

BITE



BACK

Fight Fire Ants Mississippi

Bite Back, Mississippi! Campaign

Web Hub

Google™ Custom Search Search



MISSISSIPPI STATE UNIVERSITY

En Español | Need More Information? | RSS Feeds | Share This!

COORDINATED ACCESS TO THE RESEARCH AND EXTENSION SYSTEM

msucares.com

Mississippi Agricultural and Forestry Experiment Station • Mississippi State University Extension Service

- 4-H Youth
- Aquaculture-Catfish
- Community-Government
- Crops & Horticulture
- Environmental Quality
- Farm Management
- Farm Safety
- Forestry-Forest Products
- Health-Home-Family
- Insects-Plant Diseases-Pesticides-Weeds
- Lawns & Gardens
- Leadership
- Livestock
- Poultry
- Wildlife and Fisheries

BITE BACK

Fight Fire Ants Mississippi



Bite Back, Mississippi! Campaign

Mississippi Fire Ant Blues

Song Lyrics

Mississippi Fire Ant Blues

My baby danced on her bare feet, all across this big green lawn,
My sweet baby danced on her bare feet, all across this great big green lawn,
Then some fire ants bit my baby,
Now I just want those fire ants gone.

You can see I've got the blues.
The Mississippi Fire Ant Blues.
Extension, you gotta help me bite back --
I've got the Fire Ant Blues.

When I fed my dog with morning, all he did was moan and cry,
I said when I fed by dog this morning, all he did was moan and cry.
Those fire ants were feasting,
It's time to tell those ants bye-bye.

You can see I've got the blues.
The Mississippi Fire Ant Blues.
Extension, you gotta help me bite back --
I've got the Fire Ant Blues.

At the barbecue in the backyard, watch everyone jump and shout,
While eatin' barbecue in the backyard, watch everyone jump and shout,
They are dancing to the Fire Ant Blues,
Time to get the treatment out.

You can see I've got the blues.
The Mississippi Fire Ant Blues.
Extension, you gotta help me bite back --
I've got the Fire Ant Blues.

It's time to treat those ant mounds, and broadcast all over the yard
It's past time to treat those ant mounds, and broadcast all over the yard,
With two repeated steps,
Fighting fire ants ain't all that hard.

Lyrics by
Keri Collins Lewis
20 February 2015

Bite Back, Mississippi! Campaign

Media Releases

Released: April 24, 2015
Contact: Dr. Blake Layton, 662-325-2960

Use a two-prong attack to Bite Back at fire ants

By Bonnie Coblentz
MSU Ag Communications

STARKVILLE, Miss. -- Tell Mississippians that fire ants have completely invaded the state, and they'll probably shrug and say they already know that. Tell them the pain actually comes from a sting rather than a bite, and they'll say it still hurts. But tell them how to get rid of the nasty critters, and they're all ears.

The Mississippi State University Extension Service is organizing efforts to help residents Bite Back against fire ants. The solution is a simple two-part attack, but success comes in the long-term follow-through.

Extension entomologist Blake Layton said the best way to fight fire ants and have the least environmental impact is to use bait and mound treatments.

“Spread bait around the area for foraging ants to gather three times a year at Easter, the Fourth of July and Labor Day, and use mound treatments as new mounds appear,” Layton said. “We have good tools for fighting fire ants, but we have to keep using them. It’s like the air conditioner at home. We can keep our house cool in the summertime, but just because we cooled it yesterday doesn’t mean we don’t have to do it again today.”

This two-pronged approach allows both immediate and long-term fire ant control. Mound treatments, often sold in powder form, are applied directly to visible nests and rapidly kill the entire colony when used properly. Foraging worker ants bring baits back to their mounds. These granules gradually spread through a colony and destroy its workers and queen.

“Baits are slow-acting, and it can take a month or more to see the effect, but they are important for lasting control. If I was limited to only one method of fire ant control, I would use baits,” Layton said. “Successful fire ant control has to be an ongoing effort.”

Layton said the fall bait treatment is very important.

“The benefit of fall bait application is you see fewer mounds in the spring,” Layton said. “Fire ants are persistent in the ground, and they eat stored food, including bait, in the winter.”

Black imported fire ants arrived in the U.S. at the Port of Mobile around 1918, and red imported fire ants arrived there in the 1930s. Some ships from South America would carry soil as ballast. When they loaded cargo for the trip home, the ship’s crew would unload the soil, along with any unwanted insects.

Fire ants came from the open grassy areas of Argentina and Brazil, so they like treeless areas, such as yards, pastures and athletic fields, in the U.S. Imported fire ants are more aggressive than native ants, allowing them to outcompete the domestic insects as they spread.

Fire ants have spread from California to the East Coast. They have ranged as far north as Maryland and Oklahoma. The invaders are pushed back by the cold and do not survive in areas where the soil consistently freezes several inches deep every winter.

“In the U.S., fire ants have few natural predators or diseases,” Layton said.

In colonies containing a single queen, the primary factor limiting their spread to other areas is other fire ants, said Joe MacGown, a research technician and scientific illustrator for the Mississippi Agricultural and Forestry Experiment Station.

“They compete with one another, and if one mound is gathering all the food resources in an area, the other mound can’t survive,” MacGown said. “Unfortunately, colonies that contain multiple queens do not exhibit this territorial competition.”

Fire ant workers vary in length from about 1 mm to 4.5 mm. They are bicolored, with reddish to reddish-brown heads and upper bodies and dark brown to black lower bodies.

“Queens can lay between 200 and 2,000 eggs per day, depending on the size of the colony, food resources and environmental conditions,” MacGown said.

A fire ant infestation is easily recognizable by numerous, distinctive dome-shaped mounds scattered across open areas. When not controlled, fire ants can significantly mar a landscape and pose a number of threats to humans, pets and wildlife.

“The number of mounds per acre is somewhat dependent on whether or not the colony has multiple queens (polygyne form) or a single queen (monogyne form),” MacGown said. “For monogyne forms, there are usually less than 300 mounds per acre given the right habitat, but with polygyne colonies, there can be more than 300 mounds per acre.”

Fire ants aggressively defend these homes.

“When mounds are disturbed, workers give off an alarm pheromone, which is picked up by the other workers and cues them to defend the colony,” MacGown said. “They quickly find the intruder and first bite, then sting the intruder, releasing a necrotizing alkaloid venom, which in people, causes pain and in some cases, severe allergic reactions.”

Find more information on the Bite Back efforts from MSU Extension Service at

<http://www.msucare.com/biteback>.

CUTLINES/fire ant story



Imported fire ants are a scourge across the Southeast, but a two-pronged attack can control their numbers. Bite Back by broadcasting insecticide bait three times a year, and treat mounds when they appear. (Photo by MSU Ag Communications/Kat Lawrence)

###



Most fire ants found in Mississippi are a hybrid between the red imported fire ant, pictured here, and the black imported fire ant. (Photo by Mississippi Entomological Museum/Joe A. MacGown)

###

Release: April 28, 2015
Contact: Dr. Blake Layton, 662-325-2085

Invasive fire ants prey on ground-nesting animals

By Keri Collins Lewis
MSU Ag Communications

STARKVILLE, Miss. -- Blake Layton grew up quail hunting in Simpson County and has seen the steady decline of quail as fire ant populations expanded across the state.

Layton, an entomologist with the Mississippi State University Extension Service, remembers abundant birds and wildlife on the farm he grew up on, but today it has more fire ants and fewer quail and other wildlife species.

“When I was younger, I’d go into a pasture, and Eastern meadowlarks were everywhere. Now they are much less common,” Layton said. “The serious birders around the state agree there aren’t as many.”

As with many wild animal species, habitat loss is considered the biggest reason for population declines. Urban encroachment, changing land management practices, pollution and the spread of invasive species all pose threats to native species of all types.

Fire ants’ native habitat and feeding practices combine to make them a particular nuisance. They originated in the open, savannah-type habitats of South America.

“That’s why they come to our ball fields, pastures, parks and open habitats,” Layton said. “Meadowlarks and quail nest in those same areas. You’ll see quail on the edges of heavily wooded habitat, because fire ants are less likely to do well in the trees. There is less for them to forage.”

Fire ant colonies send foragers everywhere looking for protein, oils and carbohydrates. When they come upon a nest of young birds, they see a major food source and recruit other ants to help.

“I’ve seen fire ants accumulate around the fluid coming out of an egg just as the hatchling is starting to make its way out of the shell. By the time it hatches, the nest is under a full-scale attack,” Layton said. “Newly hatched birds are so vulnerable, they are extremely susceptible to fire ants.”

Tim Lockley, now a senior entomologist with the Mississippi Department of Agriculture and Commerce, spent more than 20 years with the U.S. Department of Agriculture researching fire ants. He conducted numerous studies across the Southeast on the impact of fire ants on threatened species, as well as game species.

From gopher tortoises on Camp Shelby in Hattiesburg to the Florida grasshopper sparrow, Lockley has discovered just how opportunistic fire ants are.

“We saw extensive reduction in whatever the target animal was when fire ants were present,” Lockley said. “Field mice, snakes, alligators and not just ground-nesting birds. I’ve seen fire ants nest in the leaf litter mulch between major branches of a pecan tree and prey on birds’ nests high in the trees. If they can get to it, fire ants will kill it or cause it to die from secondary effects.”

Rabbits do not move right after they are born, which means they cannot escape fire ants. Fawns freeze when they sense danger, which is good when a coyote is approaching but ineffective when the predator is a foraging party of fire ants.

“Ant stings can blind the fawn and cause swelling around the mouth and tongue until it starves to death,” he said. “If cattle or sheep give birth on a mound of fire ants in a pasture, the offspring likely won’t survive.”

The good news is fire ants are relatively inexpensive to treat, and the treatment is effective.

Lockley’s research on the Gulf Coast least tern showed a 42 percent increase in hatchling survival in an area of beach treated for fire ants versus one that was not treated.

“Bait is very cheap on a per acre basis, and it’s extremely safe, though you won’t get instant gratification,” Lockley said. “Amdro, the most commonly used, is a slow-acting stomach poison. Some other baits don’t have a poison. Instead, they have an insect growth regulator that sterilizes the queen. She stops creating more fire ants, so the mound will die over time from attrition.”

Layton said granular fire ant baits can be applied to large areas with an airplane, but most people use a Herd seed spreader.

“Don’t use a fertilizer spreader,” he cautioned. “You need something with a low rate of distribution.”

With pastures, Layton said landowners and managers will see benefit from one application per year. For wildlife restoration, two applications a year are more effective.

“After that, it depends on how serious you are and how much you want to spend,” he said.

“Always follow label instructions for how many times you can apply it -- typically two to four times.”

To access several Extension publications related to fire ants, visit <http://msucares.com/biteback>.

CUTLINE/with fire ant wildlife feature



© Blake Layton

Fire ant mounds, such as this one in Clay County, harbor an invasive species that has a negative impact on wildlife, including reptiles, mammals and ground-nesting birds. (Photo by MSU/Blake Layton)

###

Released: May 5, 2015

Contact: Dr. Blake Layton, 662-325-2085; Dr. Jeb Cade, 662-325-1266;

Fire ant stings can be risky for kids, pets

By Susan Collins-Smith
MSU Ag Communications

RAYMOND, Miss. -- Fire ants can be more than unwelcome guests in the home lawn; their stings can be dangerous for children and pets who share play areas with the pests.

Fire ant stings are characterized by sharp localized pain, swelling and intense itchiness that is just a short-lived nuisance for most. A raised red bump appears soon after the sting and soon turns into a sterile pustule that resembles a pimple. However, the ants' venom can cause severe allergic reactions in some people and pets.

"Fire ant venom isn't toxic, and a sting or two by a few ants is usually not a big deal," said Jerome Goddard, medical and veterinary entomology specialist with the Mississippi State University Extension Service. "But a small child or pet that inadvertently steps in a mound and doesn't realize it right away or doesn't know what to do could get many stings. If that child or pet is allergic to the venom, just one sting could be very bad."

For both people and pets, anaphylactic reactions are the most dangerous. Anaphylaxis is a severe allergic reaction characterized by hives, swelling and spasms of the airway, and low blood pressure from the collapse of blood vessels. If not treated, these reactions can be fatal. Secondary infections also can develop if the child or pet scratches the bite and breaks the skin.

"While it is rare, secondary infections can progress to sepsis, or blood poisoning, if they aren't treated at the first sign," said Dr. Jeb Cade, assistant clinical professor in the MSU College of Veterinary Medicine Department of Clinical Science.

Extreme inflammation caused by a sting can compromise blood flow to an extremity. The body's immune system usually mediates this reaction, but if this happens to a pet, owners should monitor the condition and seek medical attention if swelling does not subside, Cade said.

Homeowners can reduce the chances that children and pets will come into contact with fire ants by implementing a treatment plan for their yards.

“There are effective treatments to control fire ants that are relatively inexpensive, easy to apply, and safe for people and pets when used according to the label directions,” said Blake Layton, MSU Extension entomology specialist and professor in the Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology.

Control products for use on home lawns must state how long people and pets should avoid the treated area, a time period known as the re-entry interval or REI. Most home lawn pesticides have short re-entry intervals, but others may require 24, 48 or 72 hours before the area can be entered again, Layton said.

“There really are not many of these long REI products anymore, especially among those we use for fire ants,” he said. “For example, the label on Amdro Fire Ant Bait says people and pets can use the area immediately after a treatment has been applied. But there is no reason a concerned homeowner can’t take extra precautions, such as adding a day or two to the REI following pesticide use.”

Insect growth regulators are an alternative to fire ant baits. These products take more time to work but are generally safer for pets, Cade said.

“Most fire ant baits have low mammalian toxicity when used as the label directs,” Cade said. “These products are designed to be broadcast over the entire yard and taken back to the mound by workers and fed to the queen. But the biggest problem with these products is that the sugar, corn and oil used to make them attractive to ants also make them attractive to our pets.”

For this reason, homeowners should store pesticides in an area that children and pets cannot access.

“The greatest health risk to children and pets related to pesticides is from accidental poisoning due to ingestion or exposure to the concentrated product,” Layton said.

Fire ant mounds can number between 50 and more than 200 per acre in untreated areas. Such

infestation pose more of a risk to people and pets than the products recommended to control them, as long as those products are used and stored properly, Layton said.

“Gasoline provides a good analogy,” Layton said. “Gasoline is a highly flammable product that may be fatal if swallowed or aspirated and is a suspected carcinogen, but most homeowners store gasoline on their property and are able to use it safely in lawn mowers and other gas-powered equipment -- as long as they take appropriate precautions when storing and handling it.”

For more information about safe control of fire ants in the home lawn, visit <http://msucares.com/insects/fireants/lawns.html> or refer to MSU Extension Publication 2429, “Control Fire Ants in Your Yard.”

CUTLINE/ fire ant bites



Many dogs spend time outside and often share their play areas with fire ants. When disturbed, the ants sting and deliver venom that can cause severe allergic reactions for some pets and children. (Photo by MSU Ag Communications/Susan Collins-Smith)

###

Released: May 15, 2015
Contact: Dr. Blake Layton, 662-325-2085

Misconceptions hurt odds of beating back fire ants

By Nathan Gregory
MSU Ag Communications

STARKVILLE, Miss. -- People have many misconceptions on how to eliminate fire ant mounds and prevent them from coming back, and these erroneous beliefs hinder efforts to keep the harmful pest from spreading.

One of the biggest mistakes is trying to use common household materials to manage fire ants, said Blake Layton, entomology specialist with the Mississippi State University Extension Service. More often than not, these “folk remedies” are ineffective or environmentally harmful, and they can cost more than commercial bait and mound treatments designed specifically to control fire ants. Typical makeshift solutions include gasoline, grits and soda.

Pouring gas on a mound does kill ants, but it also kills the grass and is a waste of money, Layton said.

“Gasoline is not legal to use in this way because it is not safe or environmentally suitable, and thus is not labeled for this use,” he said. “Also, it would be a very costly method of control.”

Fire ants supposedly explode after eating grits. However, this remedy is a tall tale, Layton said. Some people believe that drenching a mound with club soda will smother ants with carbon dioxide, but this method is also inefficient.

“Fire ants like grits just fine and will not explode after eating them,” he said. “It is possible to smother a mound with carbon dioxide, but it would take a good bit of effort. Some people will shovel mounds together so the ants will fight and kill each other. Ants from different mounds will usually fight, but this is not really an effective way to control fire ants -- far too labor intensive, even if it did work.”

Many people also believe that mowing the lawn causes fire ants to vacate an area. Disturbing a

mound with the lawn mower is a good way to upset ant colonies, but it doesn't do anything to get rid of them, Layton said.

“Ants build mounds high during spring time to get solar heating for the brood, and to stay out of water logged soils,” he said. “If the ground gets dry during the summer, the ants move the brood deeper into the cool soil. If the area is mown, the mounds seem to disappear, but the colonies are still there.”

Another common misconception is that fire ants simply crawl over from a neighbor's yard to invade a new area. Layton said the ants reproduce and spread by swarming.

“The males and females fly up into the air, mate up there, and then the mated queens fall back to earth to start new colonies,” he said. “During this mating flight, they may travel several hundred yards to several miles, depending on wind. It is these mated females raining back down that cause new fire ant colonies, though it takes about six months to a year for new colony to grow into a large mound.”

According to Lowndes County Extension agent Reid Nevins, the best approach to fire ant control is to use individual mound treatments in conjunction with broadcast applications of granular fire ant bait or broadcast treatments with residual insecticides to control all ants in an area. Nevins said two of the best times to broadcast are during the early spring and late summer.

“I get a lot of calls about fire ants,” Nevins said. “I tell my clients that the best thing to do is broadcast bait across the whole yard at least twice a year. It will take several weeks before you can knock it down if you've got a widespread problem, but it works.”

Layton suggested applying granular fire ant baits as broadcast treatments three or four times per year.

“This is the foundation of a good fire ant control program,” Layton said. “Use individual mound treatments to control problem mounds that escape the bait treatments. These can be dry mound treatments with acephate or liquid mound drenches with products containing contact insecticides like permethrin or carbaryl.”

CUTLINE/with fire ant misconceptions feature



The biggest reason people have trouble controlling fire ants is that they only treat individual fire ant mounds. Individual mound treatments can be useful situationally, but need to be supplemented with broadcast treatments that will control all fire ants in all areas. (Photo by MSU Extension Service/Kat Lawrence)

###

Released: May 19, 2015

Contact: Dr. Blake Layton, 662-325-2085; or Dr. Rocky Lemus, 662-325-2311

Hay, forage producers wage war on fire ants

By Linda Breazeale
MSU Ag Communications

STARKVILLE, Miss. -- Southern farmers may never win the battle against imported fire ants, but aggressive tactics can slow the pests' invasion, reduce damage and prevent further spread across the United States.

Jane Parish is an Extension/research professor with the Mississippi State University Extension Service and the Mississippi Agricultural and Forestry Experiment Station. She said cattle and hay producers have learned to live with and work around the troublesome ants since the pests arrived in the state almost a century ago.

"Fire ants are a painful aggravation. No one can do farm work without getting stung from time to time," Parish said. "Their mounds can damage cutting equipment, and if a calf is born too close to a bed, the results can be catastrophic, especially for weaker calves that may already have health issues."

Parish said producers may believe effective control costs are too high on larger farms like the Prairie Research Unit that she manages in Monroe County, but spot treatments in certain areas can be helpful.

"If only treating part of the farm, calving pastures should be a first priority to help protect cows lying down to calve and their newborns from being born into a heavily infested area," she said. "Hospital pens and receiving pens on stocker operations would be examples of other high-priority areas to treat."

Native to South America, imported fire ants first entered the U.S. around 1918 at the Port of Mobile and made their way into Mississippi in the 1930s. They have since spread to every county in the state and throughout most of the Southeast.

Rocky Lemus, an associate Extension/research professor, specializes in grazing and forage

systems. For most Mississippi hay producers, forage is grown in spite of fire ants. The pests can be more trouble in square-bale fields when hay is hauled by hand.

“Monitor for fire ant activity in and around hayfields. When the numbers are high, treat with broadcast baits according to label directions,” Lemus said. “Take care to avoid getting treatments on hay bales.”

Lemus said commercial hay producers must be aware of fire ant quarantine lines to reduce their spread across the country.

“Fire ants have moved across the South and into isolated areas of California and New Mexico,” he said. “Quarantines control the movement of some products, like soil, plants and hay, to help stop the spread of these invasive pests.”

Producers can ship hay from inside the quarantined area to other locations inside that quarantined area. Hay destined for locations outside the quarantined area must be certified as fire-ant free by the Mississippi Bureau of Plant Industry before it can be shipped.

Lemus said most of the requirements for certification refer to storage conditions, not growing conditions.

“Baled hay that is stored in direct contact with the ground will not qualify for certification and cannot be moved outside the quarantined area,” Lemus said. “Trucks and trailers will also need to be cleaned of any soil before loading.”

Consult local Extension agents or look online for additional quarantine requirements.

“Before hay is approved for shipping outside the area, an inspector from the Bureau of Plant Industry will place an attractant on the hay to determine if fire ants are present,” Lemus said. “If clear and all other standards have been met, a certificate will be issued to accompany each load to the destination and provided to the recipient.”

Extension entomologist Blake Layton said fire ants can be controlled in pastures and hayfields with granular baits, ideally before major infestations occur.

“Baits work slowly, so they need to be applied as preventatives or deterrents,” he said. “One annual treatment -- ranging from \$8 to \$15 per acre -- will reduce populations, but to eliminate or prevent mounds around a barn or paddocks, more than once a year will be necessary.”

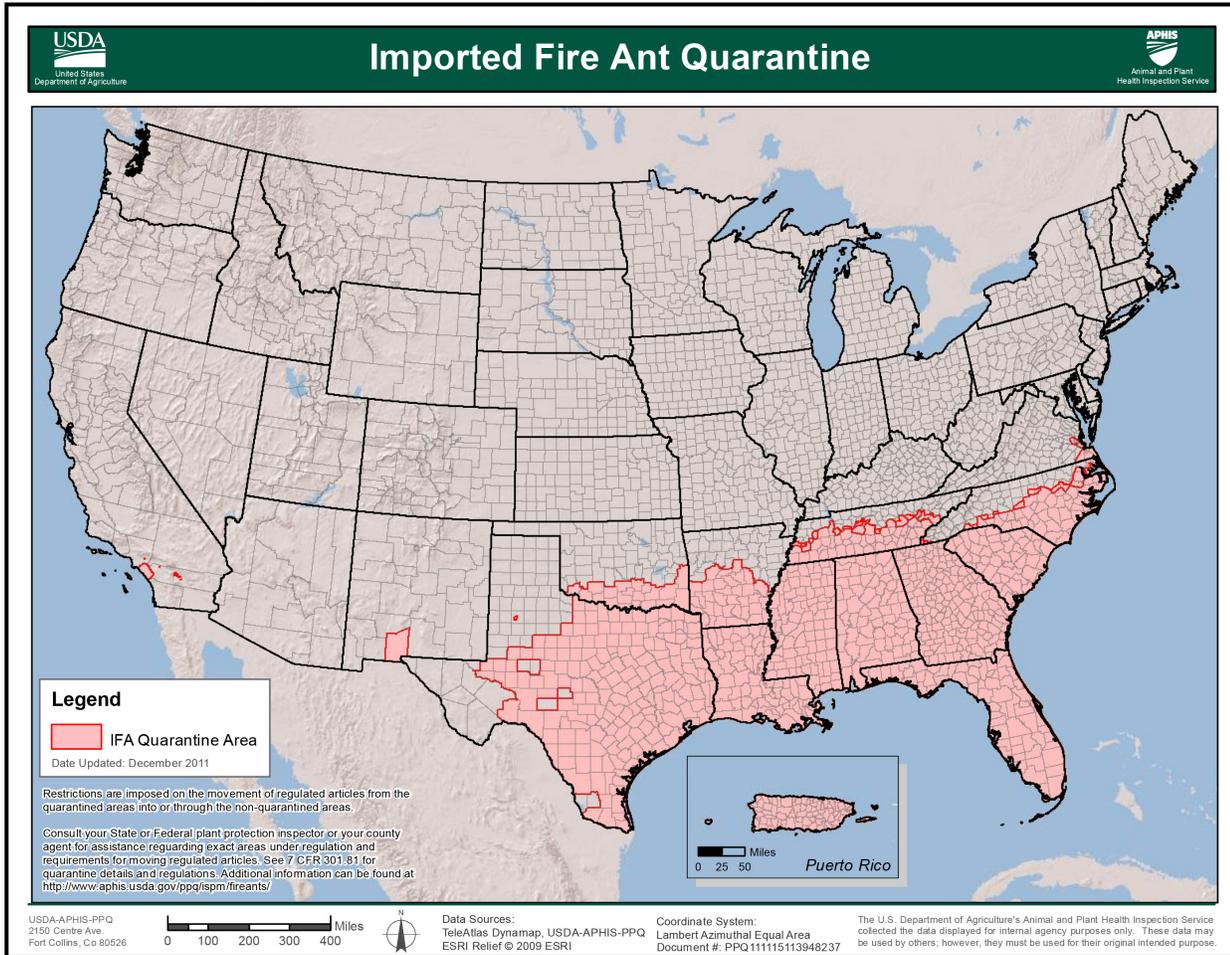
Layton said to read and follow label directions closely.

“Not all fire ant baits are labeled for hayfields and pastures,” he said. “The three active ingredients currently labeled for use in forages are methoprene, pyriproxyfen and hydramethylnon.”

He warned that dry mound treatments containing the active ingredient acephate, common in home lawn treatments, leaves illegal residues that are dangerous to livestock.

“Only purchase enough fire ant bait for one season because the oil in the baits will go rancid and no longer attract ants,” he said.

For more information on controlling fire ants in pastures, hayfields and barnyards, go online to <http://msucare.com/pubs/publications/p2493.pdf>. Additional information on the Bite Back efforts from MSU Extension Service is available at <http://msucare.com/biteback>.



Fire ant mounds are common along fence lines where they are protected from grass-cutting equipment and other traffic, such as this mound in an Oktibbeha County, Mississippi, pasture on May 11, 2015. (Photo by MSU Ag Communications/Kevin Hudson)

###

Bite Back, Mississippi! Campaign

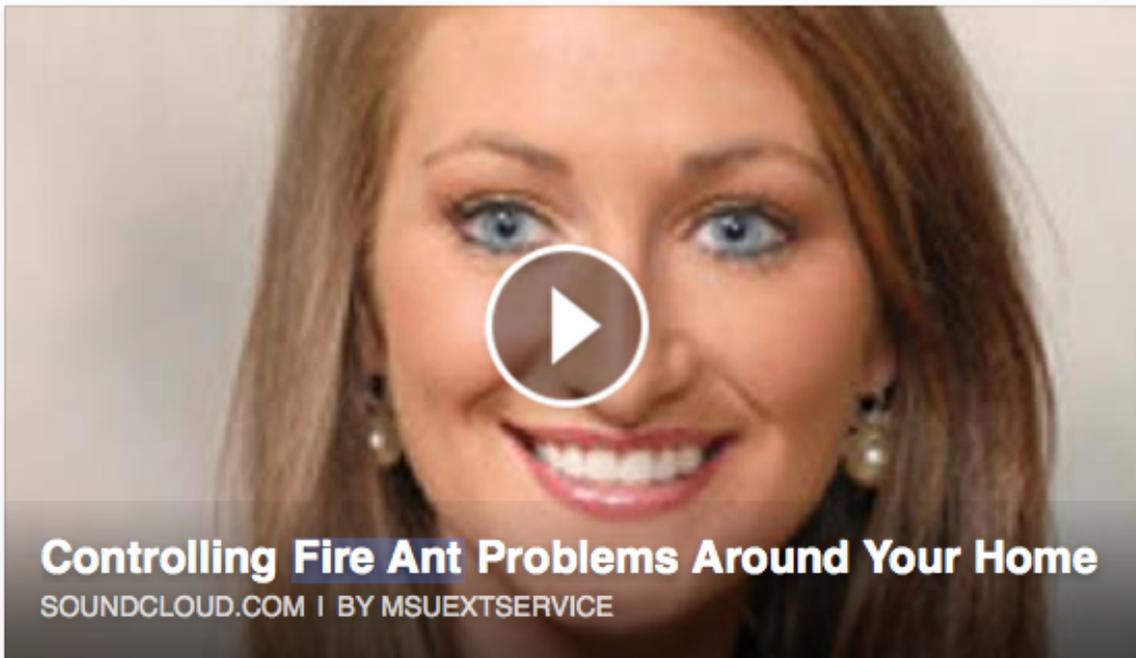
Facebook Promotion



Mississippi State University Extension Service

Published by Mississippi Ext [?] · March 25, 2015 · 🌐

In our latest Farm and Family radio segment, host Amy Taylor interviews Extension specialist Dr. Blake Layton on how to control [fire ants](#) around the home! Listen to the short clip below!



866 people reached

Boost Post

👍 Like

💬 Comment

Was this result helpful? Yes · No



➦ Share

Jenny Lee Bibb, Mississippi Development Authority, Southern Gardening and 16 others like this.



Write a comment...





Mississippi State University Extension Service

Published by Mississippi Ext [?] · April 28, 2015 ·

It's time to BITE BACK, Mississippi! Take back control from the fire ants that are making your lawn or garden a living nightmare. We have all the resources you need here: <http://msucares.com/biteback/>



2,580 people reached

Boost Post

935 Views

Like

Comment

Was this result helpful? Yes · No



Share

Judy Lewis Elledge, Erin Griffin, Wallace Skelton and 11 others like this.

22 shares



Write a comment...





Mississippi State University Extension Service added 3 new photos.

Published by Mississippi Ext [?] · June 19, 2015 · 🌐

Wanted to share with you a couple of behind the scenes pictures of something special we've been working on! Can't wait to y'all to see the new Bite Back MS video about getting rid of those [fire ants!](#) 🐜🔪



298 people reached

[Boost Post](#)

👍 Like

💬 Comment

Was this result helpful? Yes · No



➦ Share

Suzanne Stumpf, Kathy Prater, Albert Mayhan III and 6 others like this.

[Top Comments](#) ▾



Write a comment...



Sherri Underwood Renaud Can't wait!

Unlike · Reply · Message · 👍 1 · June 23, 2015 at 6:14pm



Linda Wright Garnett CAN'T WAIT --- NEED NOW!!

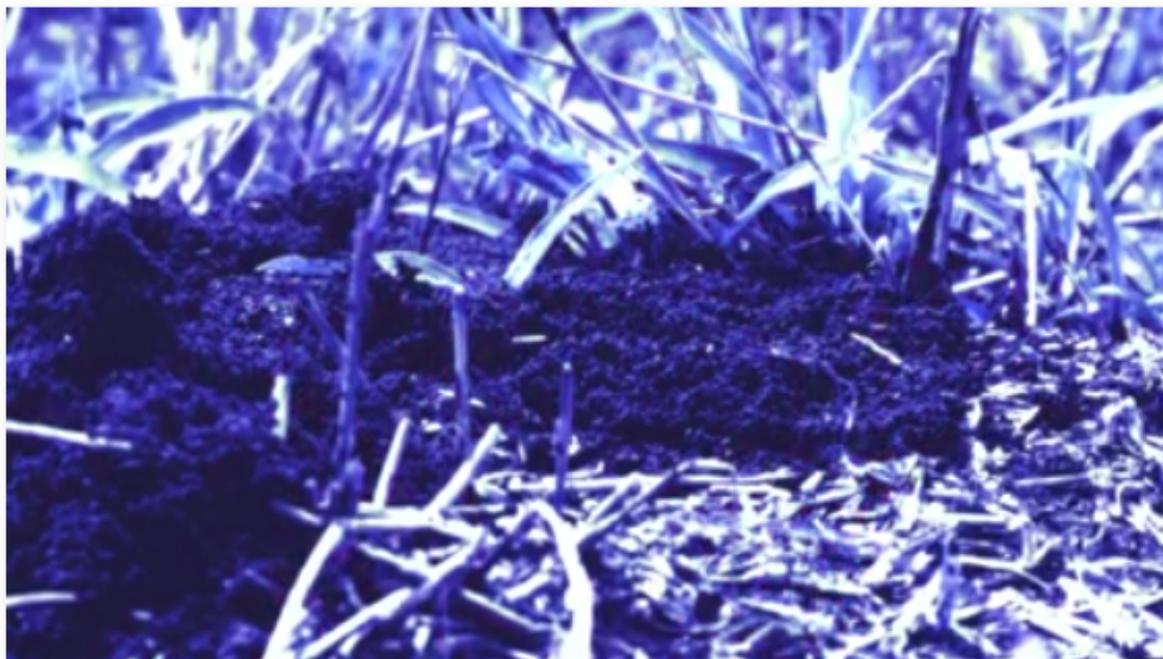
Unlike · Reply · Message · 👍 1 · June 19, 2015 at 5:51pm



Mississippi State University Extension Service

Published by Mississippi Ext [?] · July 30, 2015 · 🌐

Do you have the fire ant blues? We've got the cure! You can find more resources here: <http://msucares.com/biteback/>



828 people reached

Boost Post

156 Views

👍 Like

💬 Comment

Was this result helpful? Yes · No



➦ Share

Elizabeth Gregory North, Mississippi Development Authority, John Hood and 9 others like this.

Top Comments ▾

2 shares



Write a comment...



Sonya D. M. Baird Great work, John!

Unlike · Reply · Message · 👍 2 · July 30, 2015 at 5:02pm



Mississippi State University Extension Service

Published by Mississippi Ext [?] · November 6, 2015 · 🌐

Great information about [fire ants](#) from [16 WAPT News Jackson](#) featuring our very own Hinds County Extension agent Kyle Lewis!

You can learn more tactics to fight [fire ants](#) here: <http://msucares.com/biteback/>



1,895 people reached

[Boost Post](#)

Like

Comment

Was this result helpful? Yes · No



Share

Cindy Sanford Callahan, Sissy Cherry, Nick Brower and 9 others like this. [Top Comments](#) ▾

3 shares



Write a comment...



Katie Coker Brianna Harmony Bradley

Like · Reply · Message · November 6, 2015 at 7:42pm

Released: July 3, 2014
Contact: Dr. Jessica Tegt, 662-325-3133

Get a grip on fire ants without getting stung

By Jessica Tegt
Urban Wildlife Specialist
MSU Extension Service

MISSISSIPPI STATE -- Fire ants are more than aptly named, given the reddish-orange color of their bodies and the painful, burning sting they can give.

Fire ants were unintentionally introduced to the United States from South America. The first documented release of fire ants occurred near Mobile, Alabama around 1918, and by the late 1930s, most of Mississippi had them.

Fire ants are very small and aggressive. When disturbed, they swarm, bite and sting, producing a painful or itchy pustule within hours.

Fire ants are persistent and difficult to eradicate. They are a potential threat to humans and pets that dig, play or run near active mounds.

Livestock are vulnerable to fire ants, especially where outdoor food sources are stored. Fire ants are known to infest and kill nests of ground-nesting birds. Their effects on other wildlife, such as deer fawn, turtles and bobwhite quail are currently being researched.

Fire ants may live up to seven years, but the average lifespan is around three. The winged ants seen on or around fire ant mounds are the reproductive alates, which produce thousands of ant eggs in their lifetimes.



Closeup -- The invasive fire ant, known for its reddish color and nasty sting, is a common enemy of most homeowners and gardeners in Mississippi. (Photo courtesy of Marina Denny)



Tunnels -- Fire ant colonies build an intricate maze of tunnels in a mound, both above and below ground. (Photo courtesy of Marina Denny)

Just beneath the top of a fire ant mound is the new ant brood in larval and pupal stages, which look like hundreds of white rice particles. When they mature, they “bud-off” and join a queen in a new colony. A fire ant queen can fly one-quarter of a mile on her own, but the wind can carry her for miles.

Fire ant colonies also move through nursery stock plants, hay and sod. Humans unsuspectingly move fire ants by trying to drown them. The fire ants form balls on the water and float to new locations when their mound is flooded.

Many homeowners prefer to try natural or organic remedies before resorting to chemical treatments. Pouring 2-3 gallons of boiling water over newly produced mounds may provide up to 60 percent control, but many of the ants just move to new locations.

Other home remedies, such as grits, gasoline, orange peels, vinegar, bleach and ammonia, have nominal impact on ants, but the potential for personal injury or movement of these substances into groundwater can be very high.

Blake Layton, an entomologist with the Mississippi State University Extension Service, recommended a combination of granular baits, mound treatments and broadcast insecticide treatments to control fire ants.

Granular baits that contain a food product attractive to fire ants are inexpensive, safe for pets and wildlife, and up to 80 percent effective at removing mounds. However, they are slow-acting and may take as long as eight weeks to achieve full benefit.

During and between granular bait treatments, apply fast-acting mound treatments in the form of dry or liquid drenches. Apply the drench over and around the entire mound to ensure treatment of the vast array of underground tunnels. Keep pets and children away from mound treatments.

Finally, broadcast insecticide treatments, when used in conjunction with granular baits and mound treatments, can produce long-lasting effects by killing both worker and queen ants and preventing new mounds from being colonized. Use a fertilizer spreader to apply the broadcast treatment.

Find more fire ant facts at <http://msucare.com/biteback> or contact Layton at 662-325-2085.

[Editor's Note: Extension Outdoors is a column authored by several different experts in the Mississippi State University Extension Service. Jessica Tegt is an assistant Extension professor with the MSU Extension Service, specializing in human-wildlife conflict resolution and youth education.]



Bite Back, Mississippi! Campaign

E-mail Newsletter

Bug's Eye View

Dr. Blake Layton

MISSISSIPPI STATE
UNIVERSITY
EXTENSION SERVICE

Imported Fire Ant Mound

Solenopsis invicta

Order: Hymenoptera

Family: Formicidae



Would you like to avoid having large fire ant mounds like this one in your yard next spring? Make an application of granular fire ant bait this fall. September is the ideal time for this fall bait treatment. Even if you don't see any fire ant mounds in your landscape right now, you still need to treat because you probably have a lot more fire ants than you think. It can take six months or more for a newly established fire ant colony to grow large enough to be visible above the grass, and you probably have a lot of these young fire ant colonies in your yard right now. Even large, well-established colonies are not always easily visible this time of year. Under hot dry conditions fire ants keep their brood down in the cool moist soil and don't always maintain the above ground portion of the nest, especially if the area is frequently mown. But in early spring fire ants tend to build mounds high above the grass where they are more visible. They do this for two reasons: 1) to escape the water-saturated soil conditions that often occur due to heavy spring rains, and 2) to have a warm place to rear their brood early in the spring when it is too cold down in the soil. In this last case the ants are using solar heating to warm their brood, and they even move brood to the side of the mound that has the most sun exposure.

Control: Amdro, Extinguish, Extinguish Plus, Advion, and Distance are examples of granular fire ant baits. The key to success with baits is to apply them as broadcast treatments over the area where you want to control fire ants. Don't try to treat individual fire ant mounds with granular baits; you will miss most of the colonies in the yard. Instead, use a small, hand-held spreader to spread the bait over your yard at the rate given on the label. Even though granular baits are slow-acting, they are our most effective tools for controlling fire ants. When used correctly, baits are safe, affordable, quick and easy to apply, and effective! Make this fall bait application and you will have a lot fewer fire ant mounds popping up in your lawn next spring.

See Extension Publication 2429, Control Fire Ants in Your Yard, <http://msucares.com/pubs/publications/p2429.pdf>, for more information on fire ant biology and control, including information on granular fire ant baits. Also see the MSU Fire Ant Web Site, <http://msucares.com/insects/fireants/index.html>, for detailed information on fire ant biology and information on controlling fire ants in special situations, like pastures, orchards, or vegetable gardens.

Blake Layton, Extension Entomology Specialist, Mississippi State University Extension Service.

The information given here is for educational purposes only. Always read and follow current label directions. Specific commercial products are mentioned as examples only and reference to specific products or trade names is made with the understanding that no discrimination is intended to other

Bite Back, Mississippi! Campaign

*Administrative E-mails regarding
demo of campaign materials for
legislators*

RE: Update on Fire Ant Meeting with House Ag Committee

Jackson, Gary

Sent: Tuesday, July 14, 2015 10:35 AM

To: Layton, Blake

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John; Bohach, Gregory; North, Elizabeth

Dr. Layton:

Thanks for meeting with Representatives Sullivan and Jolly and planning this meeting. I think you have a great agenda. I also wanted to suggest that you conclude the meeting with about a five minute demo on the new Bite Back Fire Ant website on MSUCares.com before you take questions. While I am sure you will be discussing some of the info you have listed on the site, I think it is a great idea to give the House Committee a great advanced visual so they can actually see the site and your educational information on fire ants. They will also refer their constituents to it. It is a great site and I appreciate you and Ag Communications putting this together this year.

For those of you who have not seen it, it can be found at:

<http://msucares.com/biteback/>

From: Bohach, Gregory

Sent: Monday, July 13, 2015 7:35 PM

To: Layton, Blake

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John; Jackson, Gary

Subject: RE: Update on Fire Ant Meeting with House Ag Committee

Dr. Layton:

Thanks so much for your efforts on this project. This sounds great. I am also copying Dr. Jackson to keep him in the loop. Like you, I welcome input from others on this email.

Greg

From: Layton, Blake

Sent: Monday, July 13, 2015 9:25 AM

To: Bohach, Gregory

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John

Subject: Update on Fire Ant Meeting with House Ag Committee

Dr. Bohach,

I just wanted to give you an update on activities related to planning for the upcoming fire ant presentation and meeting with the House Agriculture Committee on September 15.

Last Thursday I met with Mr. Preston Sullivan and Mr. Russell Jolly, along with Mr. Scott Cagle, who is County Extension Agent in Chickasaw County. We visited over lunch and during a tour of Mr. Sullivan's farm. The key purpose for this meeting was to determine the primary goal of the September 15 meeting and to get input on the desired program content and agenda.

Based on this visit it was clear that the primary goal is to provide members of the Mississippi legislature with background information on fire ants with the objective of gaining more support for fire ant research, particularly basic research directed toward development of new control methods for long-term area-wide suppression or eradication. Eradication was the ultimate desire expressed by both Mr. Sullivan and Mr. Jolly, and we discussed the difficulties involved in eradicating such a well-established pest. We also discussed the threats presented by some of our more recently introduced invasive species and there was some interest in these as well, particularly Formosan termites.

Mr. Sullivan was aware of the fire ant research being done by USDA ARS in Stoneville and asked for someone from this unit to also be present at this meeting if possible. We had already contacted the researchers in Stoneville about this upcoming meeting, and I told Mr. Sullivan and Mr. Jolly that we would be sure to invite someone from this unit to the meeting.

Based on the requests and information received thus far, I have developed the following tentative agenda for the September 15 meeting.

Agenda: Fire Ant meeting with House Agriculture Committee, September 15, 2015, Jackson, MS

30 minutes: Fire Ants in Mississippi: Impact, Economic Costs, Biology, and Control Methods

By: Blake Layton, Extension Entomology Specialist, Mississippi State University Extension Service

10 minutes: Overview of USDA ARS Fire Ant Research Efforts at Stoneville

By: (TBA, possibly Dr. Michael Grodowitz or Dr. Jian Chen)

20 minutes: Questions, Answers, and Discussion

Of course we can make any necessary changes in this agenda, but it is my understanding that we only have an hour for the entire meeting. I believe it is especially important to make attendees aware of some of the more relevant aspects of fire ant biology that limit, or facilitate, our ability to control them; to briefly discuss the difficulties inherent in eradication of any well-established pest species; and to very briefly make attendees aware of the, sometimes even greater, threats

RE: Update on Fire Ant Meeting with House Ag Committee

Herndon, Bill

Sent: Tuesday, July 14, 2015 3:31 PM

To: Jackson, Gary; Layton, Blake

Cc: Dean, Jeffrey; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John; Bohach, Gregory; North, Elizabeth

Dear Dr. Layton,

Thank you for your meeting with Mr. Sullivan and Joly ... and especially for your site visit of Preston Sullivan's farm. I agree with Dr. Jackson that you should include in you presentation a demo of your "Bite Back" website and materials. Please let me know if I can assist you and please continue to keep us "in the loop" as you progress in planning and delivering this information.Thanks, Bill

Cary W. "Bill" Herndon, Jr.
Associate Vice President
Division of Agriculture, Forestry, and Veterinary Medicine
Mississippi State University
P.O. Box 9800
Mississippi State, MS 39762
Office: (662) 325-2630
FAX: (662) 325-1215
Cellular: (662) 312-0249

From: Jackson, Gary

Sent: Tuesday, July 14, 2015 10:35 AM

To: Layton, Blake

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John; Bohach, Gregory; North, Elizabeth

Subject: RE: Update on Fire Ant Meeting with House Ag Committee

Dr. Layton:

Thanks for meeting with Representatives Sullivan and Jolly and planning this meeting. I think you have a great agenda. I also wanted to suggest that you conclude the meeting with about a five minute demo on the new Bite Back Fire Ant website on MSUCares.com *before you take questions*. While I am sure you will be discussing some of the info you have listed on the site, I think it is a great idea to give the House Committee a great advanced visual so they can actually see the site and your educational information on fire ants. They will also refer their constituents to it. It is a great site and I appreciate you and Ag Communications putting this together this year.

For those of you who have not seen it, it can be found at:

<http://msucares.com/biteback/>

From: Bohach, Gregory

Sent: Monday, July 13, 2015 7:35 PM

To: Layton, Blake

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John; Jackson, Gary

Subject: RE: Update on Fire Ant Meeting with House Ag Committee

Dr. Layton:

Thanks so much for your efforts on this project. This sounds great. I am also copying Dr. Jackson to keep him in the loop. Like you, I welcome input from others on this email.

Greg

From: Layton, Blake

Sent: Monday, July 13, 2015 9:25 AM

To: Bohach, Gregory

Cc: Dean, Jeffrey; Herndon, Bill; Burger, Wes; Martin, Steve; Hopper, George; Tomlinson, John

Subject: Update on Fire Ant Meeting with House Ag Committee

Dr. Bohach,