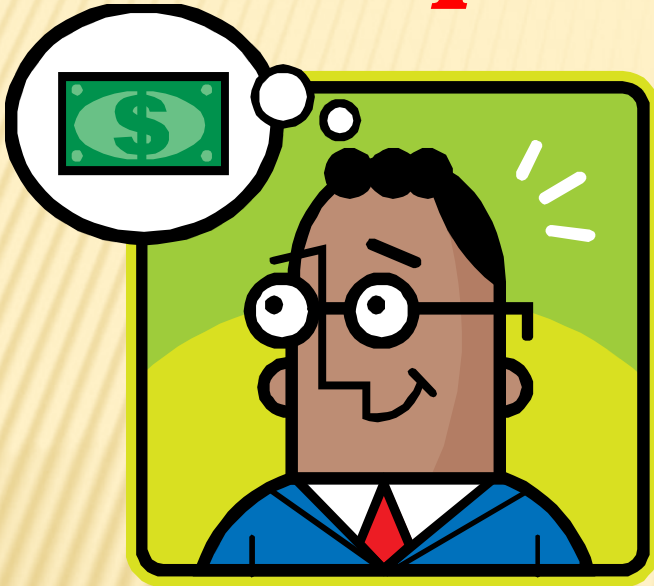


Educational Resources for Mosquito Management



Willie Chance, UGA Center for Urban Agriculture

wchance@uga.edu

See presentation online - <http://tinyurl.com/GMCA2014>

በጥላ ይኖር! ርዕዩን በባለ ሃይቅ!



Current info from UGA for the pest control industry!

What happens to West Nile Virus in the winter?



What happens to West Nile Virus in the winter? Are we still at risk of infection? How does the virus survive the winter? Click on Read More

Band Mean

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Visit the beach & earn five hours of Georgia Pesticide Applicator or ISA Credit!



located next to the St. Simon's pier and within walking distance of the Village. Earn pesticide applicator credits that are applicable in 14 categories. [Find an agenda or register here.](#) [Read More](#)

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Upcoming Training

October 15-17

[Georgia Nonprofit Council Association meeting](#)
[there](#)

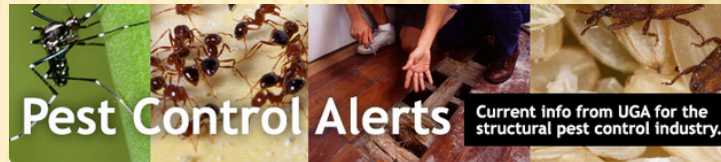
Thu through December 4
Cardiac program
 UGA-Griffin campus

October 15
[AnnRams of the Southeast](#)
[webinar](#)
 Dr. Karen Vall, University of Tenn.

October 23
 6th Workshop in Griffin
 Regular Noon or Program

October 24
Pesticide Refresher & Handling
(7 pesticide handling hours)

**For more information -
wchance@uga.edu or
www.tinyurl.com/pestalert**

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Oct 2014
6

What happens to West Nile Virus in the winter?



Where, oh where, does the virus go (in the winter)?

*Dr. Rosmarie Kelly, Public Health Entomologist, Georgia
Department of Public Health*

It's that time of year when those in mosquito surveillance and control think fondly of consistently cooler temperatures and eagerly await that first hard frost. Of course, this is already happening in some places up north. We may have to wait a while longer in here in Georgia. But that does bring to mind the question: **Where do all the mosquitoes go once the colder weather arrives?**

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PEST CONTROL ALERTS NEWSLETTER



April 03, 2014

Current info from UGA for the pest control industry!

Controlling different mosquito species

Apr03, 2014 10:54 am



methods. [Read More](#)

The first step in controlling the mosquito species which are causing your client problems is to identify the local species. Quite often, not all methods of control will work well for all species. Knowing which species are the issue can help you determine future control

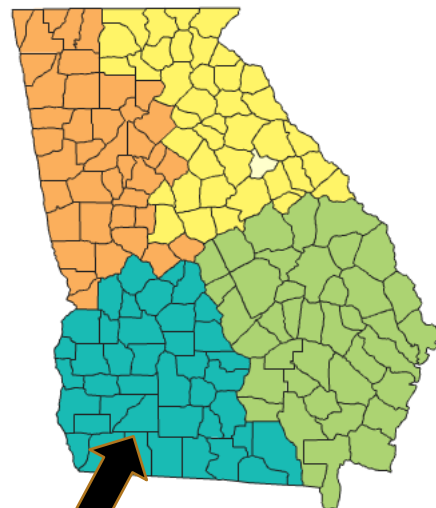
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April 3 - June 12
[Urban Pest Management Program Certificate Program](#)
UGA-Griffin campus

April 16
[Bed Bug Monitoring webinar](#)
Dr. Susan Jones, The



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Upcoming Training

October 15-17 Georgia Mosquito Control Association meeting Athens

Thursdays through December 4 [Certificate program](#) UGA-Griffin campus

October 15 [Ant Pests of the Southeast webinar](#) Dr. Karen Vail, UT - Online

October 21 [Basics of School Integrated Pest Management](#) online

October 23 [IPM Workshop in Griffin](#) *Class is full!* See program here

October 24 [Pesticide Safety & Handling](#) St Simons Island (5 hours of pesticide credits - 14 categories plus ISA and SAF CFE credits!)

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Sep 2014
5

Mosquitofish help Richmond County control mosquitoes in abandoned pools



Richmond County Mosquito Control used mosquito fish to help control mosquitoes in abandoned pools and other hard to treat areas.

[READ MORE](#)

Posted in Biological insect control, Biting pests, Integrated pest management, Mosquitoes.

[Edit](#)

Aug 2014
28

UGA Insect Identification Services



Seven spotted lady beetle, *Coccinella septempunctata*

UGA Extension faculty will be glad to provide insect identifications for the public as time permits. We request that specimens be submitted via your local county agent. These agents may be able to provide insect identifications themselves, or if not, they are trained to submit the specimen to the appropriate faculty member.

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Posted in Uncategorized.

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ONLINE ALERTS



Pest Control Alerts

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Upcoming Training

October 15-17 Georgia Mosquito Control Association meeting Athens

Thursdays through December 4 Certificate program UGA-Griffin campus

October 15 Webinar – Integrated Approach to Managing Odorous House Ants and Stopping the Occasional Invaders Online

October 21 Basics of School Integrated Pest Management online

October 24 Pesticide Safety & Handling St Simons Island (5 hours of pesticide credits – 14 categories plus ISA and SAF CFE credits!)

October 24 IPM Workshop in Griffin Class is full! See program here

November 6-7 Certified Pest Control Operators of Georgia Annual Meeting Forsyth



URBAN PEST MANAGEMENT PROGRAM-GRIFFIN

Urbanization creates pest problems that threaten the health and welfare of all Georgians. Insect and rodent pests consume and contaminate our food anywhere that it is grown, prepared.

Program Leader
[Dan Sulter](#)

THE UNIVERSITY OF GEORGIA
COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES

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- Formosan Termites
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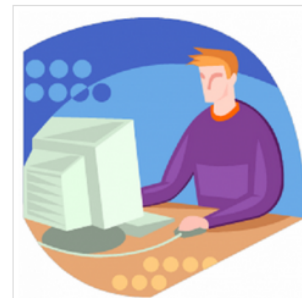
Online Training for the Pest Control Industry

Past trainings and webinars have been recorded and made available online. For more information, click on the links below. Not all webinars originate from Georgia, so not all information may be pertinent to our area.

[This website](#) lists the available online trainings.

Are Those Itsy Bitsy Spiders Good or Bad? May 2, 2014

Dr. Nancy Hinkle, Professor in the Department of Entomology at the University of Georgia.





EMERGING PROBLEMS AND ISSUES

Tawny Crazy Ant found in three new locations



The Tawny Crazy Ant (TCA) is an invasive ant species from South America with widespread distribution in Texas and Florida. The TCA was detected in Albany in 2013. In August 2014 three additional TCA sites were found in coastal Georgia. This ant has become a tremendous nuisance in other areas it invaded. If pest control professionals find a possible TCA infestation, they are asked to verify the identification by sending a sample to Dan Suiter, UGA Entomologist. This article also discusses TCA biology and control.

[Image from Texas A&M publication on Tawny Crazy Ants.](#)
[Read More](#)

Mosquito season continues through September



Elmer Gray, UGA Extension Entomologist

As we move into the last weeks of summer, be aware of the excellent conditions for mosquito development that this summer's heavy rains have created. This year has been very different from recent years when we consider our local rainfall totals. To date, much of the state is 15 inches or more ahead of normal rainfall for this time of the year. As a result there is more standing water in our counties and communities than in recent memory. This standing water will provide excellent larval habitat for mosquitoes as we move into the last few weeks of summer.

Mosquitoes are semi-aquatic insects that require standing water for the larval and pupal stages. There are 63 species of mosquitoes

known in Georgia and as result they exhibit a range of life histories.

Typically, the female mosquito will lay eggs on the surface of the water, attached to the sides of a container just above the water's surface or on moist soil that will become covered with water at a later date. After being covered with water and in due time, the eggs hatch and the larvae (or





REGULATORY CHANGES

Pest Control Alerts

Current info from UGA for the structural pest control industry.

Oct 2013
28

Free video helps to provide training on the newly revised OSHA Safety Data Sheets



(Editors' notes – these changes impact pesticide applicators in several ways:

- SDS sheets should replace the MSDS sheets used in the past. You will want to update your MSDS sheets with these new 16-section format Safety Data Sheets. These sheets need to be available to employees so they can understand the risks associated with using these chemicals at work.
- Employee training on the new system is required by Dec 1, 2013. The following article includes an online video to help with this requirement. Additional employee training may also be needed.

Pesticides will remain under US EPA regulation. EPA is not requiring pesticide labels to make any changes. The OSHA regulated SDS and the signal word will not match the EPA pesticide label. This OSHA training focuses on chemical label elements that are NON-pesticide.)

[Original article found on this website](#)

"Exposure to hazardous chemicals is one of the most serious threats facing

Apr 2014
14

Amended Rules of the Georgia Structural Pest Control Commission effective April 1



A new webpage has been created to host the amended *Rules of the Georgia Structural Pest Control Commission (SPCC)* which became effective on April 1st. The new page includes:

- All chapters of the rules of the SPCC
- The 2014 Residential Building Code (RBC) for under-floor ventilation
- The rule implementation, assistance & compliance timeline





Pest Control Alerts

Current info from UGA for the structural pest control industry.

UGA SERVICES & PUBLICATIONS

UGA Insect Identification Services



UGA Extension faculty will be glad to provide identifications for the public as time permits. Specimens be submitted via your [local county agent](#) may be able to provide insect identification or if not, they are trained to submit the specimen to the appropriate faculty member.

[Read More](#)



Apr 30

Helpful UGA publications on ant control



Carpenter Ants

Daniel R. Suiter and Brian T. Forschler,
UGA Department of Entomology

Carpenter ants are pests for several reasons. First, they are considered mild wood-destroying organisms because they chew wood to create



Black carpenter ants ($\approx 3/8$ up to $\approx 5/8$ inch) are dull black and their abdomens are covered with fine, yellowish hairs. They are most common inland in central and northern Georgia.



INFO FROM THE INDUSTRY & ASSOC.

Pest Control Alerts

Current info from UGA for the structural pest control industry.

Mosquitofish help Richmond County control mosquitoes in abandoned pools



Richmond County Mosquito Control used mosquito fish to help control mosquitoes in abandoned pools and other hard to treat areas.

[Read More](#)

Aug 2014
28

Georgia Mosquito Control Association meeting Oct 15 - 17 in Athens



GMCA Annual Meeting Oct 15 - 17, Athens

[Find Registration Info Here](#)

The 37th annual Georgia Mosquito Control Association (GMCA) meeting will be held October 15-17, 2014 at the Georgia Center for Continuing Education on the University of Georgia campus in Athens, Georgia.





PERTINENT RESEARCH

UF research: Typical populations of bedbugs can cause harmful blood loss in humans

2014 11:39 am

Jun 2014
30

Termites are lazy, when they aren't eating wood

[B](#)
[T](#)
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Sharon Dowdy is a news editor with the University of Georgia College of Agricultural and Environmental Sciences

Those who tackle termites may think the tiny insects spend their days eating wood. But a University of Georgia entomologist says 80 percent of the time they do absolutely nothing.

"As a group, they always look busy. But as individuals, only a few of them actually spend their time digging," said Brian Forschler, a researcher with the UGA College of Agricultural and Environmental Sciences.



Termites feeding on pieces of wood in garden soil. Image credit: Sharon Dowdy



[University of Florida](#) study, published online by the journal *Medical and Veterinary Entomology*, shows the blood-sucking insect can thrive with far less access to human blood than is typically believed. The three-year study also found that it typically takes about 11 weeks for one pair of bedbugs to spawn a large enough population to cause harmful blood loss in a baby, and under 15 weeks for adult humans. Just 3,500 bedbugs feeding on a single baby or 25,000 on an adult can cause health problems. [Read entire release here.](#)

[Read More](#)



TRAINING AND RECERT

Oct 2014

2

Visit the beach & earn five hours of Georgia Pesticide Applicator or ISA Credit!



Do not miss this opportunity to earn 5 hours of non-structural pesticide applicator credit and ISA credit on St Simon's Island on Friday, October 24. This class is located next to the St Simon's pier and within walking distance of the Village. Earn pesticide applicator credits that are applicable in 14

categories. [Find an agenda or register here.](#)

[READ MORE](#)

Getting The Best Of Pests

An Integrated Approach to Managing Odorous House Ants
Dr. Karen Vail, University of TN



Stopping the Occasion of the Occasional Invaders
Dr. Eric Benson, Clemson University



The University of Georgia's College of Agricultural and Environmental Sciences

<http://ugagriffincontinuinged.com/>
or 770-229-3477

Email Dan Suiter for webinar notifications – dsuiter@uga.edu

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ONLINE MOSQUITO TRAINING

Preparing to take the
Category 41 exam?

Visit

www.gamosquito.org/training.html

Mosquito Biology, Surveillance and
Control – Category 41

Elmer W. Gray

University of Georgia

Department of
Entomology



Coming Soon (hopefully!)

- ✘ *Integrated Pest Management for Mosquito Control - The Basics*
- ✘ *Mosquito Biology – Elmer Gray*

GA DEPT OF AG PESTICIDE DIVISION

- ✖ Applicator license required in category 41
- ✖ <http://tinyurl.com/3jna8kc>
 - + When does my license expire?
 - + How many hours do I need?
 - + Recert classes
- ✖ Getting a license!
 - + www.gapestexam.com



Where can you visit the beach & earn five hours of Georgia or Florida Pesticide Applicator, ISA or Society of American Forester CFE credits?

Pesticide Safety & Handling Training

Pest Manager Recertification Training

Friday, Oct 24 – St Simons Island

To register online or find registration info - www.ugagriffincontinuinged.com
Look under *Upcoming Events* or call (770) 229-3477 or email conteduc@uga.edu

2015 Tentative Schedule

Feb 19 – Savannah
Albany

March 5 – Perry
Augusta

Griffin – Mosquito Control Training (May/June)

For info – wchance@uga.edu

MOSQUITO IDENTIFICATION



Image - Susan Ellis, Bugwood.org

See this article –
www.tinyurl.com/pwhazmu

Georgia Department of Public Health classes

GMCA - www.gamosquito.org/mosquito.htm

AMCA – www.mosquito.org

*Best Management Practices for Integrated
Mosquito Management* from AMCA

Florida Medical Entomology Lab Id Course

GEORGIA MOSQUITO CONTROL ASSOCIATION

www.georgiamosquito.org

Newsletter

Website has info -

- Mosquito id
- Surveillance
- Diseases they carry



DIDEEBYCHA



The GMCA Newsletter - DIDEEBYCHA - is a means of spotlighting various programs throughout Georgia, as well as a way of providing the membership with information about topics of interest to mosquito control.

Chikungunya

Is Georgia at risk?

In 2001, the CDC and the Pan American Health Organization jointly released a document entitled "Preparedness and Response for Chikungunya Virus Introduction in the Americas" (<http://www.cdc.gov/chikungunya/>). In late 2013, Chikungunya was found for the first time on islands in the Caribbean, where it has persisted and continued to spread.

Chikungunya fever is an emerging, mosquito-borne disease caused by the Chikungunya virus. It is transmitted predominantly by *Aedes aegypti* and *Ae*

albopictus, the same species involved in the transmission of dengue. Chikungunya is an RNA virus that belongs to the Alphavirus genus in the family Togaviridae. The name chikungunya derives from a word in Makonde and roughly means "that which bends," describing the stooped appearance of persons suffering with the characteristic painful arthralgia.

Epidemics of fever, rash, and arthritis

Continued on page 4...

Mosquito Surveillance: Using the Data

Mosquito surveillance is an important part of mosquito control. Where arboviral diseases occur, mosquito testing is an equally important component of mosquito surveillance.

Page 2

Tiger, tiger...*Aedes albopictus*

The introduction of the Asian tiger mosquito, *Aedes albopictus*, had a profound impact mosquito control in Georgia.

Page 3

Program Spotlight

Jack Vereen, former director of the Liberty County Mosquito Control program, passed away on March 10, 2014.

Page 6

Welcome to the American Mosquito Control Association

AMCA® is a nonprofit organization that is dedicated to providing **leadership**, **information** and **education** leading to the enhancement of public health and quality of life through the suppression of mosquitoes.



[Learn More About Mosquito-Borne Diseases](#)

» Leadership

AMCA is a professional association with members in over 50 countries, representing researchers, educators, vector control professionals, industry representatives, and students.

[Learn more »](#)

» Information

There are over 3,000 different species of mosquitoes throughout the world; about 200 species occur in the United States.

[Learn more »](#)

» Education

AMCA is proud to offer educational events that highlight the latest science, technology, and products used to conduct research and control vectors.

[Learn more »](#)

Ask the Expert



Do you have a question about mosquitoes or mosquito control? Ask our expert. [Ask the Expert »](#)

Latest News

09/19/2014 - PESP Program Information - PESP is not a PEST: A Continuing Opportunity to Reduce Pesticide Risk
[Click to view](#)

09/03/2014 - Coachella Valley Mosquito and Vector Control District Request for Research Proposals
[Click to view](#)

09/02/2014 - 2014 Board of Directors Election is now open. Vote now!
[Click to view](#)

08/18/2014 - Press Release: AMCA Urges That All Mosquito Control Strategies Needed to Protect Public Health of Communities
[Click to view](#)

08/13/2014 - 2015 AMCA Annual Meeting Call for Papers Now Open!
[Click to view](#)

03/03/2014 - **IMPORTANT VIDEO!** Mosquito Control and Why It's Important to You
[Click to view](#)

[Home](#)[About AMCA](#)[Mosquito Info](#)[Meetings/Events](#)

Mosquito Info

Mosquitoes are insects belonging to the order Diptera. Mosquitoes' mouthparts form a proboscis. The principal food is nectar or similar plant fluids.

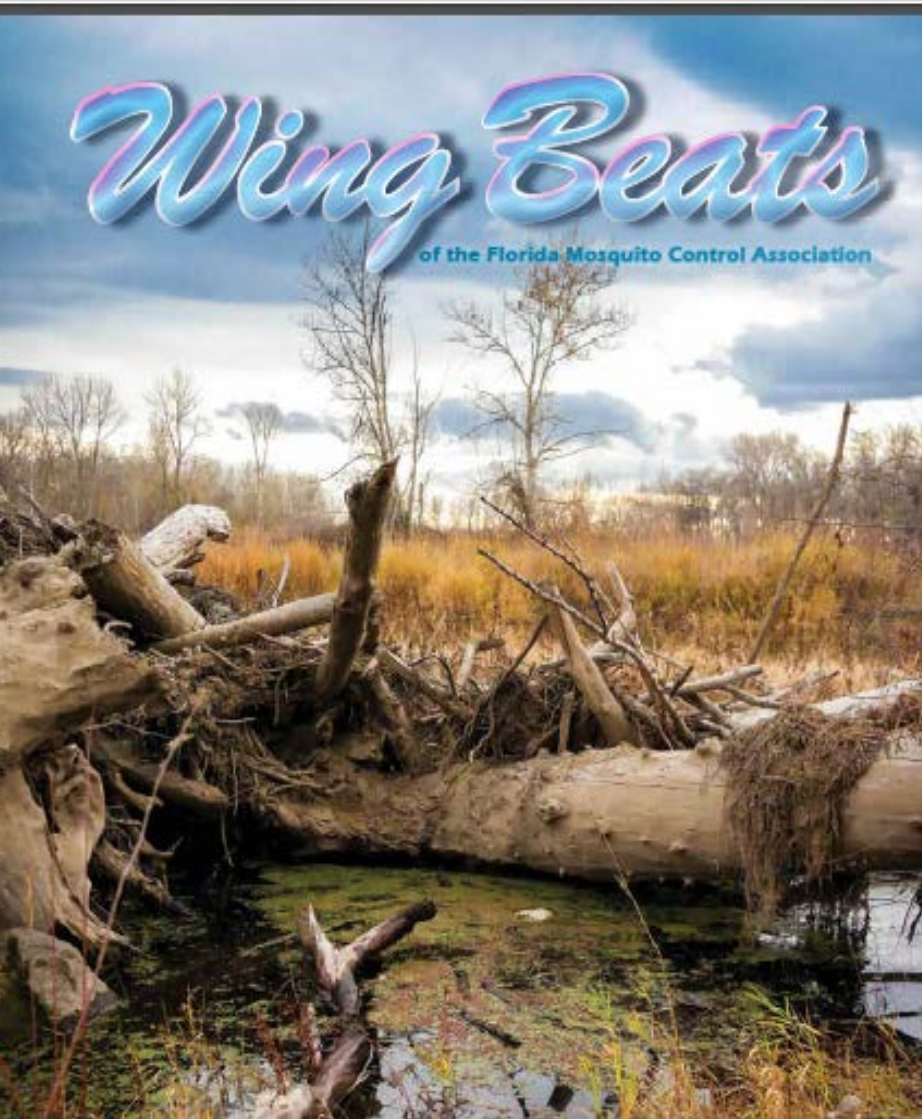
There are over 3,000 different species of mosquitoes reported from the Florida Keys. The name of a group of closely related species is capable of interbreeding. The meaning hurtful or prejudicial is often used in scientific names, such as *Ochlerotatus*.

Scientific investigators (taxonomists) have identified characteristics. Better microscopic review by Dr. John Reinert (1998) elevated a subgenus of *Aedes* to genus status and the rewriting of many taxonomic keys.

The Name "Mosquito"

[Why We Need Mosq Control](#)[An America Without Mosq Ctrl](#)[Biology](#)[Control](#)[Life Cycle](#)[Mosquito-Borne Diseases](#)[Repellents](#)[Traps](#)[Position on Misting Systems](#)[Mistaken Identities](#)[I'm One Program](#)[Fun Facts](#)[FAQ](#)[Publications](#)[Membership](#)[Books & Merchandise](#)[Journal Search](#)[Journal Subscription](#)[Info for Journal Contributors](#)[Newsletter Archive](#)[Wing Beats Archive](#)[Publishing in Wing Beats](#)

www.mosquito.org



Florida Mosquito Control Assoc - www.floridamosquito.org
Archives - <http://wingbeats.floridamosquito.org/WingBeats/>
Subscribe - sickerman@comcast.net

GA Pest Management Handbook - <http://www.ent.uga.edu/pmh/>

2014 Commercial Edition

The **2014 Commercial Edition** of the Georgia Pesticide Management Handbook has recommendations for pest control on commercial livestock, forages, pastures, row crops, vegetables, orchards, ornamentals, turf, forests and insects of public health importance. Cultural, biological, physical, and other types of control are recommended where appropriate.

Table of contents:

- [Introduction](#)
- [Pesticide Safety & Other Pesticide Information](#)
- [Animals](#)
- [Alfalfa](#)
- [Aquatic Environments](#)
- [Canola](#)
- [Clover](#)
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for ordering information.

GA Pest Management Handbook -

<http://www.ent.uga.edu/pmh/>

- ✖ Elmer Gray and Ray Noblet, UGA Entomologists
- ✖ Recommendations for
 - + ULV and LV ground applications
 - + Thermal ground operations
 - + Aerial applications
 - + Larval ground & aerial operations



Table 6. Toxicity of Insecticides Used in Mosquito Control Compared to Some Other Common Insecticides and Chemicals.

		ACUTE ORAL LD ₅₀ IN MG. TECH/KG. FOR RATS BY REFERENCE NUMBER		
COMMON NAME	TRADE NAME	1*	2**	3***
allethrin	---	310	680-1,000	920
aspirin	---	1,900*	---	---
bendiocarb	Ficam	40	40-64	40-64
bti	---	non-toxic	---	non-toxic

WHERE WILL YOU BE IN 5 YEARS, 10 YEARS?



- Who will work for you?
- Where will you work?
- Type and size of your business?
- What will the industry look like?
- See this presentation online - <http://tinyurl.com/GMCA2014> or email wchance@uga.edu