Indiana Cooperative Agricultural Pest Survey Committee
Core Work Plan Federal FY 2006

Project Coordinator:  Dr. Christopher M. F. Pierce
State:  Indiana

Project:  Sirex noctilio Survey
Project Category (Part I, II, or III – see page 2-1 of CAPS Guidelines):
Part III, it is expected that the SSC in Part 1 will be involved heavily in this activity as well.

Pests (include survey targets described in Part I, or Core, category):
Scientific Name:  Sirex noctilio Fabricius
Common Name:  Sirex woodwasp

I)  OBJECTIVES AND NEED FOR ASSISTANCE:

The purpose of this survey selected businesses and warehouses in Indiana that receive solid wood packing material (SWPM) to document pest movement of Sirex noctilio Fabricius in conjunction with USDA APHIS PPQ officers in Indiana.

II)  RESULTS OR BENEFITS EXPECTED:

The Indiana CAPS program in conjunction with USDA APHIS PPQ seeks to conduct a cooperative agricultural pest survey program which is expected to result in the detection or absence of Sirex noctilio Fabricius in Indiana via solid wood packing material (SWPM). Early detection and outreach education are the goals of this survey.

III)  APPROACH:

In conjunction with Indiana USDA APHIS PPQ Officers and the Indiana CAPS program, 50 sites will be selected following guidelines from the Exotic Wood Borer Bark Beetle Field manual 2004 as well as the Sirex noctilio Fabricius trapping protocols (04-17-06). The Indiana CAPS program will be responsible for 7 sites in central Indiana. Currently each site contains three Lindgren funnel traps containing one of the following lures: UHR ethanol, UHR ethanol/ alpha-pinene, and Tri-lure. An additional Lindgren funnel trap will be placed at each site with a lure consisting of (75% + enatomer)-alpha-pinene (70%) and beta-pinene (30%) is suggested. Traps will be placed in mid-May and serviced bi-weekly until mid-October. Visual surveys for Sirex noctilio Fabricius will also occur bi-weekly. Samples will be prescreened by summer interns. Suspect specimens would be sent to Glenn Landau of the USDA-APHIS-PPQ for positive identification. All records are to be entered into the NAPIS database by December 1 of the year of the survey, so these data are included in the yearly Plant Board Report.

A)  The Cooperator and APHIS mutually agree to/that:

   i.  Maintain a State Cooperative Agricultural Pest Survey Committee that will meet at least once a year to discuss fostering the goals of CAPS.
ii. Work together in carrying out filed surveys, trapping, and data collection, setting emphasis on the Sirex woodwasp identified (see attached list), that may pose an immediate risk to the natural resources of the state of Indiana and the United States.

iii. Have representation at National and/or Regional annual planning meetings.

iv. Utilize Cooperator and APHIS program funding, as outlined in the Financial Plan, within the authorized parameters to support survey and detection activities. In addition, specific appropriated funding in the level authorized by the PPQ Eastern Region will be dedicated to the delivery of CAPS objectives listed above.

B) The Cooperator will:

i. The selected survey sites will be selected following guidelines from the Exotic Wood Borer Bark Beetle Field manual 2004. In conjunction with Indiana USDA APHIS PPQ Officers and the Indiana CAPS program, 50 sites will be selected following guidelines from the Exotic Wood Borer Bark Beetle Field manual 2004 as well as the Sirex noctilio Fabricius trapping protocols (04-17-06). The Indiana CAPS program will be responsible for 7 sites in central Indiana. Currently each site contains three Lindgren funnel traps containing one of the following lures: UHR ethanol, UHR ethanol/alpha-pinene, and Tri-lure. An additional Lindgren funnel trap will be placed at each site with a lure consisting of (75% + enatomer)-alpha-pinene (70%) and beta-pinene (30%) is suggested. Traps will be placed in mid-May and serviced bi-weekly until mid-October. Visual surveys for Sirex noctilio Fabricius will also occur bi-weekly. Samples will be prescreened by summer interns. Suspect specimens would be sent to Glenn Landau of the USDA-APHIS-PPQ for positive identification. All records are to be entered into the NAPIS database by December 1 of the year of the survey, so these data are included in the yearly Plant Board Report.

ii. Provide the following resources
   (1) List types of personnel and what they will be doing.
      (a) Are they currently employed? No.
      (b) Will employees need to be hired? Are they full time or part time, and what mechanism will be used to hire them? A full time summer intern will be employed in the Department of Entomology at Purdue University hired by the Indiana CAPS program.
      (c) Are they paid or volunteer? Paid.

   (2) Type of equipment provided by Cooperatoer for personnel
      (a) Identify major equipment needs: N/A
      (b) Use of the equipment purchased: N/A
      (c) Purchased with APHIS funds? N/A
      (d) Method of procurement: N/A
      (e) Method of disposition: N/A
(3) Provide office space in the **Department of Entomology at Purdue University** with associated services and utilities, computers and other office equipment to for the use of Cooperator personnel in entering survey data into the NAPIS database.

(4) **Vehicles for Cooperator personnel in conducting field surveys and collecting data.**

(5) **Supplies**
   
   (a) **Trapping supplies for field surveys?** Pheromones and traps will be procured from Pherotech.

   (b) **Special Supplies:** N/A

   (c) **Method of procurement:** Indiana CAPS budget

iii. **Contracts:**

   (a) **Who will handle contractual needs?** Mr. Ryan Selby in the Business Office in the Department of Entomology at Purdue University.

   (b) **Cooperator Procurement activities shall be in accordance with A-102 and A-110.**

   (c) **Special requirements:** N/A

iv. **Reports – submit all reports to the APHIS Authorized Department Officer’s Designated Representative (ADODR). Reports include:**

   (1) Narrative accomplishment reports (**Accomplishment Report – Appendix H of the ER CAPS Guide**) in the frequency and time frame specified in the Notice of Award, Article 4.

   (2) Financial Status Reports, SF-269, in the frequency and time frame specified in the Notice of Award, Article 4.

v. **Adhere to APHIS ADP security guidelines as referenced in the Notice of Award when entering pest survey data and transmitting it to NAPIS.**

C) **APHIS will:**

i. **List any activities that are specific to APHIS, e.g., provide training, provide forms, review data.** USDA APHIS PPQ will be responsible for providing information regarding survey sites, surveying of survey sites, prescreening of trap material, and reviewing data to enhance future survey work.

ii. **Provide the following resources:**

   (1) **List types of personnel and what they will be doing:** USDA APHIS PPQ officers will survey visually and with traps at selected sites in Indiana for *Sirex noctilio* Fabricius and prescreen samples. Samples will then be sent to the Indiana CAPS SSC for further identification.
(2) Federal Equipment for its personnel: N/A
(3) Federal Equipment for use of the Cooperator personnel, e.g. vehicles: N/A
(4) Funds to the Cooperator to cover costs outlined in the Financial Plan. In addition, specific appropriated funding, in the level authorized by the APHIS Eastern Region, will be dedicated to the delivery of CAPS objectives listed above.
(5) Provide educational outreach resources (ex. fact sheets) for survey.

D) OTHER PARTIES TO WHO WILL WORK ON THE PROJECT:

i. Discuss interaction with other contributing parties to this effort. What is their role? Note that the State and APHIS do not have authority to commit other parties unless they have contracts, subgrants, or other such legally binding authority to do so: N/A
ii. List all who will work on the project:
   (1) Dr. Cliff Sadof
   (2) Dr. Jeffrey Holland
iii. Describe the nature of their effort:
   (1) Dr. Cliff Sadof and Dr. Jeffrey Holland will enhance our taxonomic ability in our survey work.

IV) QUANTITATIVE PROJECTION OF ACCOMPLISHMENTS TO BE ACHIEVED:

In conjunction with Indiana USDA APHIS PPQ Officers and the Indiana CAPS program, 50 sites will be selected following guidelines from the Exotic Wood Borer Bark Beetle Field manual 2004 as well as the Sirex noctilio Fabricius trapping protocols (04-17-06). The Indiana CAPS program will be responsible for 7 sites in central Indiana. Currently each site contains three Lindgren funnel traps containing one of the following lures: UHR ethanol, UHR ethanol/alpha-pinene, and Tri-lure. An additional Lindgren funnel trap will be placed at each site with a lure consisting of (75% + enatomer)-alpha-pinene (70%) and beta-pinene (30%) is suggested. Traps will be placed in mid-May and serviced bi-weekly until mid-October. Visual surveys for Sirex noctilio Fabricius will also occur bi-weekly. Samples will be prescreened by summer interns. Suspect specimens would be sent to Glenn Landau of the USDA-APHIS-PPQ for positive identification. All records are to be entered into the NAPIS database by December 1 of the year of the survey, so these data are included in the yearly Plant Board Report.

V) DATA COLLECTION AND MAINTENANCE:

Who has the responsibility for delivering what data and to whom and when.
Dr. Christopher Pierce is responsible for entering survey data in NAPIS. All records are to be entered into the NAPIS database by December 1 of the year of the survey, so these data are included in the yearly Plant Board Report.

A) Follow the guidelines in Appendix D of the ER CAPS Guide for the correct NAPIS language reporting requirements.
B) Identify the kind of data to be collected: Presence or absence of the Sirex woodwasp
C) How will the data be maintained: Excel spreadsheet
D) Establish criteria to evaluate the project:
   i. Results: Completed survey and outreach efforts
   ii. Successes: Survey data complete and entered into NAPIS
E) Methodology used to determine if:
   i. Identified needs are met: Check all data is in database
   ii. Results and benefits are achieved: Review data and use for planning further surveys and educational efforts

VI) GEOGRAPHIC LOCATION OF PROJECT:

Surveys will be conducted in the counties of central Indiana. Sites and counties will be selected in the spring of 2006 after the review of FY 2005 survey data. Data will be provided to the Cooperator’s State Regulatory Official (SPRO) for entry into the database.

A) Identify the type of terrain (cropland, rangeland, woodland, etc.): Industry and warehouse sites
B) Identify features which may have an impact on the project or activity:
   i. Rivers, lakes, etc: N/A
   ii. Wildlife sanctuaries: N/A

VII) TAXONOMIC SUPPORT:

In order to assure adequate taxonomic support for the CAPS program, the ER Regional CAPS Committee needs you to address this support in your work plans. The six data items needed to manage identification services are listed below. Note: All work plans must – provide the following (A – F) for each survey.

If in A you request taxonomic support the ER CAPS Committee and PPQ’s National Identification Services will use the information you provide in B – F to assign your survey samples to the appropriate taxonomic personnel of institutions.

A) Person/institution that will screen samples for target pests OR request for taxonomic support:
   i. Dr. Christopher Pierce, Jim Carroll, Charlotte Gallowitch, Tim Vawryk, Dr. Cliff Sadof, Dr. Jeffery Holland, and Arwin Provonsha. We request taxonomic support for final confirmation of identification from national identifier for new state and county records. Suspect specimens would be sent to Glenn Landau of the USDA-APHIS-PPQ for positive identification.

B) List of target pests by scientific name:

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
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<tbody>
<tr>
<td>Sirex noctilio Fabricius</td>
<td>Sirex woodwasp</td>
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</tbody>
</table>
C) **Survey dates**: Traps will be placed in mid-May and serviced bi-weekly until mid-October. Number of survey sites Indiana CAP will be responsible for: 7/50

D) **Number of traps, visual surveys, etc**: Currently each site contains three Lindgren funnel traps containing one of the following lures: UHR ethanol, UHR ethanol/alpha-pinene, and Tri-lure. An additional Lindgren funnel trap will be placed at each site with a lure consisting of (75% + enatomer)-alpha-pinene (70%) and beta-pinene (30%) is suggested. Traps will be placed in mid-May and serviced bi-weekly until mid-October.

E) **Number of collections**: Approximately 20 sampling dates