

CPHST CAPS Meeting, Notes and Action Items

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Participants:

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John Bowers
Brian Kopper
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Rick Zink
Russ Bulluck
Dave Lance
Tom Kalaris

Melinda Sullivan
Lisa Kennaway
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1. Update on CAPS Current Issues, Mission, etc.

Reorganization

There has been a lot of discussion about the upcoming reorganization and different versions of how Pest Detection and CAPS will fit in. However, there should not be any major changes on how CAPS is run, as the program is well received by stakeholders. CAPS is a strong program and is well supported; a lot of what CAPS does is in the PPQ Strategic Plan.

2. What is CAPS negative data used for, trade or plant protection?

From John's poll out to the SPHDs and others, the comments reflect that negative data is used to facilitate trade and to detect new populations of exotic pests and pests of limited distribution.

Action Item: Matt and John will talk to the trade staff and determine: the extremes of what is negotiated in export standards; what information they are using; and what the information gaps are.

The program could use a case study to show how the program is making a difference in protecting export markets (an example is plum pox virus (PPV)).

Action: Talk to WR and ER Regional Program Managers for Export Certification and Trade. Have CAPS surveys opened up markets for them?

Appropriate Pests for State Surveys

States sometimes survey for pests that are not really a risk for their state, and other states do not conduct surveys for a high risk pest for their state. Hopefully, Zonal Statistics can help states identify the actual high risk pests for their states.

3. Visual Surveys in Nurseries

Several states have requested to enter data into NAPIS from nursery surveys where pests with approved traps and lures were surveyed for visually. When trying to input this data into NAPIS, it is rejected as visual is not considered a valid approved method for these pests.

If we approve visual survey in nurseries, there are a few issues that may be encountered: there are a variety of different types of nurseries and symptomologies for pathogens can be nondescript. CPHST will develop visual survey protocols for nurseries for appropriate pests. This will be a long term project.

Action Item: CPHST will look at the J-3s and determine which pests the states are interested in looking for in nurseries. CPHST will then develop a pest list that is appropriate for visual survey in nurseries on given hosts.

Action Item: A “Visual Survey for Nurseries” section will be developed for each approved pest and inserted into the individual pest datasheets.

4. Update from the CPHST Otis Lab

Dave Lance provided updates on the Otis lab’s projects that support CAPS, including:

- 1) Lure formulation;
 - 2) Evaluation of hot melt (less sticky) adhesives in sticky traps;
 - 3) Improvements to trap design for CAPS’ moth targets;
 - 4) Farm Bill cerambycid lure development project;
 - 5) Farm Bill *Dendrolimus* trap and lure studies;
 - 6) Farm Bill buprestid trap design project;
- and other projects.

5. IPHIS

There is going to be a pilot this year for IPHIS (states: CO, ID, and ME) on Corn, Small Grains, and a Blank template. For now, CAPS will keep the approved methods page, resource and collaboration site, etc. with Purdue.

Inputting pests of state concern: In NAPIS, there are 747 unique pests (positive and negative). Some states want to enter all of their trapping data into NAPIS and it is encouraged. How will this be handled once CAPS makes the switch to IPHIS? Not all of these species can be identified ahead of time.

- Response: IPHIS has all of the pests that have been entered into the ITIS system (1000s of unique pests). When an individual goes into IPHIS, they can enter the “laboratory” side and use anything that was entered through the ITIS system. This would be the correct way to enter unexpected positives. In IPHIS, states should state if they are going to piggyback their surveys with other pests.

Updating the CAPS complex

CPHST will make updates to the CAPS complex once a year (to add additional pests; change pest names; add or change approved methods, etc.).

6. CPHST Support Tracker Updates

This is an Excel file used to capture CPHST projects that support CAPS. The group reviewed existing action items and projects.

Manuals

The next manuals that will be produced are:

- 1) Asian Defoliator Pathway-based Survey Manual;
- 2) Palm Commodity-based Survey Manual;
- 3) Solanaceous Commodity-based Survey Manual; and
- 4) Cyst Nematode Taxon-based Survey Manual (The survey is already offered, but no official guidance has been written).

Pest interception email alerts

These had been weekly email alerts based on a cross-reference of CAPS pests and weekly interception data. The group decided that these were not that helpful. Instead, we would prefer an annual update. We will ask Calvin Schuler to run this analysis for us once a year, (preferably in the fall, before the annual NCC meeting). This can help us determine if the CAPS program is not targeting for something that it should be.

Phytoplasmas

An overall strategy for phytoplasmas needs to be determined. The program cannot do anything without diagnostics. If there is an acceptable PCR/ELISA available, the CAPS program should be able to use them it even if the CPHST Beltsville lab has not validated the method.

Action Item: Russ and Melinda will work on phytoplasma diagnostic issues. An NPDN hub may be able to help with this if training on how to process samples is provided by Beltsville.

Black light protocols

Black light traps are being considered as an additional method for survey for some species (this method is approved for *Trichoderus campestris*). However, a better protocol needs to be developed. Lisa will work with John Crowe on this and consider the power source issue (invest in solar powered traps?). The protocol will probably take another year to complete. Although black lights are clunky to use, they seem to work pretty well for certain beetle species that do not have lures.

Action Item: Lisa will work with John Crowe, Dave L., Vic M., and the field to determine which black light traps are the most appropriate for our needs. Lisa will write a black light trap protocol on how to use the traps or insert this into the EWB/BB manual.

7. How to Request Work from CPHST

All employees of PPQ should be able to request work from CPHST through CPIA (<http://cphst.we.aphis.gov/CPIA/default.aspx>). The CPHST/CAPS group should discuss and decide what should be entered into CPIA. Whatever is requested will take time and resources to complete and will need to be prioritized; therefore, projects should be run through Rick before they are entered. Once approved, John, Brian, or Kristian can enter the requests for CPHST into CPIA.

8. AHP Big Picture: AHP-PPQ Pest List vs. CAPS Pest List What happens when a pest is found?

After the next AHP list is developed, the CAPS group should look at what can be done once a pest is found. The group could discuss options with the New Pest Response Guidelines group as they already look at available controls. A document can be written which explains pest detection vs. pest response. It can include what type of response works, what could be done better, and what sets of criteria would be best to use when looking at pest management.

9. AHP Model Review: current two-year timeline, Revision of AHP Model Criteria

Revamping the AHP model

The CAPS group has been trying to improve the AHP process. This has led to the development of the pre- and post-assessments. In addition, a project to revamp the AHP model criteria has been initiated. PERAL economists Trang Vo and Alison Neeley are working on improving the AHP model in order to make it more defensible and ensure that it is used appropriately.

Emerging Pest Working Group

This group goes over the EPICA and OPIS lists and determines if any regulations need to be put into place. It may be worth it to see if CPHST can be kept in the loop.

AHP Pre-assessments

New pest suggestions for the AHP list will be run through this six question questionnaire to determine if the pest is a candidate for the AHP and if enough information is available to perform the analysis. The group discussed how the pre-assessment process has been working. Overall, it seems like a good tool; however, pathogens are more difficult to assess than insects.

AHP Post-Assessments

The post-assessments will be applied to pests after they are run through the AHP to determine if there are available survey and identification/ diagnostics methods to support the pests in a CAPS survey. Post-assessments will be used to prioritize what goes onto the research list. The group reviewed the drafts of the insect and pathogen post-assessments.

Action Item: CAPS core team will send any suggested changes to Lisa and Melinda. Lisa and Melinda will make suggested changes to the post-assessments and run a few examples through to see how they work. Improved post-assessments will be sent to John, Brian, and Kristian for comments and then to Joel Floyd, identifiers, the Otis lab for comments.

Pests already on the current AHP

Pre-assessments will be performed and pests that pass will be run through the revised model criteria. Post-assessments will be performed on pests that rank above #50.

Commodity Pests

Post-assessments should be performed on all existing and future commodity pests. For new pests, a pre-assessment may be necessary. It would be helpful to have an assessment in place to use when removing a pest from a commodity (e.g., an increase in distribution beyond what we decide is allowed).

OPIS lists

The new OPIS lists have recently been released. The CPHST/CAPS group should consider looking at these on a pest by pest basis to determine if any of these should be run through the pre-assessment and considered for the AHP list. The OPIS lists do have a lot of viruses, phytoplasmas, weeds, and misc. pests that are not currently on the CAPS list. Focus will be on the A list initially. This will be a long term goal and any candidates for the AHP will not be run through the model until 2014 (i.e., will not be included in the 2013 version).

Action Item: Talitha and Melinda will look through the OPIS A list to see if any pests should be run through the pre-assessment process.

10. Phil Berger and David Kaplan (call in)

Reorganization

How will the PPQ reorganization affect CAPS?

-Response: Right now, there does not seem to be any significant changes regarding the CAPS program and the individuals involved. There have been discussions regarding where and how CAPS leadership fits into the three bubbles. This will come up in the regional discussions, but it is doubtful that things will change.

Over the last few years, the CPHST/ CAPS team has had successful collaboration with the three branches (policy, field, and science), beginning with the Otis lab. A lot of good products are beginning to come out and the group is working on bringing the tools into one place. Will this continue unhampered?

-Response: Yes. This is a good example of how modernization will work in breaking down barriers, improving cross functional areas, and integration.

11. Data Analysis Working Group (DAWG) (Brett Miller called in)

The purpose of this group is to better coordinate PPQ's analytical resources. The goal of this group is to focus on helping operations deploy more efficiently.

12. NAPPFAST (Dan Borchert called in)

Risk maps

The NAPPFAST project recently went through an external review. The main recommendation was to change risk maps from additive to multiplicative and the group has spent the last summer making the appropriate changes.

Zonal statistics tool to help pest selection

This tool includes host and climate suitability (risk) and pathway (pareto) information. This tool includes the priority pests and ranks them for a particular state based on host, climate, and pathway. Once the top pests are identified, the individual can then go back to the datasheets to identify the commodities or vice versa.

Action Item: Dan and Lisa will create a NAPPFAST section on the CAPS website with background info, links, and files for the different tools available.

Action Item: Dan will host a webinar providing background on NAPPFAST maps and new tools.

13. Pest Risk Mapping (Tom Kalaris)

Several months ago, Phil Berger asked Tom to coordinate the modeling efforts within CPHST. There are three main modeling efforts occurring within CPHST: 1) Environmental niche, 2) Population dynamics, and 3) Economic models.

How does this affect the CAPS community?

-Response: Modeling can lead to the development of better risk maps and can help states decide on which surveys to conduct. These could also be important in emergency programs. Products available now include the USDA-APHIS pest spread model (<http://services.geog.ksu.edu/spreadmodel/>) and the University of Cambridge Epidemiology and modeling group product (<http://www.webidemics.com>).

14. AGM Modeling (Lisa Kennaway)

The purpose of this project was to look more at establishment than introduction. It was a way to show states how to optimize their resources. This project has had very positive feedback from the stakeholders, and states are adjusting their trapping during the season based on the modeling results. The approach for each state was based on data availability.

Lisa K. and the G4 will discuss what CAPS pests this model development can be used for. A similar survey to the AGM modeling by Lisa K. is the Asian Defoliator survey. It may be useful to talk to states about this potential tool and see if there is interest in it.

15. Web-based Manuals and Datasheets (Terrence Walters)

Terrence and the CPHST CAPS team are working on transferring the manual datasheets into Fact Sheet Fusion allowing for a web interface.

The main reason for making the switch to web-based datasheets is that the current print manuals are time-consuming to update. In the web-based system, the datasheets and manual introductions will be free-standing. Making updates will be easier since one change can be made to a datasheet without having to reformat the entire manual. Also, for pests that are polyphagous and occur in multiple manuals, when updates are made to the information, it will be corrected on all of the relevant datasheets.

End-users will still be able to print out the datasheets. The web tool will be linked to the approved methods page once complete. End-users will click on the datasheet link on the approved method information page (for each pest) and will be taken to the datasheet on the new website. This should be seamless (no password will be needed). In addition, the datasheets can be viewed on any type of mobile device (phone, tablet, etc.). The layout of the website will automatically reconfigure to the dimensions of the device.

The CPHST CAPS group is currently transferring the EWB/BB manual over. After this is complete, there is usually two to three months of beta testing.

16. Molecular Diagnostics

CPHST Mission Lab

The group reviewed the lab report from Mission and discussed if there any additional diagnostics that CAPS needs from the Mission lab.

CPHST Beltsville Lab

CAPS has a comprehensive list of diagnostics that needs to be developed. CPHST and CAPS leadership have decided that CAPS can have screening aids for diagnostics developed without going through the full validation option with Beltsville. Beltsville is currently understaffed and trying to fill open positions.