Entomology 762  
Insect Pest Management in Agricultural Crops  
Spring 2010

**Instructors:** George G. Kennedy (phone 515 2746; email george_kennedy@ncsu.edu) and Mark Abney (phone 515 2745; email mark_abney@ncsu.edu), Research Annex West A, Ligon Street Extension, Box 7630, NCSU Campus. Hannah Burrack (phone 513 4344)  
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Students should not hesitate to contact any of them regarding questions or concerns. Similarly, students are encouraged to drop by the instructors’ offices at any time.

**Course Objectives:** 1. To expose students to fundamental principles of insect management and the factors that influence their application. 2. To provide students with an understanding of how pest biology and ecology and the crop production system interact to determine the appropriateness and effectiveness of pest management strategies and tactics. 3. To familiarize the student with the biology and ecology of major pest species and the application of insect pest management principles in crop protection.

**Attendance Policy:** Attendance will not be monitored, but students will be responsible for readings and material presented in lectures.

**Academic Integrity:** Scholarly activity is marked by honesty, fairness, and rigor. A scholar does not take credit for the work of others, does not take unfair advantage of others, and does not perform acts that frustrate the scholarly efforts of others. A scholar does not tolerate dishonesty in others. The violation of any of these principles is academic dishonesty.

Academic dishonesty includes the giving, taking, or presenting of information or material by a student with the intent of unethically or fraudulently aiding oneself or another person on any work that is to be considered in the determination of a grade or the completion of academic requirements.

Enrollment in Entomology 762 constitutes agreement by students that they will neither give nor receive unauthorized aid on any of the tests or assignments in the course.

**Handouts and Assigned Readings:** Handouts will be provided and reading assignments made in advance of related lectures. Students are expected to have completed the readings prior to the related lectures. Material from assigned readings may be included on exams.

**Grading:** Grades will be based on the average of three (3) exams, and a term paper, each of which will count for 25% of the final grade.

Plus/Minus (+/-) grading will be used in the official recording of final grades in this course. Examinations are primarily of the assay type and require command of factual information and concepts presented in lectures, handouts, and assigned readings.
Jan. 25 Biology, Ecology and Management of Colorado Potato Beetle on Irish Potato - Kennedy

Jan. 27 Biology, Ecology and Management of Spider Mites – Burrack

Feb. 1 Eradication of a key pest - the Boll Weevil and its impact on insect management in cotton – Bacheler

Feb. 3 Detection and Management of Exotic, Invasive Arthropods in Agricultural Crops – Burrack

Feb. 8 Eradication Programs for Fruit Flies – Walgenbach

Feb. 10 Exam I

Feb. 15 Integration of GM Crops in IPM Programs - Kennedy

Feb. 17 Biology, Ecology and Management of Helicoverpa and Heliothis on Selected Crops I (e.g. cotton, tobacco, soybean, tomato, corn) – Abney

Feb. 22 Biology, Ecology and Management of Helicoverpa and Heliothis on Selected Crops II (e.g. cotton, tobacco, soybean, tomato, corn) – Abney

Feb. 24 Ecology and Management of European Corn Borer on Selected Crops (e.g. potato, wheat, corn, cotton, vegetables) - Abney

Mar. 1 Biology, Ecology and Management of Corn Rootworm Complex – Abney

Mar. 3 Biology and Management of Wireworms – Abney

Mar. 8 & 10 No Classes – Spring Break

Mar. 15 Management of Arthropods in Pome Fruits - Walgenbach

Mar. 17 Management of Arthropods in Vineyards - Burrack

Mar. 22 Management of Arthropods in Stone Fruits - Walgenbach

Mar. 24 Exam II To cover material since Exam I - 20% of grade

Mar. 29 Biology, Ecology and Management of Aphids as Direct Pests - Kennedy

Mar. 31 Biology, Ecology and Management of Aphids as Vectors of Plant Pathogens- Kennedy

Apr. 5 Biology, Ecology and Management of Thrips in Selected Cropping Systems - Kennedy

Apr. 7 Biology, Ecology and Management of Whiteflies in Selected Cropping Systems – Kennedy

Apr. 12 Management of Arthropod Pest Complexes in Selected Vegetable Crops - Abney

Apr. 14 Management of Arthropod Pests in Strawberry – Burrack

Apr. 19 Management of Arthropod Pests in Tobacco - Burrack

Apr. 26 Open discussion of IPM for the future, sustainable agriculture and organic crop - Abney/Burrack/Kennedy

Apr. 28 Open discussion of IPM for the future, sustainable agriculture and organic crop - Abney/Burrack/Kennedy