BMSB SAP Meeting Polling Report

2021

All responses are color-coded according to the following subgroup classifications:

- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

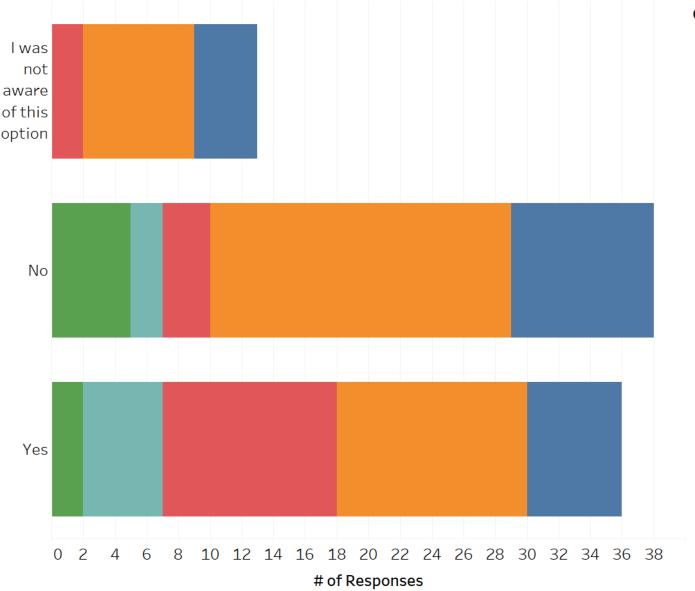
Response Rates per Day

- Day 1: 72.5% (103 out of 142 participants)
- Day 2: 75.7% (81 out of 107 participants)

 Because webinar attendance varied throughout the day, the response rate for any given polling question varied between 50 and 90 percent.

Online Decision Support System Use

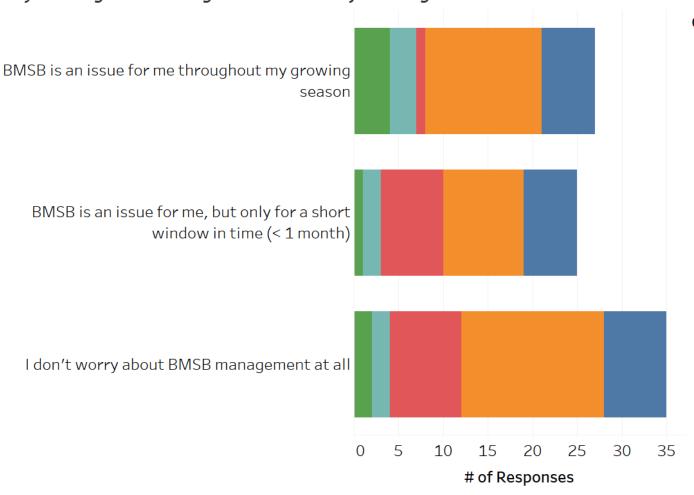
Do you currently use an online decision support system (i.e., WSU DAS, NEWA, etc.) to inform management decisions in your crops?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

BMSB Management Season Length

Do you manage BMSB throughout the season or just during a short time window?

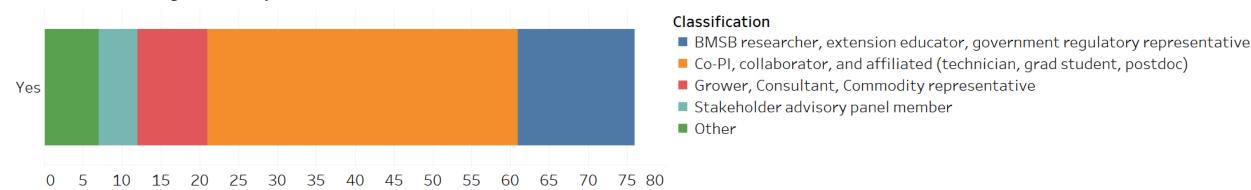


- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

California Pistachios and Almonds

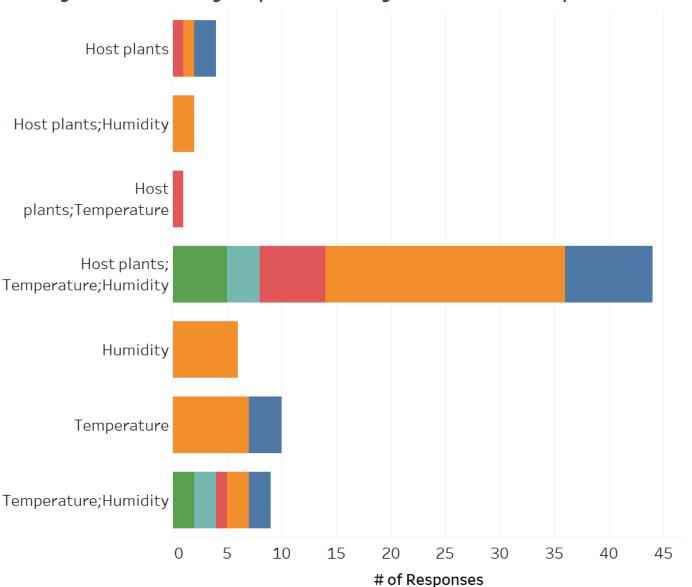
Can BMSB attack and damage California pistachios and almonds?

of Responses



BMSB Regional Damage

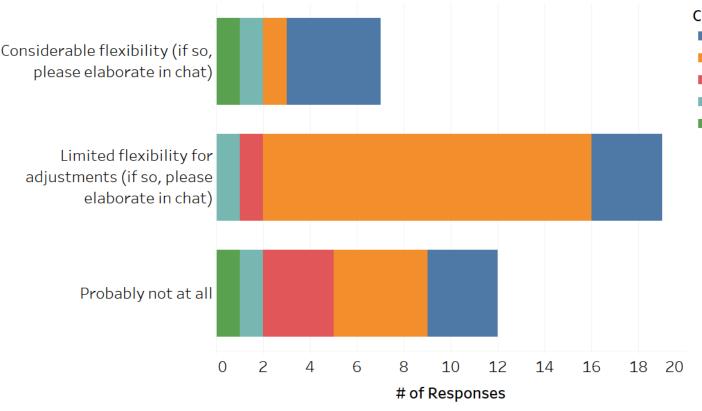
What regional differences might impact BMSB damage levels in California crops?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Management Adaptation

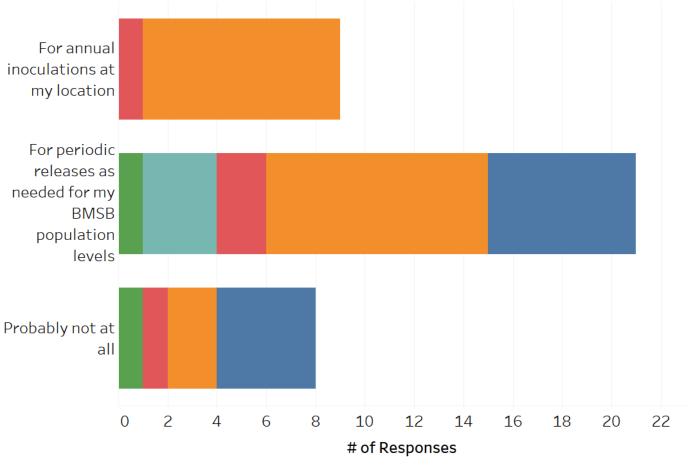
To what extent are you able to adjust or adapt your own production and pest management practices to increase the impacts of landscape biological control as part of your IPM?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Willingness to Purchase BMSB Predators or Parasitoids

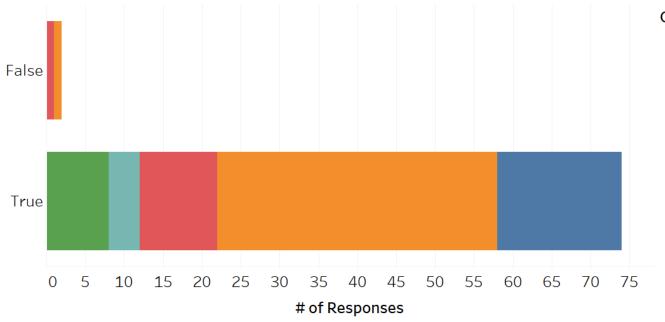
If BMSB predators or parasitoids become commercially viable products available for purchase, to what extent would you consider purchasing them for release in your crops (assuming competitive pricing)?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

BMSB and Nosema maddoxi

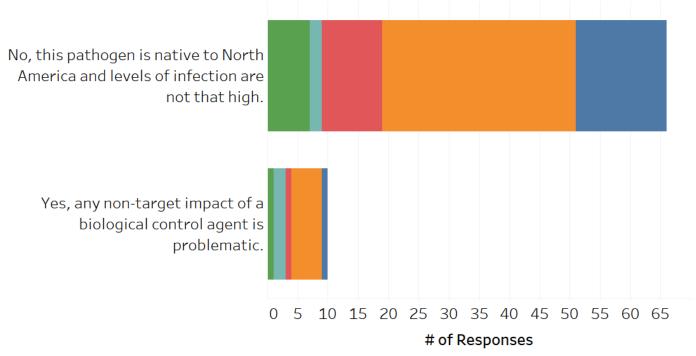
Nosema maddoxi causes chronic-type infections that impact BMSB populations by decreasing fecundity and longevity.



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Nosema maddoxi and Native Stink Bugs

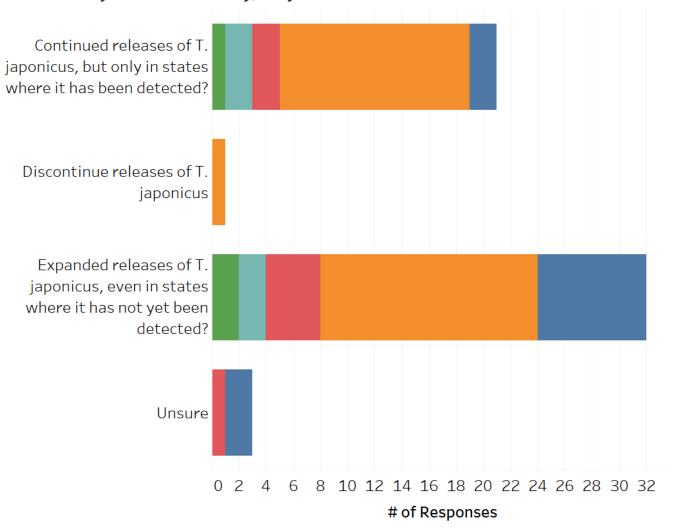
The microsporidian Nosema maddoxi infects some native species of stink bugs. Is this impact considered a problem at present?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Trissolcus japonicus Release Preferences

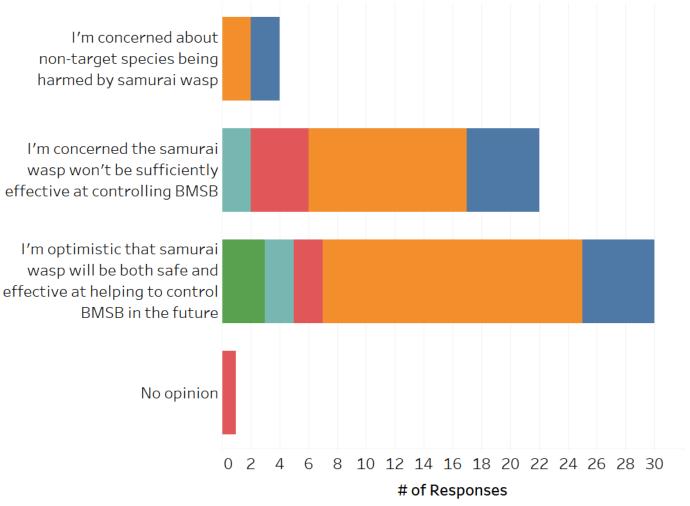
Based on what you've learned today, are you in favor of...



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Feelings about Samurai Wasp Biocontrol

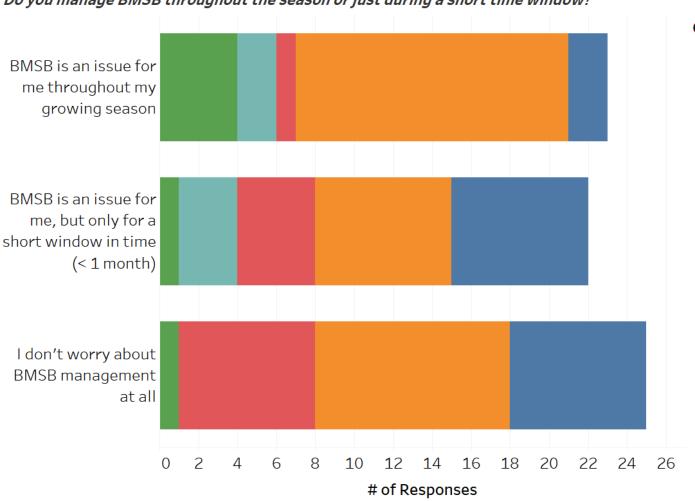
Which best captures your feelings about biological control of BMSB using the samurai wasp?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

BMSB Management Season Length

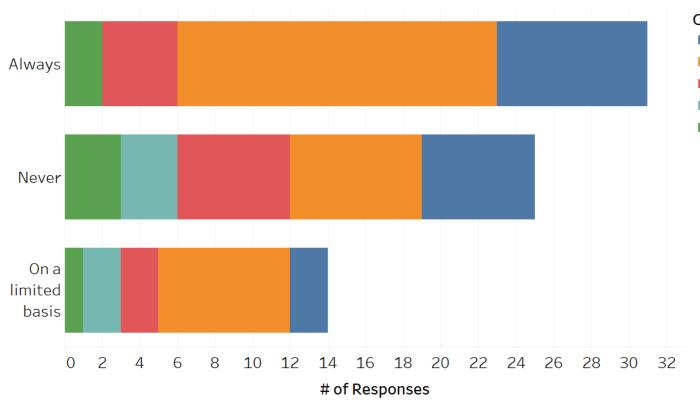
Do you manage BMSB throughout the season or just during a short time window?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Degree Days and BMSB Life Stages

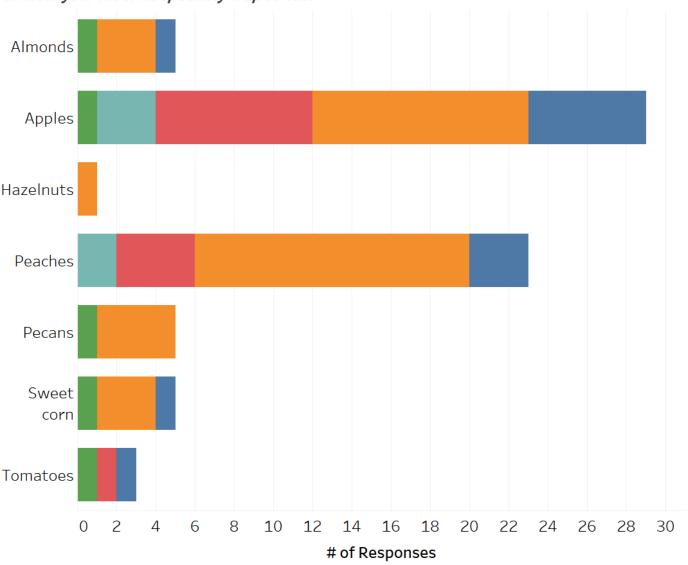
Do you consider degree days and BMSB life stages (phenology) when making management decisions, such as when to spray?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Favorite Specialty Crop to Eat

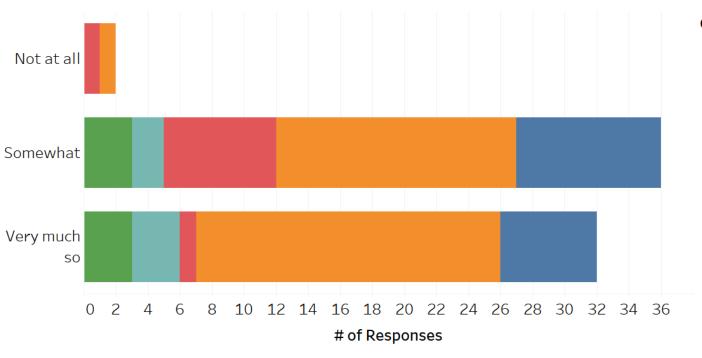
What is your favorite specialty crop to eat?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Monitoring *Trissolcus japonicus*

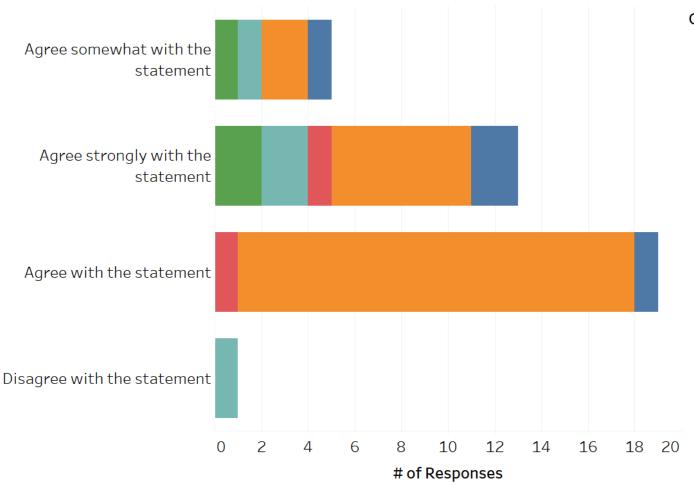
Realizing that growers will not likely monitor for Trissolcus japonicus, did the information presented increase your confidence in our ability to track its presence, spread, and changes in abundance?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Online BMSB Management Decision System

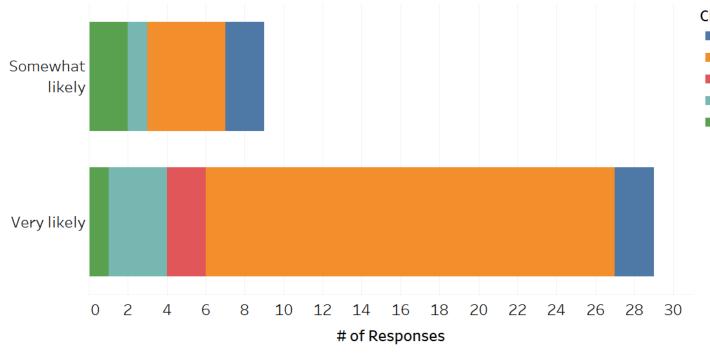
"Online pest mgmt decision system for BMSB incorporating risk models and timely mgmt information will reduce reliance on prophylactic insecticide use against this pest while increasing reliance on biological control and alternative mgmt tactics" "Do you..."



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Likeliness to Use Online BMSB Management Decision Support System

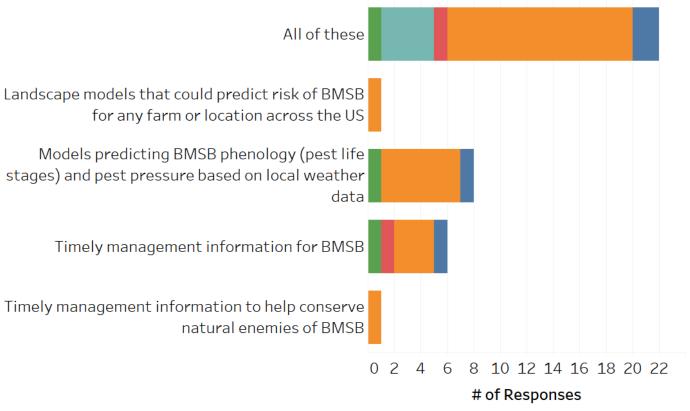
How likely would you be to utilize an online pest management decision support system that was specifically designed to assist with BMSB management in specialty crops?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Likeliness to Use Various Online BMSB Management Decisions Support System

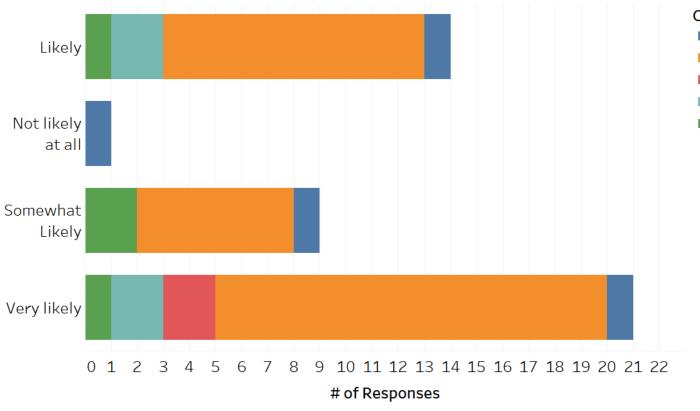
Below are tools proposed for an online BMSB pest management decision support system. Which of these tools would you be most likely to rely on for making pest management decisions?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Area Wide Management Participation

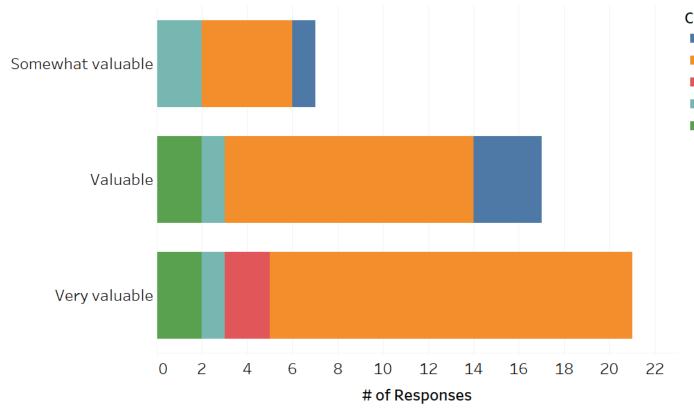
Please rate the likelihood that you would participate in an areawide management approach for BMSB with the farms you own, manage, or consult on given the opportunity?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Value of Areawide Approach

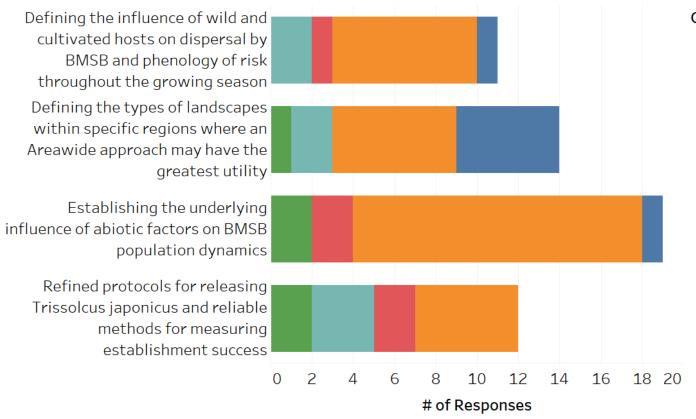
How valuable do you think the areawide approach will be to improve BMSB management and increase adoption of alternative management tactics, while providing educational opportunities for stakeholders?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Areawide Approach: Factors of Succes

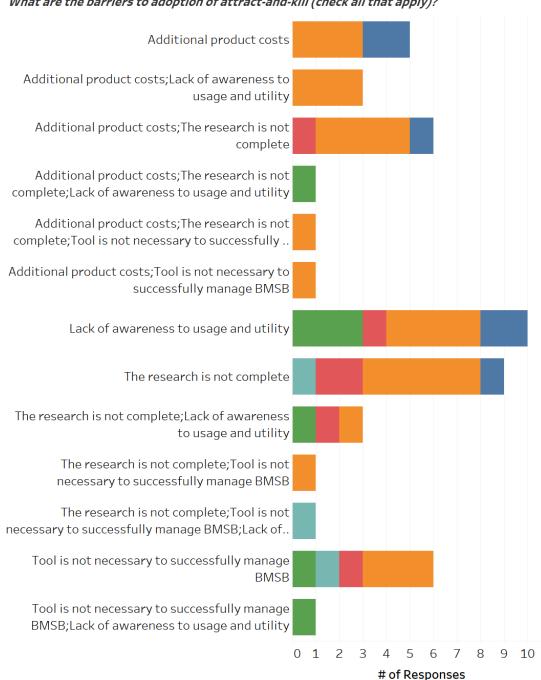
Based on what you heard about the Areawide approach for managing BMSB, what research area do you think would be most important in making this approach successful?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Other
- Stakeholder advisory panel member

Barriers to Adoption of Attract-and-Kill

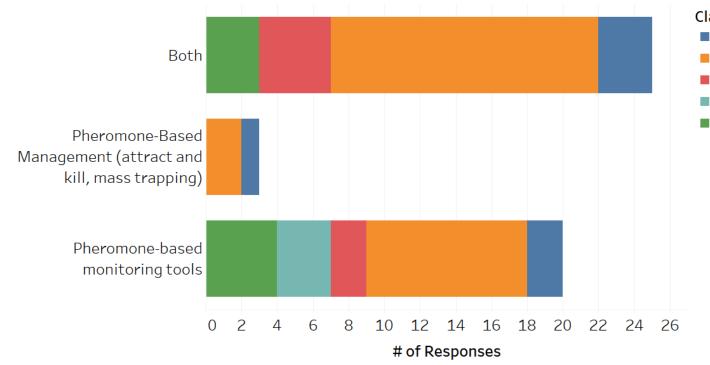
What are the barriers to adoption of attract-and-kill (check all that apply)?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

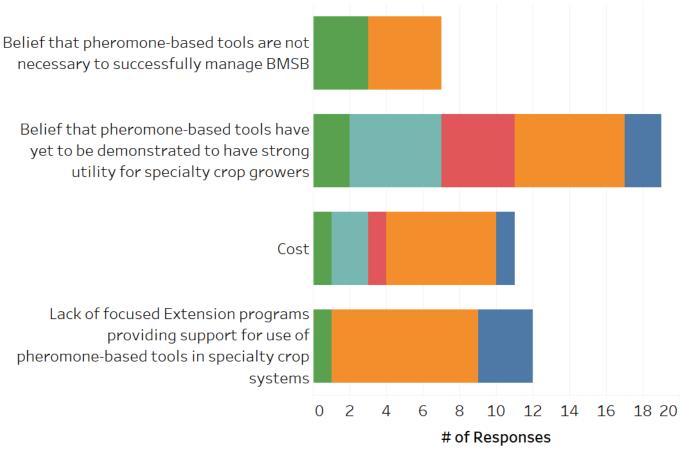
Willingness to Adopt Pheromone-based Tools

Among pheromone-based tools and technologies described, which do you think growers would be willing to adopt?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

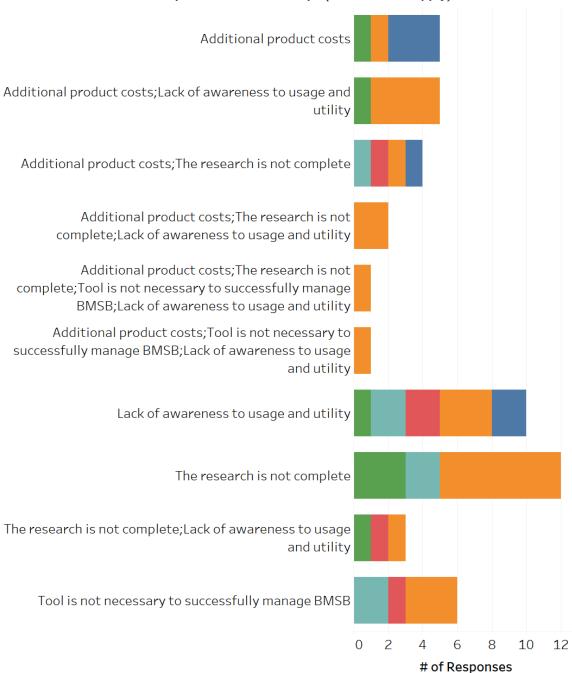
Obstacles to Adoption of Pheromone-based Tools What obstacle do you think is most important for successful adoption of pheromone-based tools by the specialty crop community?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Barriers to Adoption of Threshold Traps

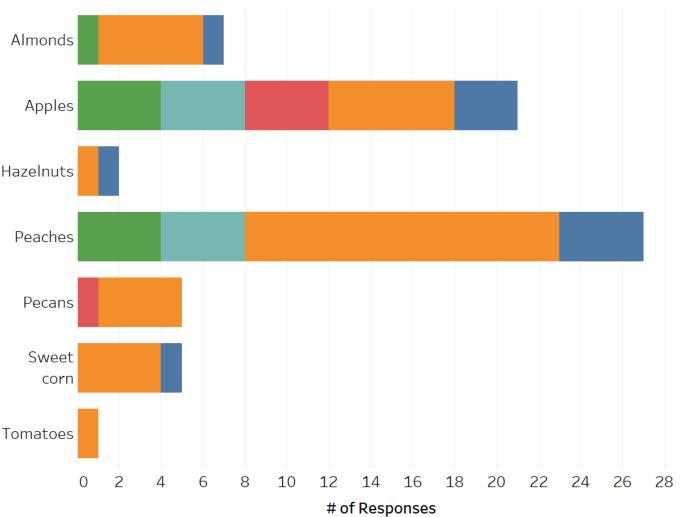
What are the barriers to adoption of threshold traps (check all that apply)?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Favorite Specialty Crop to Eat

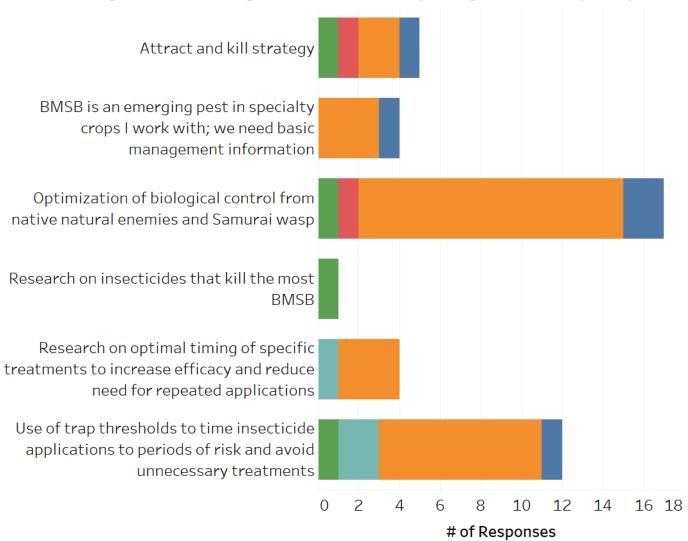
What is your favorite specialty crop to eat?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Prioritization of Alternative Management Tactics

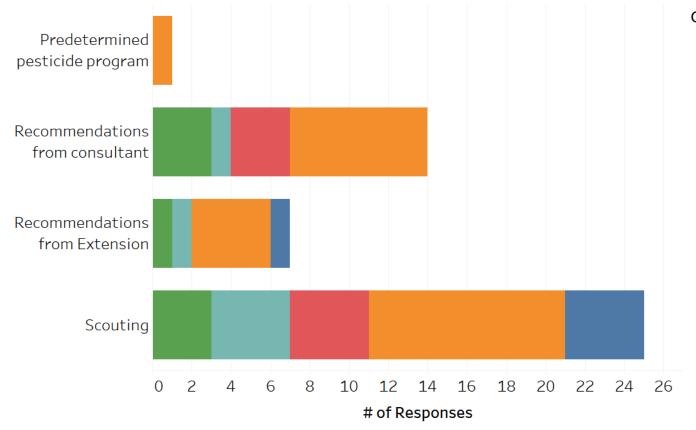
Of the following alternative management tactics, what is your highest research priority?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

When to Apply Insecticides

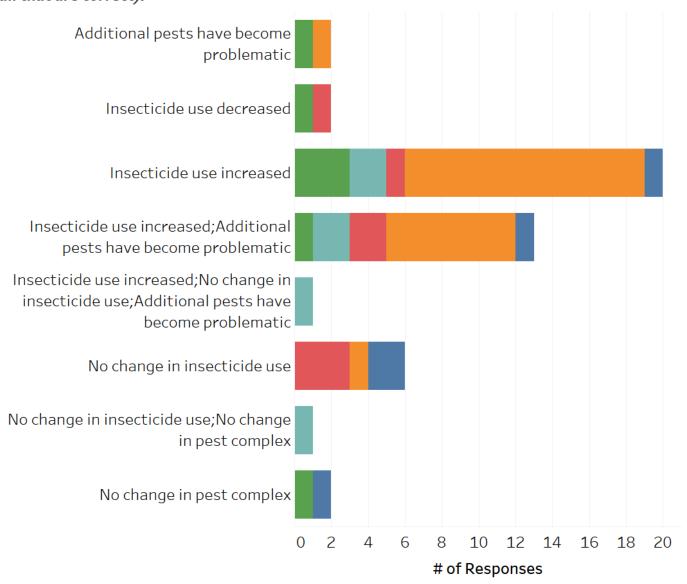
How are decisions made as to when to apply insecticides?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Management Consequences of BMSB

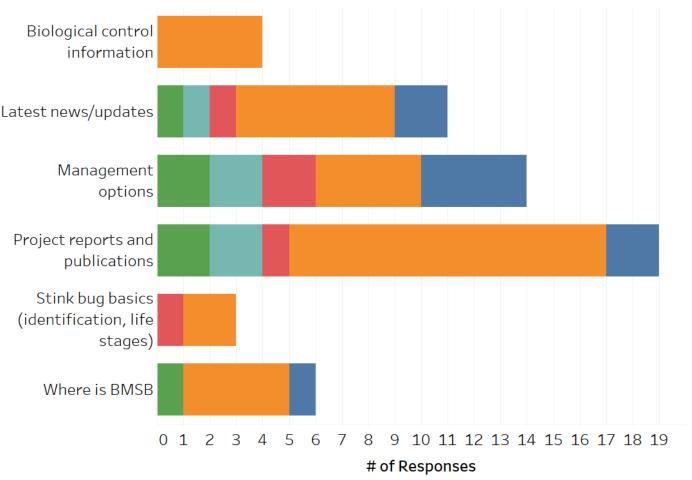
Which of the following has occurred since BMSB has become a problem in your area? (choose all that are correct):



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Most Interesting Information on StopBMSB.org

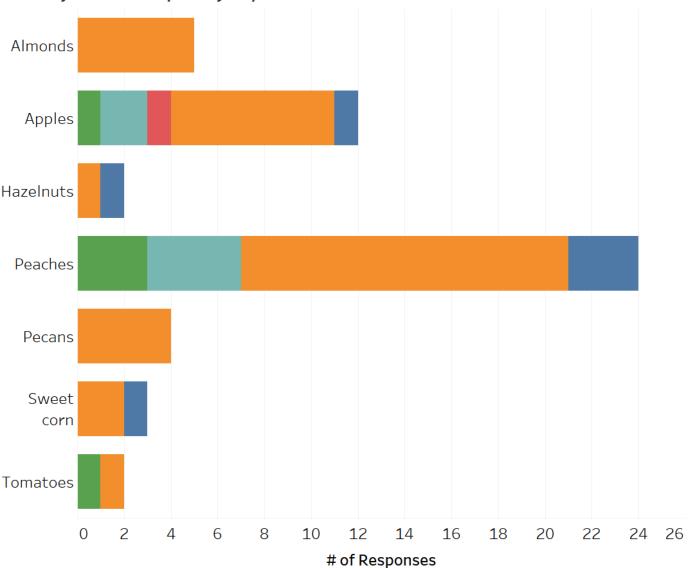
When you visit StopBMSB.org, what information are you most interested in accessing?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Favorite Specialty Crop to Eat

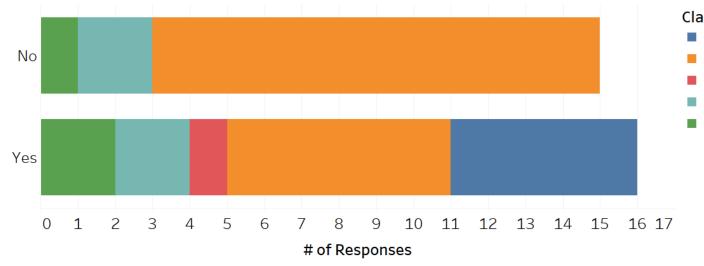
What is your favorite specialty crop to eat?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Lack of Extension and Reliance on Insecticides

Do you feel that lack of Extension or outreach resources for BMSB management are in any way reinforcing reliance on insecticides for BMSB management in crops you manage or are involved with?

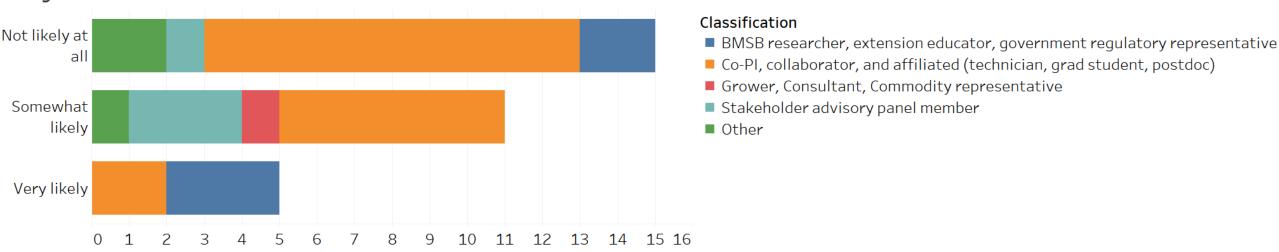


- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Exclusive Insecticides for BMSB Management

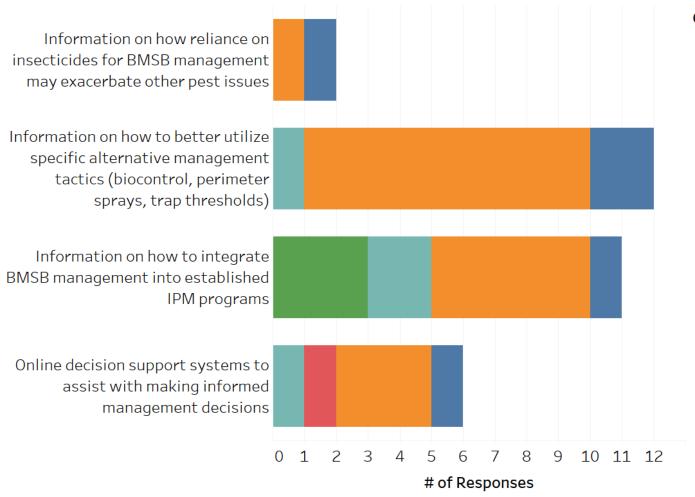
How likely are you to rely exclusively on insecticides for BMSB management in crops that you manage?

of Responses



Highest Priority BMSB Management Resources

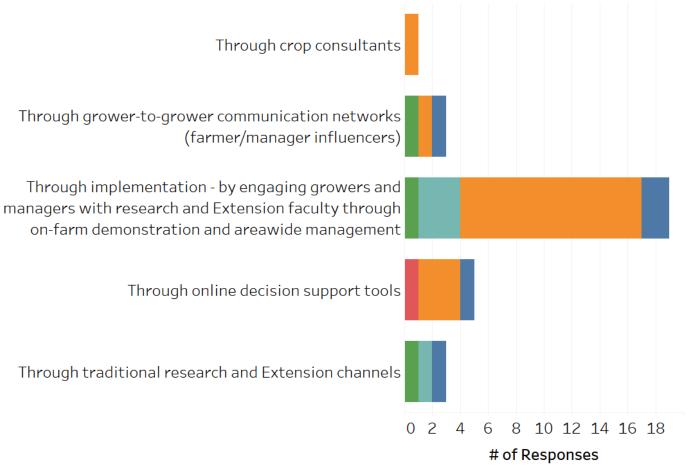
Given that there may not be enough guidance to reduce reliance on insecticides, which of the following would be the highest priority resources for crops you are involved with:



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Most Effective Model of Information Transfer

What do you regard as the most effective model of information transfer that could facilitate greater adoption of new management tactics for BMSB among growers?



- BMSB researcher, extension educator, government regulatory representative
- Co-PI, collaborator, and affiliated (technician, grad student, postdoc)
- Grower, Consultant, Commodity representative
- Stakeholder advisory panel member
- Other

Acknowledgment

Developed and managed by the Northeastern Integrated Pest Management Center, located at <u>Cornell University</u>. <u>Land Acknowledgment</u>.

This material is based upon work that is supported by the <u>National Institute of Food and Agriculture</u>, U.S. Department of Agriculture, under award numbers 2018-70006-28882 and 2022-70006-38004. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture. The Northeastern IPM Center is one of four <u>Regional IPM Centers</u>.

This material is also based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, Specialty Crop Research Initiative under award numbers 2016-51181-25409 and 2011-51181-30937. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.