



Diamondback Moth Survey

Thank you for your interest in this preliminary survey about your IPM experiences with Diamondback Moth (DBM). Industry professionals such as you are the only source we have to collect information on this topic and we value your opinions and perspective. Please review the consent information below and complete the questionnaire, which will take approximately ten minutes.

You are being asked to complete a survey for research purposes. The survey is about DBM pest management in cole crops. Completing this survey is voluntary and you can stop at any time by simply not returning this paper survey. All responses are confidential. Participating in this study isn't an expectation nor requirement of any affiliation you have with NC State or any member of the research team. You must be 18 years of age or older, reside in the United States, and be involved in the cole crops industry to participate in this study. There are minimal risks associated with your participation in this survey. You will not receive any payment for completing this survey. If you have any questions about the survey, how it is implemented, or the research study, please contact the researcher: Dr. Tegan Walker at twalker6@ncsu.edu. Please reference study number 25436 when contacting anyone about this project. If you have questions about your rights as a participant or are concerned with your treatment throughout the research process, please contact the NC State University IRB Director at IRB-Director@ncsu.edu, 919-515-8754, or fill out a confidential form online at <https://research.ncsu.edu/administration/participant-concern-and-complaint-form/>

If you consent to complete this survey, please complete this paper form and return it to the distributor, or scan the QR code to access and submit the electronic version of this survey.

1. Please indicate the crops you grow, the approximate annual acreage per crop (conventional or certified organic), and over the past two years, approximately what percentage of your acreage has had Diamondback Moth (DBM) pressure and if DBM is the insect pest that requires the most spraying.

Crops grown	Conventional (annual acreage)	Certified Organic (annual acreage)	DBM Infestations (Percentage of acreage)	Check if most sprays are for DBM
bok choi			%	<input type="checkbox"/>
broccoli			%	<input type="checkbox"/>
Brussels sprouts			%	<input type="checkbox"/>
cabbage			%	<input type="checkbox"/>
canola			%	<input type="checkbox"/>
cauliflower			%	<input type="checkbox"/>
collards			%	<input type="checkbox"/>
kale			%	<input type="checkbox"/>
mustards			%	<input type="checkbox"/>
Napa cabbage			%	<input type="checkbox"/>
radish			%	<input type="checkbox"/>
turnips			%	<input type="checkbox"/>
watercress			%	<input type="checkbox"/>
other: _____			%	<input type="checkbox"/>

2. Over the past two years, approximately what percentage of insecticide sprays for DBM, had little to no impact on DBM pressure?

_____ %

3. Please indicate the severity of the following pests:

Pest	Very Severe	Somewhat Severe	Not Severe	Not Present
(foliar) Aphids				
(root) Aphids				
Armyworms				
Bagrada bug				
Cabbage looper				
(imported) Cabbageworm				
Cabbage webworm				
Cross-striped cabbageworm				
Cutworms				
Diamondback moth				
Flea beetles				
Grasshoppers				
Harlequin bug				
Root maggots				
Seedcorn maggot				
Silverleaf whitefly				
Thrips				
Yellow margined leaf beetle				
Other: _____				

4. Any other insects not previously listed that are a problem?

5. Please indicate the insect(s) most difficult to control in cole crops with insecticides:

6. What insecticides have you used in the last year for DBM control, and how well did they work?

Insecticide Group	Insecticide	Effective	Somewhat effective	Ineffective	Inconsistent	Do not use
Carbamate	Lannate					
OP	Dibrom					
Pyrethroid/thrin	Asana					
	Brigade					
	Hero					
	Mustang					
	Pyganic					
Spinosyn	Warrior					
	Entrust					
	Radiant					
Avermectin	Success					
<i>Bacillus thuringiensis</i> (Bt)	Proclaim					
	Crymax					
	Dipel					
	Javelin					
Insect Growth Regulators	Xentari					
	Knack					
	Rimon					
	Confirm					
METI insecticides	Intrepid					
Sodium channel blocker	Torac					
Acetyl COA inhibitor	Avaunt					
Diamides	Movento					
	Coragen					
	Exirel					
	Harvanta					
Mix	Verimark					
	Besiege					
Other:						

7. Location of crop production:

State: _____ County(s): _____

8. Which pest group is the **most** difficult for you to manage?

___ insect pests ___ disease pests ___ weed pests

9. Which pest group is the **least** difficult for you to manage?

___ insect pests ___ disease pests ___ weed pests

10. Please rank the following research priorities for managing DBM (1= highest priority, 10 = lowest priority)

_____ Insecticidal control

_____ Biopesticides

_____ Options for certified organic crops

_____ Mating disruption

_____ Host plant resistance

_____ Improved monitoring/detection

_____ Insecticide resistance monitoring

_____ Biological control

_____ Cultural control alternatives

_____ Other: _____