

Kimberly Schofield Program Specialist- IPM k-schofield@tamu.edu

Flying Midges about Town

Large numbers of non-biting midge flies in the Family Chironomidae are being reported this time of year. These midges can be confused with mosquitoes, since these midges are small, between ¹/₈- ¹/₂ inches in length. However midges lack scales on their wings and they do not have piercing mouthparts. Adult midges are humpbacked and are brown, black, or gray in color. Sometimes in urban environments, where structures are built next to lakes, rivers, stagnant ditches and ponds, adult midges can emerge in extremely large numbers. These swarms tend to occur just after sunset, as the adults become active and fly towards outdoor lights. Adults are attracted to lights and may accumulate in large numbers on window screen, around porches and street lights. Swarms of adults may be so dense that they interfere with outdoor activities and these flies can stain walls and other surfaces when they rest.

Some Control Options

Some Non-Chemical Control Options:

 Fertilizer run-off from residential lawns and garden areas, golf courses and agricultural fields is sometimes responsible for the development of large populations of midges; so the proper use of fertilizers can avoid excess run-off into lakes, ponds and streams.
Try to eliminate standing water, since midges can fly as far as a ¹/₄ mile from breeding sites, such as a drainage ditch.

3) High intensity white light has been found to be highly attractive to adult midges so by keeping blinds closed and porch lights off will help to reduce the number of adults attracted to outdoor lights.

Some Chemical Control Options:

Bacillus thuringiensis var. *israelensis* (*Bti*), is registered for use against chironomid midge larvae. Also insect growth regulators such as methoprene can be used to control midge larvae. In addition, applications of residual insecticides such as those containing permethrin can be applied to porches, carports, and under the eaves of structures to control adult midges.



Photo of a midge, Family Chironomidae. Photo by Marilyn Sallee, Master Gardener Entomology Specialist, Tarrant County.

Solutions to Your Fire Ant Problems

Please join us at <u>http://connect.extension.iastate.edu/fireant</u> on Thursday, April 21st from 10:00 - 11:00 AM central time for a free webinar about controlling fire ants. This webinar is brought to you by The Imported Fire Ant eXtension Community of Practice. The moderator for the webinar is Dr. Kathy Flanders from Auburn University and the topics to be discussed are: How Can You Tell if You Have Fire Ants? by Dr. Jason Oliver from Tennessee State University; Understanding the Biology and Behavior of Fire Ants Makes it Easier to Control Fire Ants by Dr. Timothy Davis from Clemson University; Managing Imported Fire Ants by Dr. Bastiaan Drees from Texas A&M University and Biological Control of Fire Ants by Dr. Lawrence Graham from Auburn University. It is easy to participate; all you need to do is log in as a **guest** at: <u>http://connect.extension.iastate.edu/fireant</u>.



Time to Treat for Fire Ants

Red imported fire ants, *Solenopsis invicta* Buren, are an invasive species that has infested over 360 million acres so far in the United States. The use of chemicals is needed to manage their populations, in order to allow the competitive native ant species back into the landscape. Fire ant baits, drenches, dusts and contact granular insecticides may be applied to control fire ants. It is advised to treat the individual fire ant mounds directly if less than 5 mounds are found within a 1/4 acre or less than 20 mounds within 1 acre, since this is not considered an infestation. However, if more than 5 mounds are present within a ¹/₄ acre or 20 mounds within an acre, then a fire ant bait or contact insecticide should be broadcasted over the entire infested area. Fire ant baits are made up of defatted corn grit covered with insecticide and soybean oil. Before broadcasting the fire ant bait, foraging activity should be assessed, by placing a chip or hot dog next to the mound. If fire ants find the chip or hot dog within 15-20 minutes, then it is a suitable time to broadcast the bait. Fire ants will typically forage when the soil surface temperature is between 70-90° F. Fire ant baits should never be watered into the soil and they should not be applied if they smell rancid. On the other hand, contact granular insecticides can also be broadcasted over the entire infested area and need to be watered into the soil. Control using contact granular insecticide generally lasts between 6-12 months, depending on the active ingredient within the insecticide.

For more information, please visit <u>http://fireant.tamu.edu</u> and <u>www.extension.org/fire+ants</u>.



Photo of a fire ant mound. Photo by Bart Drees, Professor and Extension Entomologist, Texas A&M University.

May and June Beetles Emerging Soon

During the months of April and May, we begin to see the adult May and June beetles (*Phyllophaga* spp.) flying around lights or onto window screens, most commonly at night. The female May beetle will usually deposit eggs into the turf in April-May; where as the June beetle will usually deposit eggs in May-June. The eggs will hatch into grub worms that are creamy white in color with brown heads and are "c-shaped." The grubs feed on dead organic matter and then move to the roots of plants. Since the grubs feed on roots, they can injure roots of grasses and other plants. This causes infested grass to brown and easily removed in large clumps.

Before treating for grub worms, lawns should be inspected to determine the presence of an infestation, which is more than 5 grubs within a square foot. In order to inspect an area, soil sections that are 3 to 4 inches deep should be taken randomly to total one square foot. One square foot of turf can be sampled by removing four, 6 inch square pieces of turf or ten, 4 inch cup cutter core samples. The optimal time for inspection and treatment should be 5-6 weeks after the most beetles are seen. This will ensure that smaller grub worms that are less than $\frac{1}{2}$ inches will be found in the turf.

Some Control Options:

Non-Chemical Control Options:

Maintain healthy turf by fertilizing and watering properly.

Parasitic nematodes in the genera *Steinernema* and *Heterorhabtitis* have been shown to be effective against white grubs. They can be purchased and applied to infested areas.

Chemical Control Options:

Irrigating the soil with ¹/₄ -¹/₂ inches of water prior to treatment can improve the effectiveness of the insecticides, since the grubs will move closer to the soil surface. Imidacloprid, halofenozide, thiamethoxam, and clothianidin are some active ingredients found within insecticides that are often applied before extensive grub worm damage is seen, since they are effective on smaller grubs. Lambda-cyhalothrin and trichlorfon are some active ingredients within insecticides that are used when larger grub worms are present.



White grubs. Photo by Texas AgriLife Extension Service: http://insects.tamu.edu/images/insects/color/sorghum/sorghum.html.

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