaf with bronze or copper colored streaks (Figure 2). In some species the damage manifests as a severe stunting and twisting of leaf tissue similar to herbicide damage (Figure 3). Due to their small size, the damage is often misdiagnosed as herbicide damage. In other plants the damage appears as a severe edema (Figure 2). (Edema is a corky blister like symptom on the leaves that results from improper water transpiration.)

Control:

Spring applications of TriStar or Imidacloprid in our I&D Slurry will provide good control for low-level infestations. For severe infestations, drench affected plants with Safari and rotate additional spray applications of Avid or Conserve at 10-day intervals. Do not ever use Bifenthrin. Bifenthrin is very damaging to beneficial insects. Without the natural control of beneficial insects, populations of chili thrips will increase.

Host list:

Maple, camellia, euonymus, heather, holly, jasmine, banana, osmanthus, photinia, pittosporum, podocarpus, pyracantha, azalea, rose, hawthorn, Plumbago, viburnum Ligustrum and many more.



Figure 1. Chili thrips adults.



Figure 2. Chili thrips damage to hawthorn.



Figure 3. Chili thrips damage on Viburnum.

PEST SPECIFIC PROTOCOL

Broad Mite

Broad Mite

Polyphagotarsonemus latus

Identification:

- Adult: Females are about 1/141 inch in length, oval, and light yellow, amber or green with an indistinct light median stripe the forks near the back end of the body (Figures 1&2). The males are similar in appearance but without the stripe.
- Nymphs: Are 0.1mm long and white.
- Eggs: They are ovate and flattened with small white tufts on the upper surface. These tufts give the eggs a jeweled appearance (Figures 1&3).

Even at this small size, they are visible with a 10x hand lens.

Habitat:

Broad mites are usually seen on the undersides of new leaves. They can be found on azalea, jasmine, pittosporum, ligustrum and others.

Damage:

Broad mites attack the growing points and undersides of new leaves. This causes a hardening and distortion. The damage is similar to herbicide damage (Figure 4) and is often misdiagnosed as such. The buds grow out and appear claw like. Gray and/or bronze scar tissue between the veins on the undersides of leaves distinguishes mite damage from herbicide damage (Figure 5).

Control:

Broad mites are typically suppressed by natural enemies. Should chemical control be required, make alternating applications of Forbid or Avid (Abamectin), 10 to 14 days apart. Three or four applications will probably be necessary. Be mindful of the fact that our I&D Slurry with Imidacloprid does not control spider mites of any kind.

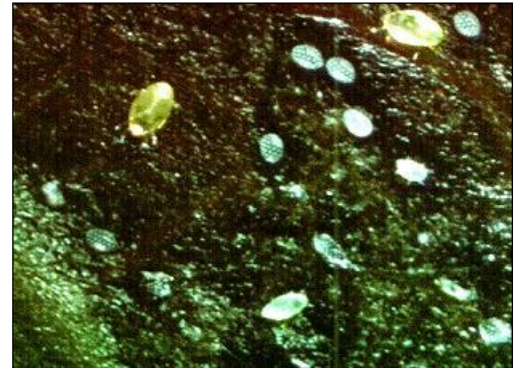


Figure 1. Broad mite adults and eggs.

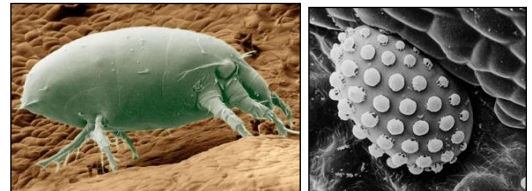


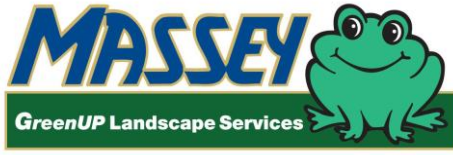
Figure 2 & 3. Broad Mite adult and egg close up.



Figure 4. Herbicide with mite scar tissue damage on ligustrum.



Figure 5. Broad mite claw like damage.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

Topic Category: Lawn

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the importance of posting lawn signs according to our company policies.

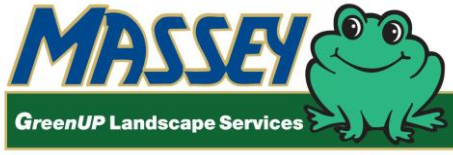
Length of lesson: Approx 30 minutes.

Materials needed:

- Training Guideline
- Company Policy #904 Lawn Treatment Posting/Notification
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests, the training information (below) and Company Policy #904 for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the Pre-test
 - Allow a few minutes for Team Members to complete the Pre-test.
 - Collect the pre-test and hand out the Verifiable Training Record Form (VTRF)
- Distribute and review the training information and Company Policy #904
- Use the Training outline as a guide for key points.
 - Encourage active participation from all Team Members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
- Hand out the Post-tests. When complete, grade the tests and record the score on the VTRF.
- Collect tests and place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly VTM's through Massey University.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

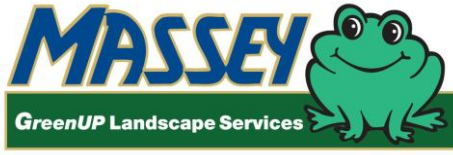
Our Lawn Treatment Posting/Notification sign is required by the State of Florida for all pesticide applications performed on turf or ornamental. Additionally, there are benefits to the company to promote our GreenUP brand. Imagine how many potential customers see our Lawn Treatment Posting/Notification signs strategically placed in the beautiful landscape under our care.

It is very important for all Specialists to understand the importance of these signs and also to understand that their placement of these signs is a reflection of the quality of their work and their attention to detail. When a Specialist places the Lawn Treatment Posting/Notification sign after an application, it should be done with pride like an artist signs a painting.

Consciously or subconsciously, potential customers notice haphazardly placed lawn signs and they also notice perfectly straight and properly inserted signs that are located in strategically placed areas.

Please read our Company Policy #904 regarding Lawn Treatment Posting/Notification signs.

Take great pride in what you do and post our signs like you are signing a work of art.



WEEKLY TRAINING SESSION

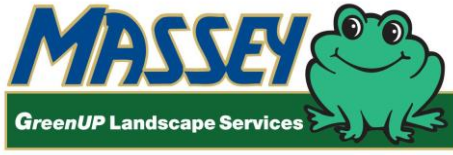


Lawn Treatment Posting/Notification

Name _____ Date _____

PRE & POST TEST

1. T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. T or F Properties on corner lots need to posted on all bordering streets.
4. T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
5. T or F The lawn posting sign should be inserted into the ground by 1 to 2 inches.
6. T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

PRE & POST TEST ANSWER KEY

1. ☒ T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. ☒ T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. ☒ T or F Properties on corner lots need to posted on all bordering streets.
4. ☒ T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
5. ☐ T or ☒ F The lawn posting sign should be inserted into the ground by 1 to 2 inches.
6. ☒ T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.

SECTION: LAWN ADMINISTRATION	SUBJECT: Lawn Treatment Posting / Notification
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The State of Florida requires all lawn care companies to post a sign whenever pesticides are applied to a lawn or exterior foliage of a home.

In general, the purpose of posting is a precautionary measure to alert people around the treated location to prevent contact by humans and / or pets with the treated area.

We have two signs (designed with two distinctly different marketing purposes) that fulfill the requirement of the State of Florida and also promote our GreenUp brand. Our standard lawn sign (exhibit A) should be posted following any lawn or shrub care application except in the case of the initial treatment or a lawn renovation. Our "Lawn Under Construction" sign (exhibit B) is posted anytime we perform an initial treatment application or treatments for the purpose of lawn renovation such as the total kill application. It is important to use these signs in accordance with this company policy.

The strategic placement of these signs should take into consideration the safety and promotional benefits. Since the law states no requirement of how the sign is to be placed other than "to be posted in a conspicuous place" the following are the guidelines for posting a property at the time of a lawn or a tree & shrub treatment. In some instances it may be necessary to use multiple signs on specific properties in order to accomplish the safety and promotional benefits.

POSTING

Lawn signs will be posted in the following manner:

1. The sign itself must be situated so as to be seen by pedestrian and vehicular traffic. The sign should be oriented so that a person approaching the property from either direction could read the text.
2. The plastic mounting stake will be inserted into the ground / turf to an approximate depth of 4 - 6 inches to prevent the sign from being blown over and so the bottom of the sign is a maximum of 12 inches above the grass.
3. Avoid placing these signs in the area of the mailbox, unless the sign will be visible from both sides of driveway.
4. Some properties (commercial properties or large residential) may require more than one sign to be posted due to extensive road or driveway frontage. In these cases, consider posting a sign every 25 – 30 linear feet of road or driveway frontage.
 - ◆ Multiple driveway entrances, as found on some commercial and large residential properties, will also require multiple posting at each entryway.
 - ◆ Properties on corner lots need to be posted on all bordering streets. Again pay attention to driveway entrances and walkways.

APPROVED BY: Eddie Faircloth	EFFECTIVE DATE: 12/6/00	Page 1 of 3
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SECTION:
LAWN ADMINISTRATION

SUBJECT:
Lawn Treatment Posting / Notification

Exhibit A



APPROVED BY:
Eddie Faircloth

EFFECTIVE DATE:
12/6/00

Page 2 of 3

SECTION:
LAWN ADMINISTRATIONSUBJECT:
Lawn Treatment Posting / Notification

Exhibit B

Landscape Under Construction!

**MASSEY****GreenUP Landscape Services****PESTICIDE APPLICATION
PLEASE****1-888-2MASSEY****masseyervices.com**APPROVED BY:
Eddie FairclothEFFECTIVE DATE:
12/6/00

Page 3 of 3



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Topic Category: Tree and Shrub

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the basics of Chili thrips and broad mites and our control procedures.

Length of lesson: Approx 30 minutes.

Materials needed:

- GreenUp Pest Specific Protocols (GreenUp Reference Materials\GreenUp Protocols\Individual Protocols\Shrub Care):
 - Chili Thrips
 - Broad Mite
- Pre and Post tests

Training Guidelines:

- Make copies of the tests and training materials for all Team members attending.
- Collect samples of Chili Thrips and Broad Mite damage from the field if possible.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the pre-test
 - Allow a few minutes for Team members to complete the pre-test.
 - Collect the pre-test and hand out the Verifiable training form
- Distribute and review the training materials. Use the Training outline as a guide for key points.
 - Encourage active participation from all Team members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
 - Collect the pre-test and discard.
- Hand out the Post-tests. When complete, have each Specialist pass their test to another Specialist for grading.
- Grade the tests as a group and discuss the answers.
- Collect the tests
- End the training session.
- Record the post test scores on the VTRF for each Team Member.
- Place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly Training topics through Massey University.

Training Outline

1. Review the protocols for Chili thrips and broad mites. Provide special emphasis on the following:
 - a. How recently these insects have become pests in our markets.
 - b. The ID characteristics of the damage patterns. It is the damage pattern and not the ID of the insect that makes it possible to correctly identify these pests.
 - i. Control of the pests is not difficult as long as they are correctly identified.
 - c. Control measures. At least two applications are needed.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test

1. T or F Chili thrips became a pest of ornamentals in Florida in 2002.
2. T or F Chili thrips prefer to attack tender new growth.
3. T or F Broad mites are easy to see as they are only 1/32" long.
4. T or F Ligustrum are great plants to install as their only pest issue is leaf spot.
5. T or F Chili thrips damage causes leaves to turn bright red and become enlarged.
6. T or F Control of Chili thrips is best achieved using Bifenthrin as a foliage spray.
7. T or F Chili thrips damage is often mistaken as an edema.
8. T or F Broad mites can be controlled with a single application of Bifenthrin.
9. T or F Broadmites are controlled with Forbid or Avid.
10. T or F A good ID characteristic of broad mite damage is enlarged claw like buds.
11. T or F The eggs of broad mites are visible under a hand lens.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test Answer Key

1. T or ☒ F Chili thrips became a pest of ornamentals in Florida in 2002.
2. ☒ T or F Chili thrips prefer to attack tender new growth.
3. T or ☒ F Broad mites are easy to see as they are only 1/32" long.
4. T or ☒ F Ligustrum are great plants to install as their only pest issue is leaf spot.
5. T or ☒ F Chili thrips damage causes leaves to turn bright red and become enlarged.
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10. ☒ T or F A good ID characteristic of broad mite damage is enlarged claw like buds.
11. ☒ T or F The eggs of broad mites are visible under a hand lens.

PEST SPECIFIC PROTOCOL

Chili Thrips

Chili Thrips

Scirtothrips dorsalis

Identification:

- Adult: They are 0.5 to 1.2 mm long and off white to yellow in color (Figure 1). Due their small size, a hand lens with 40 to 80x magnification will be required to see them.
- Larva: There are two larval stages that last for 6-7 days. Larvae are off white.
- Eggs: These are 0.075 mm long and 0.70 mm wide and are inserted into the plant tissue. The eggs last for 6-8 days.

Habitat:

Chili thrips are common to the tropics and have been a serious pest in the West Indies. In October 2005, chili thrips became a pest in Florida and are now found as far north as Atlanta Georgia. They have been found attacking many species of plants, see list below.

Damage:

Chili thrips typically attack tender new growth. The most common damage pattern is a deformity of the leaf with bronze or copper colored streaks (Figure 2). In some species the damage manifests as a severe stunting and twisting of leaf tissue similar to herbicide damage (Figure 3). Due to their small size, the damage is often misdiagnosed as herbicide damage. In other plants the damage appears as a severe edema (Figure 2). (Edema is a corky blister like symptom on the leaves that results from improper water transpiration.)

Control:

Spring applications of TriStar or Imidacloprid in our I&D Slurry will provide good control for low-level infestations. For severe infestations, drench affected plants with Safari and rotate additional spray applications of Avid or Conserve at 10-day intervals. Do not ever use Bifenthrin. Bifenthrin is very damaging to beneficial insects. Without the natural control of beneficial insects, populations of chili thrips will increase.

Host list:

Maple, camellia, euonymus, heather, holly, jasmine, banana, osmanthus, photinia, pittosporum, podocarpus, pyracantha, azalea, rose, hawthorn, Plumbago, viburnum Ligustrum and many more.



Figure 1. Chili thrips adults.



Figure 2. Chili thrips damage to hawthorn.



Figure 3. Chili thrips damage on Viburnum.

PEST SPECIFIC PROTOCOL

Broad Mite

Broad Mite

Polyphagotarsonemus latus

Identification:

- Adult: Females are about 1/141 inch in length, oval, and light yellow, amber or green with an indistinct light median stripe the forks near the back end of the body (Figures 1&2). The males are similar in appearance but without the stripe.
- Nymphs: Are 0.1mm long and white.
- Eggs: They are ovate and flattened with small white tufts on the upper surface. These tufts give the eggs a jeweled appearance (Figures 1&3).

Even at this small size, they are visible with a 10x hand lens.

Habitat:

Broad mites are usually seen on the undersides of new leaves. They can be found on azalea, jasmine, pittosporum, ligustrum and others.

Damage:

Broad mites attack the growing points and undersides of new leaves. This causes a hardening and distortion. The damage is similar to herbicide damage (Figure 4) and is often misdiagnosed as such. The buds grow out and appear claw like. Gray and/or bronze scar tissue between the veins on the undersides of leaves distinguishes mite damage from herbicide damage (Figure 5).

Control:

Broad mites are typically suppressed by natural enemies. Should chemical control be required, make alternating applications of Forbid or Avid (Abamectin), 10 to 14 days apart. Three or four applications will probably be necessary. Be mindful of the fact that our I&D Slurry with Imidacloprid does not control spider mites of any kind.

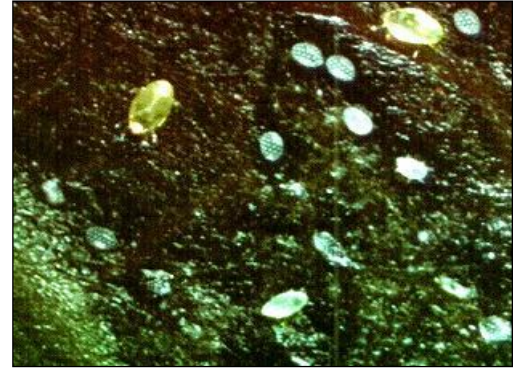


Figure 1. Broad mite adults and eggs.

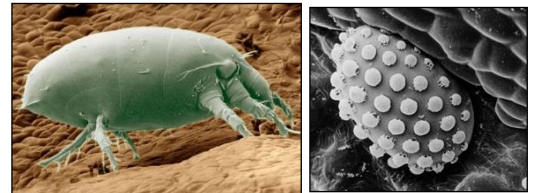


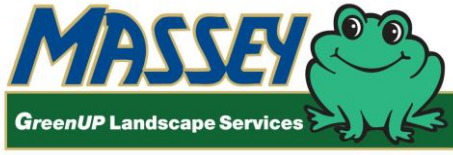
Figure 2 & 3. Broad Mite adult and egg close up.



Figure 4. Herbicide with mite scar tissue damage on ligustrum.



Figure 5. Broad mite claw like damage.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

Topic Category: Lawn

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the importance of posting lawn signs according to our company policies.

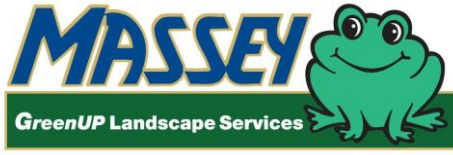
Length of lesson: Approx 30 minutes.

Materials needed:

- Training Guideline
- Company Policy #904 Lawn Treatment Posting/Notification
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests, the training information (below) and Company Policy #904 for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the Pre-test
 - Allow a few minutes for Team Members to complete the Pre-test.
 - Collect the pre-test and hand out the Verifiable Training Record Form (VTRF)
- Distribute and review the training information and Company Policy #904
- Use the Training outline as a guide for key points.
 - Encourage active participation from all Team Members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
- Hand out the Post-tests. When complete, grade the tests and record the score on the VTRF.
- Collect tests and place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly VTM's through Massey University.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

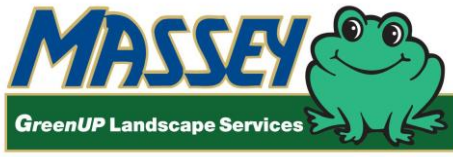
Our Lawn Treatment Posting/Notification sign is required by the State of Florida for all pesticide applications performed on turf or ornamental. Additionally, there are benefits to the company to promote our GreenUP brand. Imagine how many potential customers see our Lawn Treatment Posting/Notification signs strategically placed in the beautiful landscape under our care.

It is very important for all Specialists to understand the importance of these signs and also to understand that their placement of these signs is a reflection of the quality of their work and their attention to detail. When a Specialist places the Lawn Treatment Posting/Notification sign after an application, it should be done with pride like an artist signs a painting.

Consciously or subconsciously, potential customers notice haphazardly placed lawn signs and they also notice perfectly straight and properly inserted signs that are located in strategically placed areas.

Please read our Company Policy #904 regarding Lawn Treatment Posting/Notification signs.

Take great pride in what you do and post our signs like you are signing a work of art.



WEEKLY TRAINING SESSION

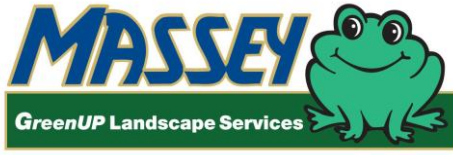


Lawn Treatment Posting/Notification

Name _____ Date _____

PRE & POST TEST

1. T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. T or F Properties on corner lots need to posted on all bordering streets.
4. T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
5. T or F The lawn posting sign should be inserted into the ground by 1 to 2 inches.
6. T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

PRE & POST TEST ANSWER KEY

1. ☒ T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. ☒ T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. ☒ T or F Properties on corner lots need to posted on all bordering streets.
4. ☒ T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
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6. ☒ T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.

SECTION: LAWN ADMINISTRATION	SUBJECT: Lawn Treatment Posting / Notification
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The State of Florida requires all lawn care companies to post a sign whenever pesticides are applied to a lawn or exterior foliage of a home.

In general, the purpose of posting is a precautionary measure to alert people around the treated location to prevent contact by humans and / or pets with the treated area.

We have two signs (designed with two distinctly different marketing purposes) that fulfill the requirement of the State of Florida and also promote our GreenUp brand. Our standard lawn sign (exhibit A) should be posted following any lawn or shrub care application except in the case of the initial treatment or a lawn renovation. Our "Lawn Under Construction" sign (exhibit B) is posted anytime we perform an initial treatment application or treatments for the purpose of lawn renovation such as the total kill application. It is important to use these signs in accordance with this company policy.

The strategic placement of these signs should take into consideration the safety and promotional benefits. Since the law states no requirement of how the sign is to be placed other than "to be posted in a conspicuous place" the following are the guidelines for posting a property at the time of a lawn or a tree & shrub treatment. In some instances it may be necessary to use multiple signs on specific properties in order to accomplish the safety and promotional benefits.

POSTING

Lawn signs will be posted in the following manner:

1. The sign itself must be situated so as to be seen by pedestrian and vehicular traffic. The sign should be oriented so that a person approaching the property from either direction could read the text.
2. The plastic mounting stake will be inserted into the ground / turf to an approximate depth of 4 - 6 inches to prevent the sign from being blown over and so the bottom of the sign is a maximum of 12 inches above the grass.
3. Avoid placing these signs in the area of the mailbox, unless the sign will be visible from both sides of driveway.
4. Some properties (commercial properties or large residential) may require more than one sign to be posted due to extensive road or driveway frontage. In these cases, consider posting a sign every 25 – 30 linear feet of road or driveway frontage.
 - ♦ Multiple driveway entrances, as found on some commercial and large residential properties, will also require multiple posting at each entryway.
 - ♦ Properties on corner lots need to be posted on all bordering streets. Again pay attention to driveway entrances and walkways.

APPROVED BY: Eddie Faircloth	EFFECTIVE DATE: 12/6/00	Page 1 of 3
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SECTION:
LAWN ADMINISTRATION

SUBJECT:
Lawn Treatment Posting / Notification

Exhibit A



APPROVED BY:
Eddie Faircloth

EFFECTIVE DATE:
12/6/00

Page 2 of 3

SECTION:
LAWN ADMINISTRATIONSUBJECT:
Lawn Treatment Posting / Notification

Exhibit B

Landscape Under Construction!

**MASSEY****GreenUP Landscape Services****PESTICIDE APPLICATION
PLEASE****1-888-2MASSEY****masseyservices.com**APPROVED BY:
Eddie FairclothEFFECTIVE DATE:
12/6/00

Page 3 of 3



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Topic Category: Tree and Shrub

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the basics of Chili thrips and broad mites and our control procedures.

Length of lesson: Approx 30 minutes.

Materials needed:

- GreenUp Pest Specific Protocols (GreenUp Reference Materials\GreenUp Protocols\Individual Protocols\Shrub Care):
 - Chili Thrips
 - Broad Mite
- Pre and Post tests

Training Guidelines:

- Make copies of the tests and training materials for all Team members attending.
- Collect samples of Chili Thrips and Broad Mite damage from the field if possible.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the pre-test
 - Allow a few minutes for Team members to complete the pre-test.
 - Collect the pre-test and hand out the Verifiable training form
- Distribute and review the training materials. Use the Training outline as a guide for key points.
 - Encourage active participation from all Team members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
 - Collect the pre-test and discard.
- Hand out the Post-tests. When complete, have each Specialist pass their test to another Specialist for grading.
- Grade the tests as a group and discuss the answers.
- Collect the tests
- End the training session.
- Record the post test scores on the VTRF for each Team Member.
- Place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly Training topics through Massey University.

Training Outline

1. Review the protocols for Chili thrips and broad mites. Provide special emphasis on the following:
 - a. How recently these insects have become pests in our markets.
 - b. The ID characteristics of the damage patterns. It is the damage pattern and not the ID of the insect that makes it possible to correctly identify these pests.
 - i. Control of the pests is not difficult as long as they are correctly identified.
 - c. Control measures. At least two applications are needed.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test

1. T or F Chili thrips became a pest of ornamentals in Florida in 2002.
2. T or F Chili thrips prefer to attack tender new growth.
3. T or F Broad mites are easy to see as they are only 1/32" long.
4. T or F Ligustrum are great plants to install as their only pest issue is leaf spot.
5. T or F Chili thrips damage causes leaves to turn bright red and become enlarged.
6. T or F Control of Chili thrips is best achieved using Bifenthrin as a foliage spray.
7. T or F Chili thrips damage is often mistaken as an edema.
8. T or F Broad mites can be controlled with a single application of Bifenthrin.
9. T or F Broadmites are controlled with Forbid or Avid.
10. T or F A good ID characteristic of broad mite damage is enlarged claw like buds.
11. T or F The eggs of broad mites are visible under a hand lens.



WEEKLY TRAINING SESSION



Chili Thrips & Broad Mites

Pre & Post Test Answer Key

1. T or ☒ F Chili thrips became a pest of ornamentals in Florida in 2002.
2. ☒ T or F Chili thrips prefer to attack tender new growth.
3. T or ☒ F Broad mites are easy to see as they are only 1/32" long.
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11. ☒ T or F The eggs of broad mites are visible under a hand lens.

PEST SPECIFIC PROTOCOL

Chili Thrips

Chili Thrips

Scirtothrips dorsalis

Identification:

- Adult: They are 0.5 to 1.2 mm long and off white to yellow in color (Figure 1). Due their small size, a hand lens with 40 to 80x magnification will be required to see them.
- Larva: There are two larval stages that last for 6-7 days. Larvae are off white.
- Eggs: These are 0.075 mm long and 0.70 mm wide and are inserted into the plant tissue. The eggs last for 6-8 days.

Habitat:

Chili thrips are common to the tropics and have been a serious pest in the West Indies. In October 2005, chili thrips became a pest in Florida and are now found as far north as Atlanta Georgia. They have been found attacking many species of plants, see list below.

Damage:

Chili thrips typically attack tender new growth. The most common damage pattern is a deformity of the leaf with bronze or copper colored streaks (Figure 2). In some species the damage manifests as a severe stunting and twisting of leaf tissue similar to herbicide damage (Figure 3). Due to their small size, the damage is often misdiagnosed as herbicide damage. In other plants the damage appears as a severe edema (Figure 2). (Edema is a corky blister like symptom on the leaves that results from improper water transpiration.)

Control:

Spring applications of TriStar or Imidacloprid in our I&D Slurry will provide good control for low-level infestations. For severe infestations, drench affected plants with Safari and rotate additional spray applications of Avid or Conserve at 10-day intervals. Do not ever use Bifenthrin. Bifenthrin is very damaging to beneficial insects. Without the natural control of beneficial insects, populations of chili thrips will increase.

Host list:

Maple, camellia, euonymus, heather, holly, jasmine, banana, osmanthus, photinia, pittosporum, podocarpus, pyracantha, azalea, rose, hawthorn, Plumbago, viburnum Ligustrum and many more.



Figure 1. Chili thrips adults.



Figure 2. Chili thrips damage to hawthorn.



Figure 3. Chili thrips damage on Viburnum.

PEST SPECIFIC PROTOCOL

Broad Mite

Broad Mite

Polyphagotarsonemus latus

Identification:

- Adult: Females are about 1/141 inch in length, oval, and light yellow, amber or green with an indistinct light median stripe the forks near the back end of the body (Figures 1&2). The males are similar in appearance but without the stripe.
- Nymphs: Are 0.1mm long and white.
- Eggs: They are ovate and flattened with small white tufts on the upper surface. These tufts give the eggs a jeweled appearance (Figures 1&3).

Even at this small size, they are visible with a 10x hand lens.

Habitat:

Broad mites are usually seen on the undersides of new leaves. They can be found on azalea, jasmine, pittosporum, ligustrum and others.

Damage:

Broad mites attack the growing points and undersides of new leaves. This causes a hardening and distortion. The damage is similar to herbicide damage (Figure 4) and is often misdiagnosed as such. The buds grow out and appear claw like. Gray and/or bronze scar tissue between the veins on the undersides of leaves distinguishes mite damage from herbicide damage (Figure 5).

Control:

Broad mites are typically suppressed by natural enemies. Should chemical control be required, make alternating applications of Forbid or Avid (Abamectin), 10 to 14 days apart. Three or four applications will probably be necessary. Be mindful of the fact that our I&D Slurry with Imidacloprid does not control spider mites of any kind.

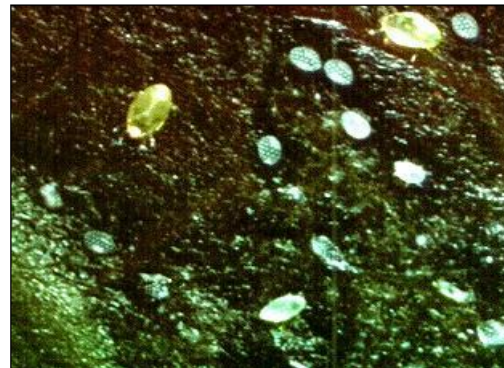


Figure 1. Broad mite adults and eggs.

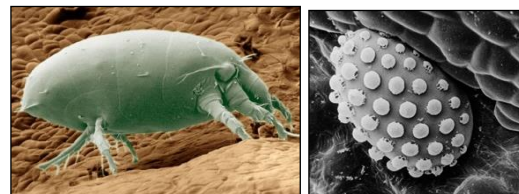


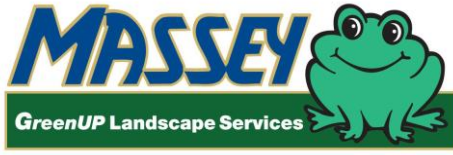
Figure 2 & 3. Broad Mite adult and egg close up.



Figure 4. Herbicide with mite scar tissue damage on ligustrum.



Figure 5. Broad mite claw like damage.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

Topic Category: Lawn

Recordable Verifiable Training Hours: 0.5

Objectives: This lesson is designed to teach the importance of posting lawn signs according to our company policies.

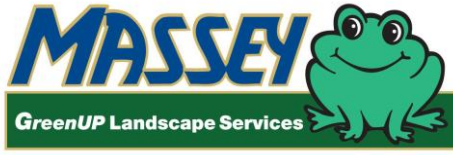
Length of lesson: Approx 30 minutes.

Materials needed:

- Training Guideline
- Company Policy #904 Lawn Treatment Posting/Notification
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests, the training information (below) and Company Policy #904 for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Begin the meeting by defining the training topic and handing out the Pre-test
 - Allow a few minutes for Team Members to complete the Pre-test.
 - Collect the pre-test and hand out the Verifiable Training Record Form (VTRF)
- Distribute and review the training information and Company Policy #904
- Use the Training outline as a guide for key points.
 - Encourage active participation from all Team Members
 - Ask probing questions to develop key points
 - Encourage group reading
- After reading and reviewing all materials, ask questions to verify the lesson has been understood.
- Hand out the Post-tests. When complete, grade the tests and record the score on the VTRF.
- Collect tests and place with the verifiable materials in the Service Center Verifiable Training File.
- Make copies of the VTRF and place in each Team Member's training file.
- Complete all Weekly VTM's through Massey University.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

Our Lawn Treatment Posting/Notification sign is required by the State of Florida for all pesticide applications performed on turf or ornamental. Additionally, there are benefits to the company to promote our GreenUP brand. Imagine how many potential customers see our Lawn Treatment Posting/Notification signs strategically placed in the beautiful landscape under our care.

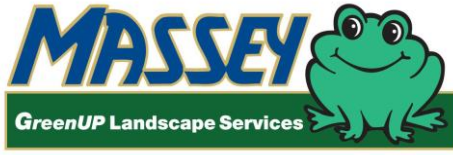
It is very important for all Specialists to understand the importance of these signs and also to understand that their placement of these signs is a reflection of the quality of their work and their attention to detail. When a Specialist places the Lawn Treatment Posting/Notification sign after an application, it should be done with pride like an artist signs a painting.

Consciously or subconsciously, potential customers notice haphazardly placed lawn signs and they also notice perfectly straight and properly inserted signs that are located in strategically placed areas.

Please read our Company Policy #904 regarding Lawn Treatment Posting/Notification signs.

Take great pride in what you do and post our signs like you are signing a work of art.

TX



WEEKLY TRAINING SESSION

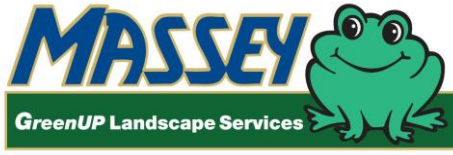


Lawn Treatment Posting/Notification

Name _____ Date _____

PRE & POST TEST

1. T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. T or F Properties on corner lots need to posted on all bordering streets.
4. T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
5. T or F The lawn posting sign should be inserted into the ground by 1 to 2 inches.
6. T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.



WEEKLY TRAINING SESSION



Lawn Treatment Posting/Notification

PRE & POST TEST ANSWER KEY

1. ☒ T or F Posting lawn signs after a treatment is not only a company policy, it is required by law.
2. ☒ T or F In addition to alerting people around the treated property that a pesticide application has been performed, another benefit is promoting our GreenUp Brand.
3. ☒ T or F Properties on corner lots need to posted on all bordering streets.
4. ☒ T or F The lawn posting sign should be situated so a pedestrian or vehicular traffic can read the text from either direction.
5. T or ☒ F The lawn posting sign should be inserted into the ground by 1 to 2 inches.
6. ☒ T or F The manner in which we display our lawn posting signs is a reflection of our attention to detail and quality of work.

SECTION: LAWN ADMINISTRATION	SUBJECT: Lawn Treatment Posting / Notification
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The State of Florida requires all lawn care companies to post a sign whenever pesticides are applied to a lawn or exterior foliage of a home.

In general, the purpose of posting is a precautionary measure to alert people around the treated location to prevent contact by humans and / or pets with the treated area.

We have two signs (designed with two distinctly different marketing purposes) that fulfill the requirement of the State of Florida and also promote our GreenUp brand. Our standard lawn sign (exhibit A) should be posted following any lawn or shrub care application except in the case of the initial treatment or a lawn renovation. Our "Lawn Under Construction" sign (exhibit B) is posted anytime we perform an initial treatment application or treatments for the purpose of lawn renovation such as the total kill application. It is important to use these signs in accordance with this company policy.

The strategic placement of these signs should take into consideration the safety and promotional benefits. Since the law states no requirement of how the sign is to be placed other than "to be posted in a conspicuous place" the following are the guidelines for posting a property at the time of a lawn or a tree & shrub treatment. In some instances it may be necessary to use multiple signs on specific properties in order to accomplish the safety and promotional benefits.

POSTING

Lawn signs will be posted in the following manner:

1. The sign itself must be situated so as to be seen by pedestrian and vehicular traffic. The sign should be oriented so that a person approaching the property from either direction could read the text.
2. The plastic mounting stake will be inserted into the ground / turf to an approximate depth of 4 - 6 inches to prevent the sign from being blown over and so the bottom of the sign is a maximum of 12 inches above the grass.
3. Avoid placing these signs in the area of the mailbox, unless the sign will be visible from both sides of driveway.
4. Some properties (commercial properties or large residential) may require more than one sign to be posted due to extensive road or driveway frontage. In these cases, consider posting a sign every 25 - 30 linear feet of road or driveway frontage.
 - ◆ Multiple driveway entrances, as found on some commercial and large residential properties, will also require multiple posting at each entryway.
 - ◆ Properties on corner lots need to be posted on all bordering streets. Again pay attention to driveway entrances and walkways.

APPROVED BY: Eddie Faircloth	EFFECTIVE DATE: 12/6/00	Page 1 of 3
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SECTION:
LAWN ADMINISTRATION

SUBJECT:
Lawn Treatment Posting / Notification

Exhibit A



APPROVED BY:
Eddie Faircloth

EFFECTIVE DATE:
12/6/00

Page 2 of 3

SECTION:
LAWN ADMINISTRATIONSUBJECT:
Lawn Treatment Posting / Notification

Exhibit B

Landscape Under Construction!

**MASSEY****GreenUP Landscape Services****PESTICIDE APPLICATION
PLEASE****1-888-2MASSEY****masseyervices.com**APPROVED BY:
Eddie FairclothEFFECTIVE DATE:
12/6/00

Page 3 of 3