Chapter 4 - Allergy

An allergy is a high sensitivity to proteins and other substances in foods, plants, pollen, microorganisms, medicines, and insect parts. These substances are called *allergens*. An allergic reaction to such an allergen can be as mild as a runny nose or as extreme as death. Hay fever, for example, is a common allergic response to pollen. Anaphylactic shock is an often fatal reaction in cases of extreme allergy.

Allergy to Insect Stings

Eight out of every thousand people suffer an allergic reaction to insect venom, mostly after being stung by a bee, fire ant, or wasp, such as a yellowjacket. Every year, between 50 and 100 people die after having a severe allergic reaction to an insect sting. Just because you never had such a reaction, does not mean that you never will, although the chances of this happening are slight.

A normal reaction to a sting is not the same as an allergic reaction. The normal reaction is intense, immediate pain at the site of the sting, followed by localized swelling, warmth, and redness. These symptoms usually subside after a few hours but itching at the sting site may continue for days.

An allergic reaction to an insect sting is more serious. Some allergic reactions to stings are immediate, starting within minutes of exposure and some reactions are delayed occurring hours or even a day after the sting.

Immediate reactions usually peak within 15-30 minutes, and are over within hours. The first symptom is a sensation of warmth followed by intense itching, often on the soles of your feet or the palms of your hands. Your skin flushes, hives may appear, your face swells, and it becomes hard to breathe. You may feel faint and anxious, with a sense of impending doom. Your blood pressure may drop. If you have these symptoms you may be experiencing “anaphylactic shock”, an acute, life-threatening allergic reaction. In some cases, people experiencing anaphylactic shock may have convulsions, become unconscious, and die.

Symptoms of delayed reactions can include fever, hives, swelling at the site, headache, pain in the joints, and tender lymph glands. This delayed reaction is usually less dangerous than an immediate reaction.

If you think you may be having an allergic reaction to an insect sting, see a physician. ***If allergy symptoms appear immediately after you have been stung, it is a medical emergency. Get to a physician immediately or call 911.*** Anaphylactic shock must be treated quickly, usually with an injection of epinephrine.

Chapter 4 - Allergy

Symptoms of Anaphylactic Shock
• **Itchy/hot palms or feet** • **Nausea, vomiting** • **Headache** • **Breathing problems** • **Lumpy welts (hives) all over the body** • **Anxiety and feeling of impending doom**

If you know or suspect you are allergic to insect stings, tell your supervisor. People who are highly allergic to insect stings are advised to avoid situations where they may encounter bees, wasps, and other stinging insects. Some people carry special emergency kits, available by prescription, containing a premeasured epinephrine syringe or a special injector that automatically injects a dose when pressed against the thigh.

Chikungunya is a mosquito-borne viral disease first described during a 1952 outbreak in Tanzania. It is an alphavirus of the family Togaviridae. The name 'chikungunya' originates from a verb in the Kimakonde language, meaning "to become contorted" and describes the bent over appearance of those infected with joint pain.

The disease shares some similarities with dengue, and can be misdiagnosed in dengue-infested areas. There is no cure for the disease, although a human vaccine is currently in the initial testing stage. Treatment is focused on relieving the symptoms. The proximity of mosquito breeding sites to humans is a major risk factor for Chikungunya. The disease occurs in Africa, Asia and India. In 2007, disease transmission was reported for the first time in north-eastern Italy.

In 2014 a few people who contracted Chikungunya away from Florida have brought the disease back with them, but we have been lucky that these cases were caught in time before they spread. It's just a matter of time before an infected person goes out into a mosquito infested area and an outbreak ensues. In recent years, Chikungunya has been spreading around the world. The following article from Buzz Words 7(6) pp.8-9. Nov/Dec 2007. FMCA. UF/IFAS/FMEL, Vero Beach, FL will open your eyes to the importance of this disease:

Florida and Chikungunya: Lessons from Chikungunya Italian Style

The danger to the U. S. from the entry of exotic mosquito-borne pathogens is real. The spread of West Nile virus throughout the U. S. in only 8 years shows all too clearly the effects on public health from a new mosquito-borne pathogen, and the challenges and difficulties for the U. S. in mitigating these effects. It is clear that public health and mosquito control professionals must be vigilant against mosquito-borne diseases. Those charged with mosquito control and protecting public health must be vigilant, while at the same time avoiding unnecessary scares to the public to promote the necessity of our professions. Florida Mosquito Control has professional responsibility to discuss and prepare in advance for the introduction of new mosquito borne pathogens, and to alert other government agencies as well on these potentials. Though many parts of the U. S. have experienced much higher incidences of West Nile in humans than Florida, Florida mosquito control must continue and improve its abilities to mitigate a Florida West Nile outbreak. Elsewhere in many columns in *BuzzWords* we have discussed West Nile in Florida, reasons for the low incidence, and why Florida is at risk for West Nile epidemics with 100's to even 1000's of human cases.

And then there is Chikungunya.

Is Chikungunya a real risk to Florida? Some may believe that a Florida Chikungunya epidemic is unlikely. I hope that they are right. On the other hand, with equal validity one could argue that the potential for a substantial outbreak of Chikungunya in Florida is real, and we must be prepared. It is only prudent to be vigilant and prepared. Why would one say Florida is at great risk?

Chikungunya Outbreak in Italy: The 2005-06 Indian Ocean outbreak of Chikungunya was unprecedented with over 1 million human cases. The mosquito culprits were *Aedes albopictus* in the southern region of the Indian Ocean, and *Aedes aegypti* in India.

Subsequently, Chikungunya virus has spread to many different countries carried by infected travelers from the Indian Ocean region. U. S. CDC reported 38 confirmed Chikungunya cases in travelers to the U. S. during the past two years. Fortunately there has been no evidence of subsequent transmission from these travelers in the U. S. We have been fortunate, but Italy was not. In June 2007 a traveler from Kerala India returned to his home to near the villages, Castiglione de Cervia and Castiglione di Ravenna, both about 6 Km from the Adriatic coast in the province of Ravenna, in the Emilia Romagna Region of Italy. He had two episodes of fever, on June 15 and June 23 and during the second episode he was visiting a cousin in Castiglione de Cervia for several hours. His cousin was the second reported case with onset of symptoms on July 4. The outbreak occurred quickly. The vector was *Ae. albopictus*, known to have been present in these villages since 2005. When human cases subsided with no new cases in October there were 334 suspected human cases of which 204 were confirmed by laboratory diagnosis with PCR. Cases were reported in some nearby villages in people with no travel history to the index villages, showing that mosquito transmission was indeed occurring elsewhere. Symptoms were similar to cases in the Indian Ocean Region with 95% experiencing arthralgia. An 83 year old patient with underlying conditions died.

Italy mosquito control and public health are now facing questions that must be answered. Will they see Chikungunya again? Why this specific region and not other regions of Italy with *Ae. albopictus* where travelers with Chikungunya have visited? There have been over 30 reports of Chikungunya in visitors to Italy. Guidelines for controlling *Ae. albopictus* issued by the Italian Ministry of Health in 1994 are being implemented, and *Ae. albopictus* is being monitored now in the Emilia Romagna Region by 1800 ovitraps with 2500 ovitraps planned for 2008. For more information see the European Center for Disease Prevention and Control Report at http://www.ecdc.eu.int/pdf/071030CHK_mission_ITA.pdf.

So what of Florida? Consider the same sequence of events in Florida, where there are large numbers of visitors from throughout the world, including regions where there is Chikungunya transmission, and populations of *Ae. albopictus* and also *Ae. aegypti* waiting to become infected from such a traveler, and transmit the virus in Florida. The two Italian villages have a combined population of 3767 people and had around 150 Chikungunya cases within a 10 week period. A description of the housing in both villages is that typically houses are low (two floors) surrounded by small gardens with many flowers, plants, and flower pots. In the streets, drainage systems are visible, indicating open stagnant water underground. Sound familiar? The incidence in the two villages over 10 weeks was ~40 per 1000. That means about 4300 Chikungunya cases in Gainesville, 9120 cases in Orlando, and 1200 cases in Key West just in the residents alone. For illustration Key West could experience 4000 cases during the tourist season.

And then there was Chikungunya!

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Department of Entomology and Nematology
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Signs and symptoms

Chikungunya, in its non-lethal form is characterized by an abrupt onset of fever frequently accompanied by joint pain that can last for months to years. Other common signs and symptoms include muscle pain, headache, nausea, fatigue and rash. The joint pain is often very debilitating, but usually ends within a few days or weeks. Most patients recover fully. Occasional cases of eye, neurological and heart complications have been reported, as well as gastrointestinal complaints. Serious complications are not common, but in older people, the disease can contribute to death. Often symptoms in infected individuals are mild and the infection may go unrecognized, or be misdiagnosed in areas where dengue occurs. 260 deaths from the virus resulted from mutated virus that became lethal on an island in the Indian Ocean in 2006.

Transmission

The virus is transmitted from human to human by the bites of infected female mosquitoes. Most commonly, the mosquitoes involved are in the dengue-carrying mosquitoes *Aedes aegypti* and *Aedes albopictus*. These mosquitoes bite throughout daylight hours, although there may be active in the early morning and late afternoon. Both species are found outdoors, but *Ae. aegypti* also likes to feed indoors. After an infected mosquito bites, illness often starts in from four to eight days but can range from two to 12 days.

Diagnosis

Several serological tests are used for diagnosis. The virus can be isolated from the blood during the first days of infection.

Treatment

There are no specific drugs to cure the disease. Treatment is directed primarily at relieving the symptoms, including the joint pain. There is no commercial Chikungunya vaccine.

Prevention and control

Like with other viral mosquito-borne diseases, the proximity of mosquito breeding sites to humans is a significant risk factor for Chikungunya . Prevention and control relies heavily on reducing the number of all water-filled containers and aquatic habitats that support breeding of the mosquitoes. This requires community cooperation. During outbreaks, insecticides and larvicides may be applied to kill flying mosquitoes and their larvae in and around water-filled containers. For protection during outbreaks of Chikungunya, clothing which minimizes skin exposure to the day-biting vectors is advised. Repellents can be applied to exposed skin or to clothing in strict accordance with product label instructions.

More about disease vectors

Both *Ae. aegypti* and *Ae. albopictus* have been implicated in outbreaks of chikungunya. The species *Ae.albopictus* thrives in water-filled breeding including coconut husks, cocoa pods, bamboo stumps, tree holes and rock pools, in addition to artificial containers such as vehicle tires and saucers beneath plant pots. This diversity of habitats explains the abundance of *Ae. albopictus* in S.E. U.S. *Ae. aegypti* not only uses these habitats, but also is more closely associated with indoor human habitation including flower vases, water storage vessels, concrete water tanks and areas of clogged water such as in gutters or in air hander drip pans in attics. There is evidence that some non-primates may act as reservoirs.

Further reading:

CDC website: 2019. https://www.cdc.gov/chikungunya/

Aprehend®

FIELD NOTES

www.rockwelllabs.com

800.891.8610

Summer is here!

Handling Aprehend as the temperature rises.

Every year as the temperatures start to increase, we get phone calls and emails about how Aprehend responds to the temperatures during transit (FedEx, UPS etc.). The biggest concern is that the spores will be adversely impacted when being shipped in standard containers in the back of a delivery truck.

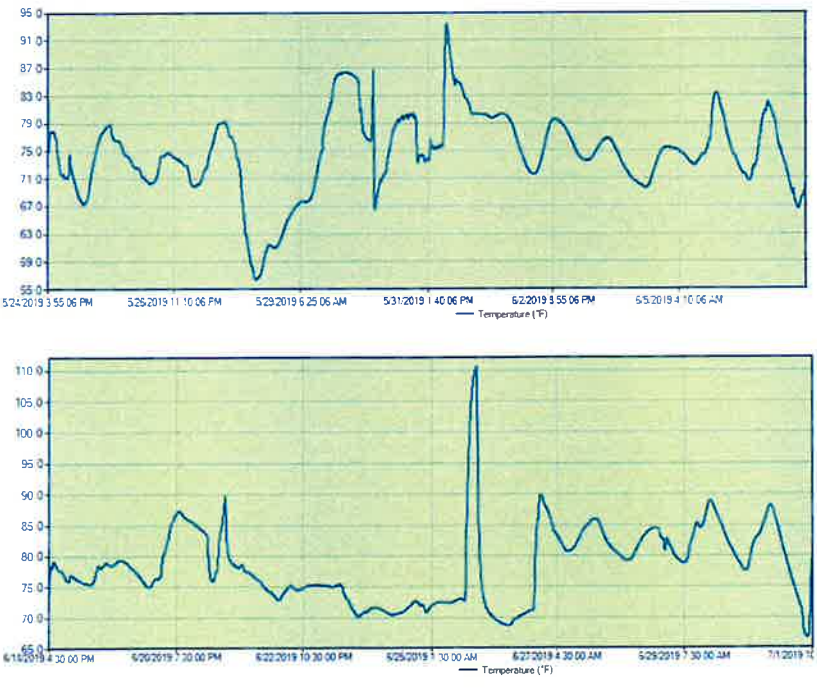
So, we did some experiments to see what really happens in the back of those trucks (at least as far as the temperature conditions). We shipped a bottle of Aprehend along with a temperature data logger to Phoenix, Arizona and Salina, Kansas and then had the bottle immediately returned to us in central Pennsylvania using the same shipping method (Figure 1). Upon return we compared the viability of the Aprehend (as measured by % germination) to the viability tested immediately after bottling.

In both cases when the Aprehend was tested upon return, the spores showed 95% viability, similar to the date they were bottled.

As a follow-up study we tested a bottle of Aprehend that was held at a temperature that averaged 107°F (range fluctuated between 105–110°F). As seen in Figure 2, Aprehend had plenty of viable spores (83% germination) after 15 days at 107°F. It wasn't until after 22 days that the viability started to drop off dramatically–enough to negatively effect the performance as a treatment.

The most important factor in maintaining the viability of Aprehend is the storage of the product once it is received by the PMP (NOT temperatures during transit), so we want to share some useful tips for the best lifetime and performance of Aprehend.

Figure 1 Temperature data logger results from shipment to Arizona (top) and Kansas (bottom) and returning to Pennsylvania. *Note: the temperature spike of 111°F did not occur during transit with the carrier. This temperature spike occurred in the private vehicle when the bottle was being dropped off at the carrier for return to ConidioTec.*



Recommended storage conditions

The Aprehend label states that the product should be stored between 40°F and 77°F in a cool, dry place away from heat or open flame. Under these conditions, Aprehend will remain effective for 12 months from the date of manufacture. Each bottle of Aprehend® is labeled with the batch number and the expiration date. Providing Aprehend® has been stored appropriately, the product can be used with confidence up to the printed expiration date.

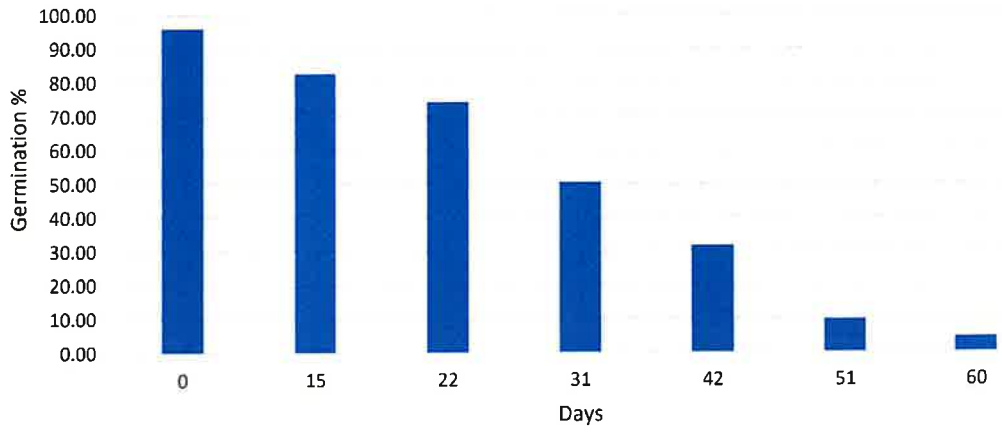
Cooler temperatures

Aprehend can be stored or exposed to temperatures below 40°F. Even freezing temperatures will not affect the efficacy or expected expiration of the product. Just make sure to warm it up before trying to apply with the spray gun, since viscosity will effect the aerosol and droplet size.

Higher temperatures

Temperatures above 80°F will begin to affect the efficacy and expected expiration date of Aprehend. Short periods of exposure to temperatures up to 95°F are unlikely to have a significant effect on efficacy of the product in the near term but will affect the long-term stability. Bottles of Aprehend that have been exposed to temperatures above 95°F are likely to have reduced shelf life and may be less effective if they are not used until close to the printed expiration date.

Figure 2 Aprehend viability (% germination) at 107.6°F average temperature shows decline over time.



for **MORE** info

*View and download case studies and much more technical information at www.**rockwelllabs**.com*

If bottles of Aprehend are exposed to temperatures above 100°F, it is likely that there will be some decline in efficacy of the product in the near term, and long-term stability will definitely have been compromised.

Where to store your Aprehend

Store your Aprehend in a cool, dry place. If your warehouse is not temperature controlled and is prone to heating up above 77°F in the hotter months, it would be best to store Aprehend in the office or other environment that is maintained at a comfortable temperature for employees.

Aprehend can be stored in a refrigerator, but this should be dedicated to non-food items. Never store any pesticide product in a refrigerator with food or beverages.

If you have difficulty in finding a suitable environment for storage of Aprehend, it may be better to purchase limited stock to ensure that all product is used well before the printed expiry date.

Traveling to and from jobs with Aprehend

During the summer, many regions of the US experience high temperatures during the day. Temperatures in cars and trucks can be even more extreme, particularly if they are parked in full sunshine. Under these conditions, it is important to ensure that Aprehend is not exposed to these extreme high temperatures. Many PMPs use a small cooler with an ice pack for transporting Aprehend during these hotter months. Providing a frozen ice pack is used each day, the cooler can be left in the car or truck during house visits and even overnight, unless temperatures are expected to remain above 80°F.

Alternatively, Aprehend can be carried into each job with the PMP to avoid exposure to high temperatures in a parked vehicle. A general rule of thumb is that if the temperature is comfortable for a human, Aprehend will remain effective. If you keep Aprehend with you in the cab it will also benefit from the A/C between jobs.

Always keep your bulk stock of Aprehend back at the office and travel with just one or two bottles, depending on the number of bed bug jobs you have planned for the day.

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Summer is coming..... How to handle Aprehend® as the temperature rises

Recommended storage conditions

The Aprehend® label states that the product should be stored between 40°F and 77°F in a cool, dry place away from heat or open flame. Under these conditions, Aprehend® will remain effective for 12 months from the date of manufacture. Each bottle of Aprehend® is labeled with the batch number and the expiration date. Providing Aprehend® has been stored appropriately, the product can be used with confidence up to the printed expiration date.

Cooler temperatures

Aprehend® can be stored or exposed to temperatures below 40°F. Even freezing temperatures will not affect the efficacy or expected expiration of the product.

Higher temperatures

Temperatures above 80°F will begin to affect the efficacy and expected expiration date of Aprehend®. Short periods of exposure to temperatures up to 95°F are unlikely to have a significant effect on efficacy of the product in the near term but will affect the long-term stability. Bottles of Aprehend® that have been exposed to temperatures above 95°F are likely to have reduced shelf life and may be less effective if they are not used until close to the printed expiration date.

If bottles of Aprehend® are exposed to temperatures above 100°F, it is likely that there will be some decline in efficacy of the product in the near term, and long-term stability will definitely have been compromised.

Where to store your Aprehend®

Store your Aprehend® in a cool, dry place. If your warehouse is not temperature controlled and is prone to heating up above 77°F in the hotter months, it would be best to store Aprehend® in the office or other environment that is maintained at a comfortable temperature for employees.

Aprehend® can be stored in a refrigerator, but this should be dedicated to non-food items. Never store any pesticide product in a refrigerator with food or beverages.

If you have difficulty in finding a suitable environment for storage of Aprehend®, it may be better to purchase limited stock to ensure that all product is used well before the printed expiry date. For example, bottles of Aprehend® that are stored under conditions where the daytime and nighttime temperatures fluctuate between 70°F and 90°F will remain effective for up to 4 months, but may well have reduced efficacy if used closer to the expiration date.

Traveling to and from jobs with Aprehend®

During the summer, many regions of the US experience high temperatures during the day. Temperatures in cars and trucks can be even more extreme, particularly if they are parked in full sunshine. Under these conditions, it is important to ensure that Aprehend® is not exposed to these extreme high temperatures. Many PMPs use a small cooler with an ice pack for transporting Aprehend® during these hotter months. Providing a frozen ice pack is used each day, the cooler can be left in the car or truck during house visits and even overnight, unless temperatures are expected to remain above 80°F.

Alternatively, Aprehend® can be carried into each job with the PMP to avoid exposure to high temperatures in a parked vehicle. A general rule of thumb is that if the temperature is comfortable for a human, Aprehend® will remain effective. If you keep Aprehend® with you in the cab it will also benefit from the A/C between jobs.

Always keep your bulk stock of Aprehend® back at the office and travel with just one or two bottles, depending on the number of bed bug jobs you have planned for the day.

What to do if Aprehend® has been exposed to a high temperature

IfAprehend® was accidentally exposed to a high temperature, it is best to assume that some damage was done. However, unless this exposure was extreme (>115°F), the product will still beeffective, but should be used soon after this exposure and kept at the lowest temperature possible to prevent further decline in efficacy. The guidelines in Table 1 (below) may be used as a decision guide to ensure that all applications of Aprehend® are conducted with effective product.

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TABLE 1

Temperature	Duration	Lifetime
0°F	Indefinitely	As per printed label
Up to 77°F	Indefinitely	As per printed label
90°F	Up to 2 weeks	2 months earlier than printed label
90°F	Up to 4 weeks	4 months earlier than printed label
100°F	Up to 1 week	2 months earlier than printed label
100°F	Up to 2 weeks	6 months earlier than printed label
110°F	1 day	4 months earlier than printed label
110°F	2 days	8 months earlier than printed label
115°F	Up to 1 day	Use product within 1 week of exposure
>115°F	>1 hour	Do not use product

WEEKLY TRAINING SESSION

May Application Procedures

Topic Category: Lawn
Recordable Verifiable Training Hours: 1.5

Objectives: This lesson is designed to teach our Application Procedures for May.

Length of lesson: Approximately 1 Hour and 30 minutes.

Materials needed:

- Training Guideline
- May Applications Training Document and What We Apply – What We Expect document located in the G: Drive Shared\GreenUp Reference Materials\GreenUP Protocols\Monthly Applications Information\2026\May
- **8 pounds** of 12-0-14 Shrub Fertilizer (16 ounces in a measuring cup is close to one pound)
- 1000 sq. ft. area of shrub bed
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests and training materials for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Hand out the Verifiable Training Record Form (VTRF)
- Begin the meeting by defining the training topic and handing out the Pre-test
- Distribute and review the training materials on May Application Procedures
    - Allow the Team Members to complete the Pre-test as the application information is discussed.
    - Encourage active participation from all Team Members
    - Ask probing questions to discuss key points.
    - Read and answer questions from the test and have the Specialists write in their answers.
    - 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
- Take all Specialists to the pre-measured shrub bed area. Apply the **8** pounds of 12-0-14 to the shrub bed area so they get an idea of how much fertilizer is being applied to all new shrub care services.
- 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 VTM's through Massey University.

WEEKLY TRAINING SESSION

May Application Procedures

Name_____ Date _____

PRE & POST TEST

1. T or F The fertilizer applied to St. Augustine starts in All Service Centers is the 20-0-6 + Atrazine at five pounds per 1000 sq. ft.

2. T or F The products applied to all regular St Augustine services is the 33-0-16, 0-0-1, NIS80-20, and Meridian.

3. T or F Talstar/Avalon is used as a liquid spot treat insecticide application on all grass types.

4. T or F Broadleaf weeds in a St. Augustine lawn are treated with 2 ounces of SBM1 per gallon of water.

5. T or F The fertilizer applied Bahia starts is 20-0-6 +Sulfur Barricade at 4 pounds (0-0-3 Barricade in Alachua) per 1000 sq. ft. used in All Service Centers.

6. T or F The fertilizer applied to Zoysia regulars at 5 pounds per 1000 sq. ft. is 14-0-14 with Pendimethalin (14-2-14 Pendimethalin in the Villages) used in All Service Centers.

7. T or F SBM2 can be mixed with Sedge Hammer.

8. T or F No insecticide is applied to grass types other than St. Augustine unless insect problems are found.

9. T or F Annual aerations are fertilized with 0-0-3 at 5 pounds or Granular Sulfur at 4 pounds per 1000 sq. ft.

10. T or F Broadleaf, sedge, and grassy weeds in Bermuda and Zoysia grass are treated with Dismiss South and Celsius.

11. T or F All new shrub care services are fertilized with 12-0-14 at 8 pounds per 1000 sq. ft.

12. T or F Every shrub on the property should be sprayed with the I&D Slurry.

13. T or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

WEEKLY TRAINING SESSION

May Application Procedures

PRE & POST TEST ANSWER KEY

1. T or (F) The fertilizer applied to St. Augustine starts in All Service Centers is the 20-0-6 + Atrazine at five pounds per 1000 sq. ft.

2. (T) or F The products applied to all regular St Augustine services is the 33-0-16, 0-0-1, NIS80-20, and Meridian.

3. (T) or F Talstar/Avalon is used as a liquid spot treat insecticide application on all grass types.

4. T or (F) Broadleaf weeds in a St. Augustine lawn are treated with 2 ounces of SBM1 per gallon of water.

5. (T) or F The fertilizer applied to Bahia starts is 20-0-6 +Sulfur Barricade at 4 pounds (0-0-3 Barricade in Alachua) per 1000 sq. ft. used in All Service Centers.

6. T or (F) The fertilizer applied to Zoysia regulars at 5 pounds per 1000 sq. ft. is 14-0-14 with Pendimethalin (14-2-14 Pendimethalin in the Villages) used in All Service Centers.

7. T or (F) SBM2 can be mixed with Sedge Hammer.

8. T or (F) No insecticide is applied to grass types other than St. Augustine unless insect problems are found.

9. (T) or F Annual aerations are fertilized with 0-0-3 at 5 pounds or Granular Sulfur at 4 pounds per 1000 sq. ft.

10. (T) or F Broadleaf, sedge, and grassy weeds in Bermuda and Zoysia grass are treated with Dismiss South and Celsius.

11. (T) or F All new shrub care services are fertilized with 12-0-14 at 8 pounds per 1000 sq. ft.

12. T or (F) Every shrub on the property should be sprayed with the I&D Slurry.

13. (T) or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

GREENUP LAWN, TREE & SHRUB CARE SERVICE PROTOCOLS

May 2026 LANDSCAPE APPLICATIONS

Geographical Areas Defined: "South" - Sarasota to Vero and South of this line. "Central" - Clearwater, Tampa, Odessa, Leesburg, Volusia and South of this Line to Sarasota and Vero - "North" - Brooksville, Ocala, to Palm Coast and North of this Line - "Tallahassee and Baton Rouge" – Tallahassee and Baton Rouge.

Lawn Care Accounts

1. St. Augustine
   a. New and Regular Customers (All Service Centers)
      Apply **1.25** pounds of 33-0-16 water soluble fertilizer, **0.33** ounces of NIS80-20, **18** ounces of 0-0-1 Bio-Blend, and **0.3** ounces of the Meridian per 1000 sq. ft.

The 33-0-16 and Meridian must be thoroughly dissolved. Put the materials into the drop tank mixing screen with the drop tank being about 3/4ths full of the required water with the pump and agitator running. Use the Lawn Wand to circulate the liquid material in the drop tank over the top of the materials until they are completely dissolved. Next, remove the mixing screen and add the remaining water to fill the drop tank to the appropriate level using the drop tank measuring stick. Insert the Lawn Wand deep into the tank and spray the bottom of the tank for about 60 seconds to ensure the material is completely dissolved and what is coming out of the spray nozzle is at the right concentration. **Be very careful of staining with this mixture!**

If chinch bugs are found at the time of a new or regular service, spot treat them with **1** ounce of Bifenthrin, **0.32** ounces of PBO-8, and **0.33** ounces of NIS80-20 using the backpack sprayer with an **8020E** spray tip. In addition to any regular service being performed.

All broadleaf weeds in St. Augustine lawns must be spot treated with the SBM2 Slurry at **2 ounces** of pre-mixed material using a backpack sprayer and the 11010-spray tip. Do not use SBM2 on Bahia grass! **SBM2 will KILL Bahia grass.**

2. Zoysia
   a. New and Regular Customers (All Service Centers)
      Apply **1.25** pounds of 33-0-16 water soluble fertilizer, **0.33** ounces of NIS80-20, **18** ounces of 0-0-1 Bio-Blend, and **0.3** ounces of the Meridian per 1000 sq. ft.

   b. New Customers (Alachua County)
      Apply **5** pounds of 20-0-6 **+Sulfur Barricade 0.25%** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

   c. Regular Customers (Alachua County)
      Apply **5** pounds of 20-0-6 **Acelepryn 0.67%** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

3. Bermuda
   a. New Customers (All Service Centers except Orange and Hernando Counties)
      Apply **5** pounds of 20-0-6 **+Sulfur Barricade 0.25%** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

May 2026 LANDSCAPE APPLICATIONS

b. New and Regular Customers (Orange and Hernando Counties)
Apply **1.25** pounds of 33-0-16 water soluble fertilizer, **0.33** ounces of NIS80-20, **18** ounces of 0-0-1 Bio-Blend, and **0.3** ounces of the Meridian per 1000 sq. ft.

c. Regular Customers (All Service Centers except Alachua, Orange, and Hernando Counties)
Apply **5** pounds of 20-0-6 **+Sulfur Straight** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

d. Regular Customers (Alachua County)
Apply **5** pounds of 20-0-6 **Acelepryn 0.67%** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

All broadleaf, sedge, and grassy weeds in Zoysia or Bermudagrass must be treated with Celsius at **0.11** ounces and Dismiss South at **0.28** ounces per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip. This mixture does a great job on each of the 3 classifications of weeds. **Do not use on St. Augustine, Bahia, or Seashore Paspalum grass; severe injury or death will occur.** Use a separate backpack dedicated for this use.

4. Centipede
   a. New and Regular Customers (All Service Centers)
   Apply **1.25** pounds of 33-0-16 water soluble fertilizer, **0.33** ounces of NIS80-20, **18** ounces of 0-0-1 Bio-Blend, and **0.3** ounces of the Meridian per 1000 sq. ft.

Broadleaf weeds in **Centipede are spot treated with 0.75 ounces of Change Up Herbicide** per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip. Do not use on St. Augustine grass or damage will occur. Use a separate backpack dedicated for this use.
Grassy weeds in **Centipede are spot treated with 2 ounces of Sethoxydim (Segment II)** per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip. Do not use on St. Augustine grass or damage will occur. Use a separate backpack dedicated for this use.

5. Bahia
   a. New and Regular Customers (All Service Centers except Alachua County)
   Apply **4** pounds of 20-0-6 **+Sulfur Barricade 0.28%** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

   b. New Customers (Alachua County)
   Apply **5** pounds of 0-0-3 **Barricade** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

   c. Regular Customers (Alachua County)
   Apply **5** pounds of 20-0-6 **+Sulfur Straight** per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

Broadleaf weeds in **Bahia are spot treated with 0.9 ounces of Change Up Herbicide** per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip. Do not use on St. Augustine grass or damage will occur. Use a separate backpack dedicated for this use.

May 2026 LANDSCAPE APPLICATIONS

6. Annual and New Aeration

   Apply 0-0-3 (Straight) at **5** pounds per 1000 sq. ft. or Granular Sulfur at **4** pounds per 1000 sq. ft.; typically, this will be setting 15 for sulfur, with the Lesco Calibration tool. (Depending on the soil pH) See the Aeration Service Protocol for complete details.

All new lawn care customers receive the above application protocols for New Customer Services. A *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular monthly lawn care protocol for the month in which the regular service is performed. Aeration plus the 0- 0-3 or Sulfur application is performed the month following the initial treatment.

Do not apply Barricade to newly installed sod or plugs; the roots will not establish properly, and damage can occur. Make sure to use your sidewalk guard properly around shrub beds.

Make sure to use your sidewalk guard properly around roadways, driveways, sidewalks and bodies of water. Maintain a 3-15 foot ring of responsibility depending on your county ordinance near all waterbodies. Remember blowing off the roadways, sidewalks, pavers, decks, and driveways is required after all granular fertilizer applications. Blow the material back into the turf areas. Do not allow any fertilizer to go into a storm sewer or pool. Blow off any landscape curbing as well to avoid staining.

Inspect all lawns very carefully for Chinch bug activity. Good inspections, perfect preventive treatment and proper proactive treatments must be done. Perform proactive inspections for any chinch bug problem 10 to 14 days after treatment to ensure they are dead. If there is no further activity, do not apply any additional control materials.

Sedge must be treated in St. Augustine and Bahia with Sedge Hammer **SLURRY** at **2** ounces. per gallon of water using the backpack sprayer and the 11010-spray tip. Treat all sedge. A proactive treatment may be needed in 30 days to ensure control. **DO NOT ADD SEDGE HAMMER TO THE SBM2. THIS WILL KILL THE TURF**. Sedge treatments work best when the turf has not been mowed for a few days before treatment and will not be mowed for a couple of days after treatment. In situations where a large amount of kyllinga sedge is present, the customer must be informed that this area will turn brown. If the area is so large and full of sedge that sodding or plugging will be needed after control has been achieved, do not treat the sedge without first communicating with the customer and getting their approval in writing. Sedge treatment must remain dry for at least 3 hours to be successful.

The liquid broadcast applications at this time of year are extremely important and a huge investment in season long control for lawn damaging insects. Perform the applications perfectly. Ensure walking speed, product measurements (including the amount of water in the drop tank), and spray patterns are perfect. Bucket checks MUST be performed daily to ensure we maintain 5 gallons per minute.

Shrub Service

Certain shrubs (see the list below) are treated with the I&D materials on a preventative basis for insect and disease. Most shrubs are treated on an as needed basis only. **Do not** treat every shrub on the property. This is not necessary or beneficial.

May 2026 LANDSCAPE APPLICATIONS

a. New and Regular Customers (All Service Centers)
Apply 12-0-14 at **8** pounds per 1000 sq. ft. 8-0-12 is used instead in beds that contain small palms and Sagos at **12.5** pounds per 1000 sq. ft. Keep this material off concrete surfaces. Perform insect and disease treatment as prescribed below.

b. New and Regular Customers (All Service Centers)
Treat shrubs that are prone to insect or disease problems.
- Apply **2** ounces of the I&D Drop Tank **Slurry** (with **Merit** and **Talaris/Transom**) per 10 gallons of water.

Shrubs that are treated on a preventative basis with **every initial and regular service** include:
- Viburnum (especially the Awabuki and Suspensum)
- **Azalea
- Crape myrtle
- **Camellia
- **Gardenia
- Sago
- Pittosporum
- **Indian Hawthorne
- Holly
- **Knock-Out Roses
- Ficus (South FL)

The list above may be expanded depending on the geographical location and specific concerns in the Service Center.
**For the protection of pollinating insects, do not spray the foliage of shrubs that are in full bloom or if pollinators are in the area.

Do not allow pesticides of any kind to contact bodies of water or fish ponds. Many of the materials we use can be deadly to fish.

Set proactive treatments that are necessary to control insect or disease problems that threaten the life of the plant. Make sure to treat the top and bottom sides of the leaf. Inspect all shrubs thoroughly!!

Treat all Crape Myrtles to prevent aphids. Treat the lower trunk (4 feet high and down) of all crape myrtles. If the height does not exceed 10 feet, treat the foliage as well.

Specimen Palm Quarterly Injection Service

Treatment for Palm Bud Weevil and piercing-sucking insect control is performed in March, April, or May using Ima-jet (undiluted) at a rate of 5 milliliters per inch of trunk diameter. If nutrition or disease is a concern for a new customer, either Phospho-jet or Palm-jet may also be performed at the time of initial service using a separate port. See GreenUP Protocol – Specimen Palm Quarterly Injection Service for complete details.

May 2026 LANDSCAPE APPLICATIONS

Do a quality job on every application. Perform thorough inspections and perfect applications (especially for CHINCH BUGS and SOD WEBWORMS!). Always being mindful of the 5 key principles, great communication with the customer to provide long-term sustainable solutions, perfect measuring, perfect calibration, and perfect walking speed is what is needed to keep our customers happy to prevent service calls, cancellations, and claims.

What We Do and What to Expect – May 2026 Landscape Applications

Watering instructions for all new and regular LAWN CARE services are: Please irrigate with ¼ inch of water if there is no rain within 24 hrs."

Liquid Applications New and Regular Lawn Care Services (Various Service Centers and all grass types)

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Liquid Broadcast application of fertilizer.	This application will provide a moderate amount of nitrogen (except Centipede and Bahia), potassium, chelated micro-nutrients and humic acid to enhance and maintain good color and growth.	An improvement in the color and growth of the lawn will be achieved in about 7 to 10 days.	"This fertilizer application will help enhance and maintain good color and growth. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Liquid Broadcast application for the prevention and control of lawn damaging insects.	All grass types are treated for the prevention and control of lawn damaging insects such as chinch bugs, grubs, and mole crickets.	The primary purpose of this application is to prevent lawn damaging insects from becoming a problem. If chinch bugs are present at the time of treatment, they will stop feeding immediately after treatment and control will be achieved over a 10-to-14-day period.	"Your lawn was treated to prevent lawn damaging insects such as chinch bugs, mole crickets and grubs. Preventative treatments are beneficial because they keep the populations of lawn damaging insects low and reduce the need for reactive treatments and lawn damage."
Post-emergent weed control applied as a spot treatment using the backpack applicator for low volume application.	We achieve excellent control of practically all types of broadleaf weeds. Sedge can also be treated if it is competing with the turf or if it is a concern for the customer.	The weed control materials we use are a combination of slow and quick acting materials. Affects to the weeds can be seen in about 5 to 7 days. Control is achieved within 3 - 4 weeks.	"The weed control materials applied will greatly reduce the amount of weeds in your lawn within 3 to 4 weeks. A second application may be necessary in severe cases."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their **regular** lawn care treatment in May via the printed Service Report in All Service Centers: "Today, I provided a liquid broadcast application of fertilizer and insect control materials to enhance and maintain the color and growth of your lawn and to prevent lawn damaging insects from becoming a problem. I also inspected and treated any existing broadleaf weeds and diseases as needed. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Granular Applications New and Regular Lawn Care Services (Various Service Centers and all grass types)

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Dry fertilizer application with insect prevention or pre-emergence weed control on Bermuda and Bahia.	This application will provide a substantial amount of nitrogen, potassium and minor elements. 65% of the nitrogen will be released slowly while the other 35% can be used right away.	The improvement of growth and color may be achieved slower at this time of the year if the temperatures evening temperatures are cool.	"This fertilizer application will help achieve good spring green-up. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Broadcast treatment treatment of insecticide to Bermuda and Zoysia lawns in Alachua County.	This is the time of year where we begin to treat lawns proactively for insects. Turf Caterpillars are a very common and damaging pest of Zoysia and Bermuda. This treatment is performed to reduce new insect populations.	If caterpillars are already at damaging levels, expect the damage in the lawn to get a little worse before it gets better. Control is achieved slowly and may take up to 14 days.	"The insect control application is for the control of lawn damaging insects. It could take up to a week or two for the wed worms to die. The damage may look like it is getting a little worse for a week or so, but that response is normal due to the feeding and damage that has already been done."
Post-emergent weed control applied as a spot treatment using the backpack applicator for low volume application.	We achieve excellent control of practically all types of broadleaf weeds. Sedge can also be treated if it is competing with the turf or if it is a concern for the customer.	The weed control materials we use are a combination of slow and quick acting materials. Noticeable affects to the weeds will take about 5 to 7 days. Control is achieved within 3 to 4 weeks.	"The weed control materials applied will greatly reduce the amount of weeds in your lawn within 3 to 4 weeks. A second application may be necessary in severe cases."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their **new** lawn care treatment in May via the printed Service Report in All Service Centers: "Today, I provided a granular broadcast application of fertilizer to enhance and maintain the color and growth of your lawn and to prevent grassy and broadleaf weed seeds from sprouting. I also performed a liquid localized treatment to control lawn damaging insects. Additionally, I inspected and treated any existing broadleaf weeds and diseases as needed. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Annual and New Aeration Services

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Core aeration	Aeration is the most beneficial service we perform. It stimulates root growth, helps break down thatch, and allows water and air to get to the root system.	Increased root growth, better soil structure, and an improvement in the overall health of the plant. Leaf tissue will look better in the long run but there will not be a visible change in the short term.	"The aeration will help create healthy plant roots and improve the vigor and heartiness of the lawn."
Depending on the soil pH at the customer's home, a broadcast application of 0-0-3 or sulfur to lower soil pH according to our Annual Aeration Protocol.	The 0-0-3 will aid in development of healthy soils to enhance drought and stress tolerance. Proper soil pH is essential for the availability of soil nutrients. The application of granular sulfur will lower the soil pH when it is too high for the particular turf type.	Improved root growth as well as healthy soils. If the soil pH is higher than what required for a particular turf type, the application of sulfur will lower the soil pH and allow bound nutrients to become available to the turf resulting in healthier turf with a darker green color.	"The application of 0-0-3 works very well in conjunction with aeration to enhance root growth and creating healthy soils. Please irrigate with ¼ inch of water if there is no rain within 24 hrs." "The application of granular sulfur will lower the soil pH to enhance the availability of soil nutrients. Please irrigate with ¼ inch of water if

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their Aeration Service via the printed Service Report: "Today, I inspected your irrigation system, aerated your lawn and took a soil sample to test the soil pH. I also provided a broadcast application of organic material and nutrients (or sulfur to lower the pH). This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Shrub Care Customers

What We Use	Benefit of the	What To Expect	What to Tell the Customer
Broadcast application of dry fertilizer (New and Regular Customers in All Service)	This application will provide a substantial amount of nitrogen, potassium and minor elements to help achieve spring green-up.	The growth and color of the shrubs should improve in 10 to 14 days.	"This fertilizer application will help enhance the color and stimulate new growth of your shrubs. Please irrigate with ¼ inch of water if there is no rain within 24 hrs.
Foliage application (as needed) of liquid insect and disease control materials. (New and Regular Customers)	The insect and disease control materials provide both contact and system control of shrub damaging insects and diseases.	Shrubs that either have or are prone to have insect and disease problems are treated. The application will provide control of soft bodied insects such as aphids and lace bugs within 2 to 4 days. Scale insects will require 2 to 3 weeks for control. Fungal leaf spots will be suppressed. Keep in mind that leaves that have been damaged by insects or disease do not turn green after control has been achieved. Damaged leaves will need to be trimmed off to achieve visual benefits.	"This application will provide control of existing insects and foliar diseases. Leaves previously damaged will need to be trimmed off to simulate new growth to cover up the damage. Follow-up treatments may be required for certain insect and disease problems."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their new shrub care treatment in May via the printed Service Report: "Today, I provided a granular application of fertilizer to enhance and maintain the color and growth of your landscape shrubbery. I also inspected and treated any existing shrub damaging insects and diseases. Additionally, I inspected all turf areas for weeds, insects and diseases. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

Primary Landscape Issues in May

The fertilizer we are applying for regular service in all grass types (except Bermuda and Bahia) in All Service Centers (except Alachua County zoysia) is a water-soluble 33-0-16. This is a granular material with stabilized nitrogen that is dissolved in water to be able to apply as a liquid. At the rate we use, 0.4 pounds of nitrogen and .2 pounds of potassium will be applied per 1000 sq. ft. In addition to this, we add 0-0-1, which contains Humic acid, seaweed extract, magnesium and chelated iron and manganese. The Humic acid and seaweed extract is proven to enhance rooting. Chelated sources of iron and manganese protect the iron and manganese from becoming insoluble to keep it available to the plant.

The fertilizer we are applying for New Customers with Bermuda turf is a granular 20-0-6 +Sulfur Barricade. (except Orange and Hernando Counties) The nitrogen source is a blend of ammonium sulfate, polymer coated Urea (slow release) and Methylene Urea (water insoluble). 65% of the total nitrogen source is slow release. At the rate we use, 1 pound of nitrogen and 0.3 pounds of potassium will be applied per 1000 sq. ft. along with preemergent to reduce new weed growth. The fertilizer application this month is important to begin to stimulate new growth.

Our preventative chinch bug treatments begin in May. These treatments are very important to keep the chinch bug populations from getting to levels that will cause turf damage. The number of chinch bugs present at this time may not be enough to cause turf injury, but they are there; you are just not seeing the damage yet. If the chinch bugs are not controlled at this time, we could have extensive damage by our next scheduled visit and a more difficult time controlling them for the rest of the year. If chinch bug activity is found, they must also be spot treated with bifenthrin, PBO-8, and NIS80-20 and a pro-active inspection must be set for 10 to 14 days after treatment to ensure the chinch bugs are dead. Very thorough inspections will be needed in all Service Centers and spot treatments must be performed with the regular service where chinch bugs are found.

At this time of the year, the vast majority of adult mole crickets have laid eggs and died. Eggs will begin to hatch in the later part of May and will continue through June. Our insect control applications performed at this time of the year will kill the young mole crickets as they hatch from the egg.

The weed problems that occurred in March and April will dramatically decline in May. Most of the weeds we had been dealing with were winter annual broadleaf weeds. These problems were controlled on the vast majority of our lawns through our post-emergent applications by the end of April. In addition, the winter annual weeds decline naturally as the warmer summer temperatures arrive. Summer annual weeds will be on the rise, but the turf will be growing more actively and will compete better with the weeds than it was able to in the cooler months.

The need for supplemental irrigation will continue to be high in May. Warm weather and low humidity increase the plant's demand for moisture. In the absence of rain, watering twice a week is typically not sufficient to prevent localized dry spots and potentially damage from drought stress. At a minimum, spot watering of localized dry areas will be needed. Provide the customer with the information necessary to address this problem and sell our Irrigation Service whenever possible. All customers need this service.

Piercing- sucking insects on shrubbery are a big problem at this time of the year. Look for sooty mold to be an indicator. The black mold which feeds on honeydew from the insects can be seen from a

distance, informing the observant Inspector, Technician, and Lawn Specialist to inspect closer for aphids, scales, or mealy bugs. Ant activity in, on, or around homes and shrubs can also be an indicator of insects on the nearby shrubbery. Set service leads for our pest service and upgrading our bimonthly service to monthly when ants are found. The best control for ants indoors or outdoors is to eliminate their natural food sources, and typically this is an insect presence on adjacent shrubbery.

Magnolias continue to drop some of their older leaves in May. This is a natural occurrence. New growth and flowers will appear soon.

May is a great time of year for Landscape, renovation, and irrigation Sales. Opportunity is everywhere. Our customers and potential customers need our help and expertise. It is still SPRING; take advantage of the opportunity! Spring has sprung and life is good! Help people have the landscape they always wanted, have fun doing it and make a lot of money. This is a win-win for everyone. So……

SELL, SELL, SELL AND SERVICE, SERVICE, SERVICE! SELL AND SERVICE YOUR BRAINS OUT!

WEEKLY TRAINING SESSION

May Application Procedures

Topic Category: Lawn
Recordable Verifiable Training Hours: 1.5

Objectives: This lesson is designed to teach our Application Procedures for May.

Length of lesson: Approx 1 Hour and 30 minutes.

Materials needed:

- Training Guideline
- May Applications Training Document and What We Apply – What We Expect document located in the G: Drive Shared\GreenUp Reference Materials\GreenUp Protocols\Monthly Applications Information\2026\Georgia\May
- **8 pounds** of 12-2-14 Shrub Fertilizer (16 ounces in a measuring cup is close to one pound)
- 1000 sq. ft. area of shrub bed
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests and training materials for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Hand out the Verifiable Training Record Form (VTRF)
- Begin the meeting by defining the training topic and handing out the Pre-test
- Distribute and review the training materials on May Application Procedures
    - Allow the Team Members to complete the Pre-test as the application information is discussed.
    - Encourage active participation from all Team Members
    - Ask probing questions to discuss key points.
    - Read and answer questions from the test and have the Specialists write in their answers.
    - 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
- Take all Specialists to the pre-measured shrub bed area. Apply the **6** pounds of 12-2-14 to the shrub bed area so they get an idea of how much fertilizer is being applied to all new shrub care services.
- 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 VTM's through Massey University.

WEEKLY TRAINING SESSION

May Application Procedures

Name _____ Date _____

PRE & POST TEST

1. T or F The materials applied to all new Bermuda or Zoysia lawn care services is 4 pounds of 32-5-7 per 1000 sq. ft.

2. T or F Shrub care service is provided to new and regular Monthly Landscape services.

3. T or F 0-0-3 DTPA is applied to annual aerations if the soil pH is 6.5 or higher at 5 pounds per K.

4. T or F The fertilizer applied to Tall Fescue starts is the 25-0-10 + Dimension at 4 pounds per 1000 sq. ft.

5. T or F The fertilizer applied to Every Other Month Tall Fescue regulars is the 25-0-10 + Dimension at 4 pounds per 1000 sq. ft.

6. T or F Every Other Month Lawn Care customers with Warm Season turf receive the same treatment as Regular Monthly Landscape customers with Warm Season Turf.

7. T or F Sedge is treated in Tall Fescue with Sedgehammer.

8. T or F Broadleaf, Sedge and Grassy weeds in Tall Fescue are treated with 0.11 ounces of Celsius and 0.28 ounces of Dismiss South per 1000 sq. ft.

9. T or F Broadleaf, Sedge and Grassy weeds in Bermuda and Zoysia are treated with 0.11 ounces of Celsius and 0.28 ounces of Dismiss South per 1000 sq. ft.

10. T or F Our Shrub fertilizer is the12-2-14, which is applied to new and regular Monthly Landscape customers this month at 8 pounds per 1000 sq. ft.

11. T or F Every shrub on the property should be sprayed with the I&D Slurry.

12. T or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

WEEKLY TRAINING SESSION

May Application Procedures

PRE & POST TEST ANSWER KEY

1. T or F The materials applied to All New Bermuda or Zoysia lawn care services is 4 pounds of 32-5-7 per 1000 sq. ft.

2. T or F Shrub care service is provided to new and regular Monthly Landscape services.

3. T or F 0-0-3 DTPA is applied to annual aerations if the soil pH is 6.5 or higher at 5 pounds per K.

4. T or F The fertilizer applied to Tall Fescue starts is the 25-0-10 + Dimension at 4 pounds per 1000 sq. ft.

5. T or F The fertilizer applied to Every Other Month Tall Fescue regulars is the 25-0-10 + Dimension at 4 pounds per 1000 sq. ft.

6. T or F Every Other Month Lawn Care customers with Warm Season turf receive the same treatment as Regular Monthly Landscape customers with Warm Season Turf.

7. T or F Sedge is treated in Tall Fescue with Sedgehammer.

8. T or F Broadleaf, Sedge and Grassy weeds in Tall Fescue are treated with 0.11 ounces of Celsius and 0.28 ounces of Dismiss South per 1000 sq. ft.

9. T or F Broadleaf, Sedge and Grassy weeds in Bermuda and Zoysia are treated with 0.11 ounces of Celsius and 0.28 ounces of Dismiss South per 1000 sq. ft.

10. T or F Our Shrub fertilizer is the12-2-14, which is applied to new and regular Monthly Landscape customers this month at 8 pounds per 1000 sq. ft.

11. T or F Every shrub on the property should be sprayed with the I&D Slurry.

12. T or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

May 2026 LANDSCAPE APPLICATIONS

Monthly Landscape Accounts

1. Warm Season Grasses
   New Customers
   Apply **4** pounds of 32-5-7 with **Pendimethalin** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

2. Cool Season Grasses
   New Customers
   Apply **4** pounds of 25-0-10 with **Dimension** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

3. Shrub Care – **New** Monthly and **Regular** Landscape Customers
   Apply 12-2-14 at **8** pounds per 1000 sq. ft. Keep this material off concrete surfaces. Perform insect and disease treatment using our I&D Slurry as prescribed below.

Certain shrubs (see the list below) are treated on a preventative basis for insect and disease. Use **2** ounces of Insect and Disease Drop Tank **slurry** (with **Merit** and **Talaris**) per 10 gallons of water. Most shrubs are treated on an as needed basis only. **Do not** treat every shrub on the property. This is not necessary or beneficial.

Shrubs that are treated on a preventative basis with **every** initial and regular service include:

- Azalea**
- Camellia
- Gardenia**
- Pittosporum
- Indian Hawthorne**
- Holly (all varieties)
- Laurels (all varieties)
- Knock-Out Roses**
- Crepe Myrtle**

The list above may be expanded as needed.
**For the protection of pollinating insects, do not spray the foliage of shrubs that are in full bloom or if pollinators are in the area.

All broadleaf, sedge, and grassy weeds in **Warm Season Turf** must be treated with Celsius at **0.11** ounces and Dismiss South at **0.28** ounces per gallon of water per 1000 sq. ft. from the backpack sprayer and the 11010-spray tip. **DO NOT USE ON COOL SEASON TURF**.

May 2026 LANDSCAPE APPLICATIONS

Every Other Month Lawn Care Accounts

1. Warm Season EOM Grasses
   a. New Customers
      Apply **4** pounds of 32-5-7 **with Pendimethalin** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

   b. Regular Customers
      Apply **4** pounds of 32-5-7 **Straight** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

2. Cool Season EOM Grasses
   New and Regular Customers
   Apply **4** pounds of 25-0-10 with **Dimension** per 1000 sq. ft.; typically, this will be setting 15 with the Lesco Calibration tool.

All broadleaf and grassy weeds in **Cool Season Turf** must be spot treated with Speed Zone at **1** ounce, Drive XLR8 at **1.32** ounces and Methylated Seed Oil at **0.5** ounces per gallon of water to cover 1000 sq. ft. using the backpack sprayer and the 11010-spray tip.
Sedge must be treated in Cool Season Turf with Prosedge SLURRY at **2** oz. per gallon of water using the backpack sprayer and the 11010-spray tip. A proactive treatment may be needed in 30 days to ensure control.

Annual and New Aeration

Inspect and flag the irrigation heads. Take soil pH samples. Aerate all turf areas. Apply Limelight ProCal or 0-0-3, depending on pH, at **5** pounds per 1000 sq. ft.; typically, this will be setting 16 with the Lesco Calibration tool.

All new lawn care customers receive the above application protocols for New Customer Services. A *complete* Regular Service application is done (at full charge) about 30 days after the initial application using the regular monthly lawn care protocol for the month in which the regular service is performed. Aeration and Limelight ProCal application is performed the month following the initial treatment for Warm Season grasses or in September or October for Cool Season grasses.

Make sure to use your sidewalk guard properly around roadways, driveways, and sidewalks. Remember blowing off the roadways, sidewalks, pavers, decks, and driveways is required after all granular fertilizer applications. Blow the material back into the turf areas. Do not allow any fertilizer to go into a storm sewer. Blow off any landscape curbing as well to avoid staining.

Do not apply pre-emergence herbicides to newly installed sod, seed, or plugs; the roots will not establish properly, and damage can occur.

Inspect all landscapes very carefully for insect and disease activity. Good inspections, proper treatment and proper proactive treatments must be done.

May 2026 LANDSCAPE APPLICATIONS

Do a quality job on every application. Perform perfect applications with perfect measuring, perfect calibration, and perfect walking speed. Always be mindful of the 5 key principles. Provide thorough inspections and great customer communication with the goal of providing long-term sustainable solutions. This is what is needed to keep our customers happy, to prevent cancellations and claims.

What We Do and What to Expect – May 2026 Landscape Applications

Watering instructions for all new and regular LAWN CARE services are: Please irrigate with ¼ inch of water if there is no rain within 24 hrs."

New Customers

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
New Customers with Warm or Cool Season Turf- Granular fertilizer with pre-emergence weed control.	This application will provide a substantial amount of nitrogen, potassium and minor elements. 25% of the nitrogen will be released slowly while the other 75% can be used right away. The pre-emergent will prevent weeds from sprouting.	The improvement of growth and color may be achieved slower at this time of the year if the evening temperatures are cool. Far fewer weeds will emerge in a turf that has been treated with a pre-emergence herbicide as opposed to one that has not been treated.	"This application will provide a noticeable improvement in the color and growth in about 2 weeks and will help prevent annual broadleaf weeds and spring emergence of crabgrass." Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Post-emergent weed control applied as a spot treatment using the backpack applicator for low volume application.	We achieve excellent control of practically all types of weeds.	Noticeable results will take 5 to 7 days. Control is achieved within 3 to 4 weeks.	"The weed control material applied will greatly reduce the amount of weeds in your lawn within 3 to 4 weeks. A second application may be necessary in severe cases."
Inspection for lawn damaging insects and diseases	Lawn damaging insects and diseases can be devastating to turf. Frequent inspection and treatment as needed is crucial in the prevention of turf damage.	Lawn damaging insects and diseases are treated on an as needed basis.	"Your lawn was inspected for lawn damaging insects and diseases. Any problems found are treated on an as needed basis."

Regular Monthly Landscape Customers with Warm or Cool Season Turf receive shrub care service as described below. Turf is inspected and treated on an as needed basis only this month.

Shrub Care – New and Regular Monthly Landscape Customers

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Shrub Care Service - Broadcast application of dry fertilizer	This application will provide a substantial amount of nitrogen, potassium and minor elements to help achieve good color and growth.	The growth and color of the shrubs should improve in 10 to 14 days.	"This fertilizer application will help improve the color and growth of your shrubs. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Shrub foliage application of liquid insect and disease control materials.	The insect and disease control materials provide both contact and system control of shrub damaging insects and diseases.	Shrubs that either have or are prone to have insect and disease problems are treated. The application will provide control of soft bodied insects such as aphids and lace bugs within 2 to 4 days. Scale insects will require 2 to 3 weeks for control. Fungal leaf spots will be suppressed. Keep in mind that leaves that have been damaged by insects or disease do not turn green after control has been achieved. Damaged leaves will need to be removed to achieve visual benefits.	"This application will provide control of existing insects and foliar diseases. Leaves previously damaged will need to be trimmed off to simulate new growth to cover up the damage. Follow-up treatments may be required for certain insect and disease problems."

What We Do and What to Expect – May 2026 Landscape Applications

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their treatment in May via the printed Service Report. This information applies to all New Turf applications: "Today, I applied a broadcast granular application of fertilizer with micro-nutrients and pre-emergence weed control to provide good spring color and to prevent annual broadleaf and grassy weeds from germinating. I also inspected for any existing broadleaf, sedge or grassy weeds as well as insects and diseases and treated those as needed. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their treatment in May via the printed Service Report. This information applies to all **New and Regular** Monthly Landscape Customers when Shrub Care is provided: "Today, I provided a granular application of fertilizer to enhance and maintain the color and growth of your landscape shrubbery. I also inspected and treated any existing shrub damaging insects and diseases. Additionally, I inspected all turf areas for weeds, insects and diseases. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

Annual and New Aeration Services

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Core aeration	Aeration is the most beneficial service we perform. It stimulates root growth, helps break down thatch, and allows water and air to get to the root system.	Increased root growth, better soil structure, and an improvement in the overall health of the plant. Leaf tissue will look better in the long run but there will not be a visible change in the short term.	"The aeration will help create healthy plant roots and improve the vigor and heartiness of the lawn."
Broadcast application of high efficiency lime *or 0-0-3 an organic material with potassium and iron*	This application will increase the pH of Georgia's very acidic soils. *Or enhance soil health and vigor by adding a source of nutrients.*	Visual results of this treatment may be seen as a slight increase in growth, density and overall health of the turf, but the primary benefit is to raise the soil pH to better utilize nutrients applied with future services. *Or improve color and soil health by adding organic material and iron*.	"Your lawn was treated with a high efficiency lime material to balance the pH of your soil. This application will help your lawn better utilize nutrients applied with future services." Or "Your lawn was treated with an organic material that contains iron and potassium to improve color and soil health."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their Aeration Service via the printed Service Report: "Today, I inspected your irrigation system, aerated your lawn and took a soil sample to test the soil pH. I also provided a broadcast application of granular high efficiency lime. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Primary Landscape Issues in May

May is a shrub care month for regular Monthly Landscape Customers; there is no scheduled application for the turf, but it is inspected and treated as needed. All shrubbery is fertilized with our custom blended 12-2-14 shrub fertilizer. This application will stimulate good color and growth to the shrubs and small trees. In addition to the shrub fertilizer application, all landscape shrubbery is inspected for insects and disease. Selected shrubs are treated on a preventive basis and the other shrubbery is treated on an as needed basis.

The fertilizer we apply to new customers with Bermuda and Zoysia grass is a granular 32-5-7 with pre-emergence weed control. 25% of the nitrogen source is polymer coated urea to extend the color response. At the rate we use, 1.28 pounds of actual nitrogen is applied along with 0.28 pounds of potassium and micro-nutrients. The pre-emergence weed control will prevent annual broadleaf and grassy weeds.

The fertilizer we apply to new and regular customers with Tall Fescue is a granular 25-0-10 with pre-emergence weed control. 25% of the nitrogen source is polymer coated urea to extend the color response. At the rate we use, 1 pound of actual nitrogen is applied along with 0.4 pounds of potassium and micro-nutrients. The pre-emergence weed control will prevent annual broadleaf and grassy weeds.

May is the month when **Bermuda and Zoysia** lawns continue their spring green up. **These grasses should be mowed about an inch lower than normal to remove brown leaves that may block new shoots from receiving sunlight.**

Tall Fescue lawns will continue to look very good in May. May temperatures are typically good for Fescue lawns and applied nutrients achieve great results. As the temperatures continue to warm up, Tall Fescue lawns will go into a semi-dormant state.

The primary emphasis for turfgrasses in May continues to be spring fertilization and the prevention of annual broadleaf and grassy weeds. These applications are extremely important to stimulate good color and growth and for the prevention of weeds well into the summer months.

Annual Bluegrass and winter annual broadleaf weeds continue to be a concern in May. Our pre-emergent weed control applications will be a big help in suppressing this problem; however, an increase in service calls for weeds and weed control applications should be expected.

Brown patch fungus can be a problem this month. Look for circular patches of damaged turf with yellow, orange or purple grass blades on the outside border of the patch. The base of the blade will be rotten and will slide out easily when pulled. Re-growth in the center of the circular patch may give the damaged area a "doughnut" like appearance. Fungicide applications will be necessary to stop the spread of the disease and allow the turf to recover.

It is possible that Spring Dead Spot will be seen this month. Spring dead spot (SDS) is a persistent and destructive disease of Bermudagrass in North Georgia. The disease has also been observed in Zoysiagrass, although less frequently. Various fungi responsible for this disease are active mostly in the fall and somewhat in the spring when cool, moist conditions exist. Infection of the turfgrass begins when soil temperatures are less than 70 degrees, but above 50 degrees. The fungi do not kill Bermudagrass directly, but rather make the turfgrass more susceptible to cold and freezing injury by feeding on roots, rhizomes, and

stolons. Damage is typically noticed when the turf greens up after dormancy. Well-defined circular patches of dead, bleached-out grass are noticeable in the affected areas. Non-infected Bermudagrass resumes growth, accentuating the noticeability of the damaged areas. Recovery from the disease is very slow. Because turfgrass in the affected patches is dead, the primary means of recovery occurs by the spread of rhizomes and stolons into the dead patch. Symptoms can remain visible well into the growing season. If preventive fungicide applications are not performed in the fall when the disease is active, it is likely that these patches will reappear in the same location the following spring. For this reason, customers with Spring Dead Spot need to be flagged and fall fungicide applications will need to be performed.

The need for supplemental irrigation can be variable in May depending on the temperatures and humidity levels. In the absence of rainfall, supplemental watering may be needed every 10 days to two weeks.

Piercing- sucking insects on shrubbery continue to increase in May as many plants begin to produce more new growth. Look for sooty mold to be an indicator. The black mold which feeds on honeydew from the insects can be seen from a distance, informing the observant Inspector and Lawn Specialist to inspect closer for aphids, scales or mealy bugs.

The larval and adult stages of various beetles and weevils become increasingly active in May. There are many different species of beetles and weevils that cause damage to plants in Georgia. The most common the Chafers, Japanese Beetles and May and June Beetles. Weevils are beetles with a snout or bill; the most commonly known is the Bill bug. Weevil larvae differ in appearance from beetle larvae in that beetle larvae have three pairs of legs and weevil larvae are legless. The larval stage of both beetles and weevils is known as a grub. Grubs are cream colored, stout worm-like creatures. Most beetle grubs rest in a “C” shaped position. It is common for grubs to cause injury to turfgrass. Turf injury is typically recognized as wilting turf (even though the soil is moist) due to the feeding on the root system. Because the roots have been eaten, turf may pull back easily from the soil and be rolled back like a carpet. Beetle adults will commonly feed on the foliage of ornamental shrubbery. The Japanese beetle is the most voracious of those listed above.

Freeze damage to ornamental shrubbery may be noticed as a cracking and splitting of the bark. Damaged branches may remain green and appear healthy for a few months followed by sudden browning and death of branches or the entire plant. Inform customers of turf areas or plant material that has been permanently damaged by frost or freeze. If plant material has been permanently damaged, documentation will be crucial to avoid future claims and customer cancellations. Make sure you thoroughly document this damage.

May is a good time of year to prune trees and shrubs. Branches that are dead, diseased or dysfunctional should be removed. Trimming for shape should also be performed assuming that the particular plant does not have flower buds that are about to open.

Tent caterpillars are active in May. Look for silken webbing wrapped around branch crotches. These caterpillars are common in Cherry Laurels and Pecan trees. Bifenthrin works well for trees that are sprayable size and tree injection can be performed for trees that are too large to spray.

Oak leaf tier may be a problem in May. Oak leaf tiers are small caterpillars that feed on the new growth of Oaks. These caterpillars hang from silken webs often becoming a tremendous nuisance. If the tree is sprayable size it can be treated with Bifenthrin and tree injection can be performed for trees that are too large to spray. Oak leaf tier are not severely damaging to the tree.

What We Do and What to Expect – May 2026 Landscape Applications

Make May a success by constantly looking for opportunities, offering solutions and asking for the business. It is springtime and time to get the lawns and shrubs growing again and looking good. Landscape sales should be rocking in May. Every lawn is a lead. People need our help. Find those in need, solve their problems and

SELL, SELL, SELL & SERVICE, SERVICE, SERVICE!

WEEKLY TRAINING SESSION

May Application Procedures

Topic Category: Lawn
Recordable Verifiable Training Hours: 1.5

Objectives: This lesson is designed to teach our Application Procedures for May.

Length of lesson: Approximately 1 Hour and 30 minutes.

Materials needed:

- Training Guideline
- May Applications Training Document and What We Apply – What We Expect document located in the G: Drive Shared\GreenUp Reference Materials\GreenUP Protocols\Monthly Applications Information\2026\May
- **6 pounds** of 12-4-8 Shrub Fertilizer (16 ounces in a measuring cup is close to one pound)
- 1000 sq. ft. area of shrub bed
- Pre- and Post- tests.

Training Guidelines:

- Make copies of the tests and training materials for all Team Members attending.
- Set up the training area in an area of the office that will minimize disruptions.
- Hand out the Verifiable Training Record Form (VTRF)
- Begin the meeting by defining the training topic and handing out the Pre-test
- Distribute and review the training materials on May Application Procedures
    - Allow the Team Members to complete the Pre-test as the application information is discussed.
    - Encourage active participation from all Team Members
    - Ask probing questions to discuss key points.
    - Read and answer questions from the test and have the Specialists write in their answers.
    - 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
- Take all Specialists to the pre-measured shrub bed area. Apply the **6** pounds of 12-4-8 to the shrub bed area so they get an idea of how much fertilizer is being applied to all new shrub care services.
- 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 VTM's through Massey University.

WEEKLY TRAINING SESSION

May Application Procedures

Name_____ Date _____

PRE & POST TEST

1. T or F The fertilizer applied to St. Augustine starts in all Service Centers is the 32-5-7 + Pendimethalin at 4 pounds per 1000 sq. ft.

2. T or F The fertilizer applied to all regular lawn care services is 0-0-1 at 18 ounces per 1000 sq. ft.

3. T or F Acelepryn Xtra is used as a liquid broadcast insecticide application on all grass types during EOM regular services.

4. T or F Broadleaf weeds in a St. Augustine lawn are treated with 2 ounces of SBM1 per gallon of water.

5. T or F The fertilizer applied to Zoysia starts is the 0-0-5 at 4 pounds per 1000 sq. ft. is used in All Service Centers.

6. T or F The fertilizer applied to Regular EOM Customers is the 33-0-16 at 1.5 pounds per 1000 sq. ft. is used in All Service Centers.

7. T or F SBM2 can be mixed with Sedge Hammer.

8. T or F No insecticide is applied to grass types other than St. Augustine unless insect problems are found.

9. T or F Annual aerations are fertilized with 0-0-3 or Granular Sulfur at 5 or 4 pounds respectively per 1000 sq. ft.

10. T or F Broadleaf, sedge, and grassy weeds in Bermuda and Zoysia grass are treated with Dismiss South and Celsius.

11. T or F All new and regular shrub care services are fertilized with 12-4-8 at 6 pounds per 1000 sq. ft.

12. T or F Every shrub on the property should be sprayed with the I&D Slurry.

13. T or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

WEEKLY TRAINING SESSION

May Application Procedures

PRE & POST TEST ANSWER KEY

1. (T) or F The fertilizer applied to St. Augustine starts in all Service Centers is the 32-5-7 + Pendimethalin at 4 pounds per 1000 sq. ft.

2. T or (F) The fertilizer applied to all regular lawn care services is 0-0-1 at 18 ounces per 1000 sq. ft.

3. (T) or F Acelepryn Xtra is used as a liquid broadcast insecticide application on all grass types during EOM regular services.

4. T or (F) Broadleaf weeds in a St. Augustine lawn are treated with 2 ounces of SBM1 per gallon of water.

5. T or (F) The fertilizer applied to Zoysia starts is the 0-0-5 at 4 pounds per 1000 sq. ft. is used in All Service Centers.

6. (T) or F The fertilizer applied to Regular EOM Customers is the 33-0-16 at 1.5 pounds per 1000 sq. ft. is used in All Service Centers.

7. T or (F) SBM2 can be mixed with Sedge Hammer.

8. T or (F) No insecticide is applied to grass types other than St. Augustine unless insect problems are found.

9. (T) or F Annual aerations are fertilized with 0-0-3 or Granular Sulfur at 5 or 4 pounds per 1000 sq. ft.

10. (T) or F Broadleaf, sedge, and grassy weeds in Bermuda and Zoysia grass are treated with Dismiss South and Celsius.

11. (T) or F All new and regular shrub care services are fertilized with 12-4-8 at 6 pounds per 1000 sq. ft.

12. T or (F) Every shrub on the property should be sprayed with the I&D Slurry.

13. (T) or F Following the initial lawn care treatment, a *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular lawn care protocol for the month in which the regular service is performed.

TEXAS GREENUP LAWN, TREE & SHRUB CARE SERVICE

May 2026 LANDSCAPE APPLICATIONS

Lawn Care Accounts

1. St. Augustine EOM Customers
   a. New Customers **All Service Centers**
      Apply **4** pounds of 32-5-7 with **Pendimethalin**, per 1000 sq. ft. typically this will be setting 15 with the Lesco Calibration tool.

   b. Regular Customers **All Service Centers**
      Apply **1.5** pounds of 33-0-16 per 1000 sq. ft. Also add **18** ounces of 0-0-1 and **0.184** oz of Acelepryn Xtra, per 1000 sq. ft. **Be very careful of staining with this mixture!**

2. St. Augustine Landscape Customers
   a. New Customers **All Service Centers**
      Apply **4** pounds of 32-5-7 with **Pendimethalin**, per 1000 sq. ft. typically this will be setting 15 with the Lesco Calibration tool.

   b. Regular Landscape Customers **All Service Centers**
      This is a shrub care month with only supplemental fertilization of the lawn.

If chinch bugs are found at the time of new or regular service, spot treat them with **Arena Chinch Bug spot treat slurry** using the backpack sprayer using the 8010E spray tip.
Broadleaf weeds in St. Augustine lawns must be spot treated with the SBM2 slurry at **2** ounces of pre-mixed material per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip.
Sedge in St. Augustine must be spot treated with Sedgehammer Slurry at **2** ounces per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip.
Grassy weeds in St. Augustine must be spot treated with Certainty at **.8** grams and **.5** ounces of wetting agent per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip.

3. Bermuda and Zoysia EOM Customers
   a. New Customers **All Service Centers**
      Apply **4** pounds of 32-5-7 with **Pendimethalin**, per 1000 sq. ft. typically this will be setting 15 with the Lesco Calibration tool.

   b. Regular Customers **All Service Centers**
      Apply **1.5** pounds of 33-0-16 per 1000 sq. ft. Also add **18** ounces of 0-0-1 and **0.184** oz of Acelepryn Xtra, per 1000 sq. ft. **Be very careful of staining with this mixture!**

4. Bermuda and Zoysia Landscape Customers
   a. New Customers All Programs **All Service Centers**
      Apply **4** pounds of 32-5-7 with **Pendimethalin**, per 1000 sq. ft. typically this will be setting 15 with the Lesco Calibration tool.

   b. Regular Landscape and Monthly Lawncare Customers **All Service Centers**
      This is a shrub care month with only supplemental fertilization of the lawn.

May 2026 LANDSCAPE APPLICATIONS

All broadleaf, sedge, and grassy weeds in Zoysia or Bermudagrass must be treated with Celsius at **0.11** ounces and Dismiss South at **0.28** ounces per gallon of water per 1000 sq. ft., using the backpack sprayer and the 11010-spray tip. This mixture does a great job on each of the 3 classifications of weeds. Do not mix this in a slurry. Celsius is not stable in a slurry. Do not use on St. Augustine, severe injury or death will occur. Use a separate backpack dedicated for this use.

As a supplemental fertility for zoysia and St Augustine 0-5-5 at 5 pounds per 1000 sq. ft. per 1000 sq. ft. or for Bermuda and EOM customer 16-4-6 at **4** pounds per 1000 sq. ft., can be used when there is a nutrient deficiency. Follow the 5-key principles and correct underlying issues, as additional nutrition alone cannot enhance growth if there are unresolved problems. It's crucial to address the root causes first.

5. Annual and New Aeration
   Apply 0-0-3 (Straight) or Granular Sulfur (depending on the soil pH) at **5** or **4** pounds respectively per 1000 sq. ft.; typically, this will be setting 16 for sulfur with the Lesco Calibration tool. See the Aeration Service Protocol for complete details.

All new lawn care customers receive the above application protocols for New Customer Services. A *complete* Regular Service lawn care application is done (at full charge) about 30 days after the initial application using the regular monthly lawn care protocol for the month in which the regular service is performed. Aeration plus the 0-0-3 or Sulfur application is performed the month following the initial treatment.

Do not apply Pendimethalin fertilizer to newly installed sod or plugs; the roots will not establish properly, and damage can occur.

Make sure to use your sidewalk guard properly around roadways, driveways, sidewalks, and bodies of water. Maintain a 5-foot ring of responsibility near all waterbodies. Remember blowing off the roadways, sidewalks, and driveways is **required** after all granular fertilizer applications. Blow the material back into the turf areas. Do not allow any fertilizer to go into a storm sewer. Blow off any landscape curbing as well to avoid staining**.**

Turf Diseases in any grass type is treated with Talaris/Transom at **1.5** ounces per 1000 sq. ft. using a backpack sprayer and the 8010E spray tip.

Shrub Service

Certain shrubs (see the list below) are treated with the I&D materials on a preventative basis **each visit** for insect and disease. Most shrubs are treated on an as needed basis only. **Do not** treat every shrub on the property. This is not necessary or beneficial.

a. New and Regular **Landscape** Customers (**All Service Centers**)
   Apply **6** pounds of 12-4-8 per 1000 sq. ft. Keep this material off concrete surfaces.

May 2026 LANDSCAPE APPLICATIONS

Treat shrubs that are prone to insect or disease problems.
Apply **2** ounces of our Merit Slurry, **1.6** ounces of Kalmor, and **8** ounces of Horticultural Oil per 10 gallons of water.

Shrubs that are treated on a preventative basis with **every** initial and regular service include:

- Viburnum
- **Azalea
- **Crape myrtle**
- Camellia
- **Gardenia
- Sago
- Pittosporum
- Indian Hawthorne
- Holly
- **Knock-Out Roses

The list above may be expanded depending on the geographical location and specific concerns in the Service Center.
**For the protection of pollinating insects, do not spray the foliage of shrubs that are in full bloom or if pollinators are in the area.

Do not allow pesticides of any kind to contact bodies of water or fishponds. Many of the materials we use can be deadly to fish.
Set proactive treatments that are necessary to control insect or disease problems that threaten the life of the plant. Make sure to treat the top and bottom sides of the leaf. Inspect all shrubs thoroughly!!

Specimen Palm Quarterly Injection Service

Treatment for Palm Bud Weevil and piercing-sucking insect control is performed in March, April, or May using Ima-jet (undiluted) at a rate of 5 milliliters per inch of trunk diameter.
If nutrition or disease is a concern for a new customer, either Phospho-jet or Palm-jet may also be performed at the time of initial service. See GreenUP Protocol – Specimen Palm Quarterly Injection Service for complete details.

Do a quality job on every application. Do thorough inspections and perfect applications. Always being mindful of the 5 key principles and great communication with our customers to provide long-term sustainable solutions. Perfect measuring, perfect calibration, and perfect walking speed is what is needed for proper applications. Perform walking speed tests weekly. (40 feet in 10 seconds) All of the above will keep our customers happy to prevent service calls, cancellations, and claims.

GREENUP SERVICE PROTOCOLS

What We Do and What to Expect – May 2026 Landscape Applications

Watering instructions for all new and regular LAWN CARE services are: Please irrigate with ¼ inch of water if there is no rain within 24 hrs."

New Lawn Care Services-(South and North Texas)

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Dry fertilizer application with pre-emergence weed control.	This application will provide a substantial amount of nitrogen, potassium and minor elements. 25% of the nitrogen will be released slowly while the other 75% can be used right away. The pre-emergent will prevent weeds from sprouting.	The improvement of growth and color may be achieved slower at this time of the year if the temperatures evening temperatures are cool.	"This fertilizer application will help achieve good spring green-up. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Pre-Emergence Weed Control (All grass types all Service Centers)	All grass types are treated for the prevention of annual weeds.	This application will help prevent annual broadleaf weeds and crabgrass.	"This application will help prevent annual broadleaf weeds and spring emergence of crabgrass."
Spot treatment treatment of insecticide to St. Augustine lawns.	This is the time of year where we begin to treat St. Augustine lawns proactively for chinch bugs. Chinch bugs are a very common and damaging pest of St. Augustinegrass. This treatment is performed to control existing chinch bug populations.	If chinch bugs are already at damaging levels, expect the damage in the lawn to get a little worse before it gets better. Control is achieved slowly and may take up to 14 days.	"The insect control application is for the control of lawn damaging insects such as chinch bugs. Chinch bug feeding will cease immediately, but it could take up to a week or two for the chinch bugs to die. The damage may look like it is getting a little worse for a week or so, but that response is normal due to the feeding and damage that has already been done."
Post-emergent weed control applied as a spot treatment using the backpack applicator for low volume application.	We achieve excellent control of practically all types of broadleaf weeds. Sedge can also be treated if it is competing with the turf or if it is a concern for the customer.	The weed control materials we use are a combination of slow and quick acting materials. Noticeable affects to the weeds will take about 5 to 7 days. Control is achieved within 3 to 4 weeks.	"The weed control materials applied will greatly reduce the amount of weeds in your lawn within 3 to 4 weeks. A second application may be necessary in severe cases."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their **new** lawn care treatment in April via the printed Service Report in All Service Centers: "Today, I provided a granular broadcast application of fertilizer and pre-emergence weed control materials to enhance and maintain the color and growth of your lawn and to prevent grassy and broadleaf weed seeds from sprouting. I also inspected and treated any existing lawn damaging insects, broadleaf weeds and diseases as needed. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

GREENUP SERVICE PROTOCOLS

What We Do and What to Expect – May 2026 Landscape Applications

Regular Lawn Care Services –(South and North Texas)			
What We Use	**Benefit of the Service**	**What To Expect**	**What to Tell the Customer**
Liquid Broadcast application of fertilizer.	This application will provide a moderate amount of iron and manganese to enhance and maintain good color and growth.	An improvement in the color and growth of the lawn will be achieved in about 7 to 10 days.	"This fertilizer application will help enhance and maintain good color and growth. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."
Liquid Broadcast application for the prevention and control of lawn damaging insects.	All properties are treated for the prevention and control of lawn damaging insects such as chinch bugs, grubs and mole crickets.	The primary purpose of this application is to prevent lawn damaging insects from becoming a problem. If chinch bugs are present at the time of treatment, they will stop feeding immediately after treatment and control will be achieved over a 10 to 14 day period.	"Your lawn was treated to prevent lawn damaging insects such as chinch bugs, mole crickets and grubs. Preventative treatments are beneficial because they keep the populations of lawn damaging insects low and reduce the need for reactive treatments and lawn damage."
Post-emergent weed control applied as a spot treatment using the backpack applicator for low volume application.	We achieve excellent control of practically all types of broadleaf weeds. Sedge can also be treated if it is competing with the turf or if it is a concern for the customer.	The weed control materials we use are a combination of slow and quick acting materials. Affects to the weeds can be seen in about 5 to 7 days. Control is achieved within 3 - 4 weeks.	"The weed control materials applied will greatly reduce the amount of weeds in your lawn within 3 to 4 weeks. A second application may be necessary in severe cases."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their St. Augustinegrass **regular** lawn care treatment in April via the printed Service Report in Southern and Central Service Centers: "Today, I provided a liquid broadcast application of fertilizer and insect control materials to enhance and maintain the color and growth of your lawn and to prevent lawn damaging insects from becoming a problem. I also inspected and treated any existing broadleaf weeds and diseases as needed. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment.

What We Do and What to Expect – May 2026 Landscape Applications

Annual and New Aeration Services

What We Use	Benefit of the Service	What To Expect	What to Tell the Customer
Core aeration	Aeration is the most beneficial service we perform. It stimulates root growth, helps break down thatch, and allows water and air to get to the root system.	Increased root growth, better soil structure, and an improvement in the overall health of the plant. Leaf tissue will look better in the long run but there will not be a visible change in the short term.	"The aeration will help create healthy plant roots and improve the vigor and heartiness of the lawn."
Depending on the soil pH at the customer's home, a broadcast application of 0-0-3 a potassium, organic material, and iron source or sulfur to lower soil pH according to our Annual Aeration Protocol.	The 0-0-3 application will aid in development of a hearty root system to enhance drought and stress tolerance and improve color. Proper soil pH is essential for the availability of soil nutrients. The application of granular sulfur will lower the soil pH when it is too high for the particular turf type.	Improved root growth and color as well as enhanced cold, and drought stress tolerance. If the soil pH is higher than what required for a particular turf type, the application of sulfur will lower the soil pH and allow bound nutrients to become available to the turf resulting in healthier turf with a darker green color.	"The application of 0-0-3 works very well in conjunction with aeration to enhance root growth, color and improve heat, drought and stress tolerance. Please irrigate with ¼ inch of water if there is no rain within 24 hrs." "The application of granular sulfur will lower the soil pH to enhance the availability of soil nutrients. Please irrigate with ¼ inch of water if there is no rain within 24 hrs."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their Aeration Service via the printed Service Report: "Today, I inspected your irrigation system, aerated your lawn and took a soil sample to test the soil pH. I also provided a broadcast application of granular potassium and magnesium (or sulfur). This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Shrub Care Customers (New and Regular)			
What We Use	**Benefit of the Service**	**What To Expect**	**What to Tell the Customer**
Broadcast application of dry fertilizer (New and Regular Customers)	This application will provide a substantial amount of nitrogen, potassium and minor elements to help achieve spring green-up.	This application provides nutrients to stimulate our initial spring green-up. Results can be slower if temperatures are cool.	"This fertilizer application will help enhance the color and stimulate new growth of your shrubs. Please irrigate with ¼ inch of water if there is no rain within 24 hrs.
Foliage application (as needed) of liquid insect and disease control materials. (New and Regular Customers)	The insect and disease control materials provide both contact and system control of shrub damaging insects and diseases.	Shrubs that either have or are prone to have insect and disease problems are treated. The application will provide control of soft bodied insects such as aphids and lace bugs within 2 to 4 days. Scale insects will require 2 to 3 weeks for control. Fungal leaf spots will be suppressed. Keep in mind that leaves that have been damaged by insects or disease do not turn green after control has been achieved. Damaged leaves will need to be trimmed off to achieve visual benefits.	"This application will provide control of existing insects and foliar diseases. Leaves previously damaged will need to be trimmed off to simulate new growth to cover up the damage. Follow-up treatments may be required for certain insect and disease problems."

The following information should be typed into the handheld computer in the General Comments section to provide the customer with information of what we did for their new or regular shrub care treatment in April via the printed Service Report: "Today, I provided a granular application of fertilizer to enhance and maintain the color and growth of your landscape shrubbery. I also inspected and treated any existing shrub damaging insects and diseases. Additionally, I inspected all turf areas for weeds, insects and diseases. This treatment will need to be irrigated with ¼" of water if rain does not occur within 24 hours of the treatment."

What We Do and What to Expect – May 2026 Landscape Applications

Primary Landscape Issues in May

May is a shrub care month for regular Monthly Landscape Customers; there is no scheduled application for the turf, but it is inspected and treated as needed. All shrubbery is fertilized with our custom blended 12-4-8 shrub fertilizer. This application will stimulate good color and growth to the shrubs and small trees. In addition to the shrub fertilizer application, all landscape shrubbery is inspected for insects and disease. Selected shrubs are treated on a preventive basis and the other shrubbery is treated on an as needed basis.

The fertilizer we apply to new customers is a granular 32-5-7 with pre-emergence weed control. 25% of the nitrogen source is polymer coated urea to extend the color response. At the rate we use, 1.28 pounds of actual nitrogen is applied along with 0.28 pounds of potassium and micro-nutrients. The pre-emergence weed control will prevent annual broadleaf and grassy weeds.

If chinch bug activity is found during any service, a pro-active inspection must be set for 14 to 21 days after treatment to ensure the chinch bugs are dead. Very thorough inspections will be needed and spot treatments where chinch bugs are found.

At this time of the year, the vast majority of adult mole crickets have laid eggs and died. Eggs will begin to hatch in the later part of May and will continue through June. Our insect control applications performed at this time of the year will kill the young mole crickets as they hatch from the egg.

The weed problems that occurred in March and April will dramatically decline in May. Most of the weeds we had been dealing with were winter annual broadleaf weeds. These problems were controlled on the vast majority of our lawns through our post-emergent applications by the end of April. In addition, the winter annual weeds decline naturally as the warmer summer temperatures arrive. Summer annual weeds will be on the rise, but the turf will be growing more actively and will compete much better with the weeds than it was able to in the cooler months.

The need for supplemental irrigation will continue to be high in May. Warm weather and low humidity increase the plant's demand for moisture. In the absence of rain, watering twice a week is typically not sufficient to prevent localized dry spots and potentially damage from drought stress. At a minimum, spot watering of localized dry areas will be needed. Provide the customer with the information necessary to address this problem.

Piercing- sucking insects on shrubbery are a big problem at this time of the year. Look for sooty mold to be an indicator. The black mold which feeds on honeydew from the insects can be seen from a distance, informing the observant Inspector and Lawn Specialist to inspect closer for aphids, scales or mealy bugs.

Crepe Myrtle Bark Scale is a soft scale that begins this time of year and if left untreated can be a major pest later in the year. Proper inspection is critical. If left untreated the sooty mold can coat the trunk and branches of the entire plant, while not fatal it is extremely unsightly and can potentially increase service calls and cancels. **Crepe Myrtles should be treated proactively this month with the Tree and Shrub care visit.**

What We Do and What to Expect – May 2026 Landscape Applications

Magnolias continue to drop some of their older leaves in May. This is a natural occurrence. New growth and flowers will appear soon.

Freeze damage to ornamental shrubbery may be noticed as a cracking and splitting of the bark. Damaged branches may remain green and appear healthy for a few months followed by sudden browning and death of branches or the entire plant. Inform customers of turf areas or plant material that has been permanently damaged by frost or freeze. If plant material has been permanently damaged, documentation will be crucial to avoid future claims and customer cancellations. Make sure you thoroughly document this damage.

May is a good time of year to prune trees and shrubs. Branches that are dead, diseased, or dysfunctional should be removed. Trimming for shape should also be performed assuming that the particular plant does not have flower buds that are about to open.

Tent caterpillars are a big problem in May. Look for silken webbing wrapped around branch crotches. These caterpillars can be found in Cherry Laurels and Pecan trees. Bifenthrin works well for trees that are sprayable size. Injection works very well for trees that are not a sprayable size.

Oak leaf blister becomes evident at this time of year. Oak leaf blister is caused by a fungus. It mainly affects Laurel Oaks, causing the leaves to have "blister" looking bumps. Unfortunately, fungicide treatments are not effective against this problem.

Oak leaf tier may be a problem in May. Oak leaf tiers are small caterpillars that feed on the new growth of Oaks. These caterpillars hang from silken webs often becoming a tremendous nuisance. If the tree is sprayable size it can be treated with Bifenthrin. Large trees can be treated through injection. Oak leaf tier are not severely damaging to the tree.

Make May a success by constantly looking for opportunities, offering solutions and asking for the business. It is springtime and time to get the lawns and shrubs growing again and looking good. Landscape sales should be rocking in May. Every lawn is a lead. People need our help. Find those in need, solve their problems and SELL, SELL, SELL & SERVICE, SERVICE, SERVICE!