

Florida Medical Entomology Laboratory  
IFAS/Department of Entomology and Nematology

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***Culex* Mosquito Identification Workshop**  
**Manatee County Mosquito Control District**  
2317 2nd Ave. W  
Palmetto, FL 34221  
January 19, 2011: 9:00 am – 3:00 pm

**Instructor:** Dr. Roxanne Connelly, UF/IFAS, Florida Medical Entomology Laboratory, Vero Beach, FL [crr@ufl.edu](mailto:crr@ufl.edu)

**Prerequisites:** Experience with dissecting (stereo) microscope, experience with identifying Florida mosquitoes to species on a regular basis. This is not a beginner's workshop. We will not cover the basics needed for identifying mosquitoes; these should already be well known by attendees of this workshop.

**Workshop Objectives:** To improve and expand students knowledge of characters used to identify adult mosquitoes of some of the confusing species of Florida *Culex*. To introduce students to characters used to identify larvae of some of the *Culex Melanoconion* species found in Florida.

**Registration:** Please register for the class on-line through <http://mosquito.ifas.ufl.edu/IDCourse/Culex/>

**Fees:** There are no fees for this class.

**Lunch:** Orders for sandwiches from Subway will be taken in the morning and lunch will be delivered to the District. Please bring cash to pay up front for the lunch order. Otherwise, bring your own lunch.

**Text:** Darsie RF and CD Morris. 2000. Keys to the Adult Females and Fourth Instar Larvae of the Mosquitoes of Florida (Diptera: Culicidae). Technical Bulletin of the Florida Mosquito Control Association. Volume 1 (revised). 159 pp. **Please advise Dr. Connelly if you do not have this text.** Supplemental materials will be provided during class.

**Equipment:** Bring your own microscope and light if possible. If not, please make arrangements with Dr. Connelly **IN ADVANCE** to ensure that everyone has a microscope.

*Culex* species we will cover in this workshop:

*Culex (Melanoconion) atratus*  
*Culex (Melanoconion) cedecei*  
*Culex (Melanoconion) erraticus*  
*Culex (Melanoconion) iolambdis*  
*Culex (Melanoconion) mulrennani*  
*Culex (Melanoconion) peccator*  
*Culex (Melanoconion) pilosus*

*Culex (Culex) coronator*  
*Culex (Culex) tarsalis*  
*Culex (Culex) nigripalpus*  
*Culex (Culex) quinquefasciatus*  
*Culex (Culex) restuans*  
*Culex (Culex) salinarius*

## AGENDA

- 9:00 – 9:30 Review of microscopes:  
Differences between dissecting and compound scopes  
When to use dissecting and when to use compound scopes  
Magnification, Focus for individuals' eyesight, Fine and Course Focus  
Working Distance, The importance of good lighting.
- 9:30 – 10:00 Biology, bionomics, distribution of the *Culex* species covered in this workshop.
- 10:00 – 10:30 Identifying adult mosquitoes to genus: *Culex*  
Discussion and exercise.
- 10:30 – 11:30 Identifying adult *Culex* to species.  
Discussion and exercises.
- 11:30 – 12:00 LUNCH – Subway sandwiches can be ordered in the morning. Please bring cash for lunch.
- 12:00 – 1:00 Identification of *Culex Melanoconion* species found in Florida.
- 1:00 – 1:15 Working with the troublesome/confusing 4 *Culex* species found in Florida.
- 1:15 – 1:30 Comparisons of *Culex coronator* and *Culex tarsalis*.
- 1:30 – 2:30 Microscope work on identifying unlabeled specimens of *Culex* species covered in this workshop.
- 2:30 – 3:00 Identifying larvae of *Culex Melanoconion* species.  
Test of knowledge and skills: Identify adult specimens to species.

***CEUs in Public Health have been requested.***