

Appendix A. Organic Vegetable Breeding Needs Assessment Survey

Have your voice be heard and help create the next generation of new vegetable varieties for organic farmers!

Exercise your right to inform public breeding and assure your public vegetable breeding program is working on breeding relevant to your needs! Completing this survey will make sure your voice is heard.

This survey is being conducted as part of the Vegetable Breeding Program of Cornell University under breeder Dr. Michael Mazourek. We are seeking input from organic vegetable growers across the Northeast to guide our current and future breeding. A similar assessment of growers was done ten years ago; the responses we received then helped inform our breeding priorities.

This anonymous survey is divided into 5 sections.

Section 1 asks for basic information about your farm and farming practices so that we can correlate needs with the different types of farms that answer the survey.

Section 2 asks you to provide information on current critical varieties that you disproportionately rely on. Identifying these will help us determine where there are potential vulnerabilities in the organic seed supply.

Section 3 is looking for critical crop varieties that you have relied on in the past but which are no longer available. By identifying these critical lost varieties (and understanding what made them so perfect) we can potentially bring them back.

Section 4 gives you the opportunity to let us know the kinds of new varieties you would like developed to meet your current production and marketing needs.

Section 5 seeks to identify your main pest or disease related production challenges and then to rank specific growing challenges. Knowing your main challenges will help us prioritize characteristics to include as we breed and improve new varieties. This survey will take 10-20 minutes to complete. Completion of this survey is voluntary, results will be anonymous, and completing the survey implies your consent to participate.

This survey is funded by USDA-AFRI as part of the grant "Breeding, Research, and Education Needs Assessment for Organic Vegetable Growers in the Northeast Grant 2014-67013-22409."

Section I: Basic Farm information

What state do you farm in?

- New York
- New Jersey
- Pennsylvania
- Massachusetts
- New Hampshire
- Maine
- Rhode Island
- Vermont
- Connecticut
- Other _____

Please select the statement that best describes your growing practices in relation to the National Organic Standards.

- My vegetable operation is certified organic
- My vegetable operation is Certified Naturally Grown
- I only use certified organic growing practices but do not have organic certification
- I use certified organic growing practices but also use some practices that are not allowed under organic certification
- Other _____

How many years have you been farming? _____

How many acres do you have in vegetables? Include field, greenhouse, hoop-house, and land in cover crops. _____

Rate the method you use for marketing your vegetables.

	This is one of my major methods of marketing my vegetables	This is one of my minor methods of marketing my vegetables (2)	I don't use this marketing method (3)
CSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Home Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farm Stand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wholesale	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section II: Critical Crop Varieties

Are there certain crop cultivars you disproportionately rely on, such that you would find yourself at a tremendous loss if seed of that particular variety disappeared? We hope to identify these varieties to make efforts to ensure seed availability. Please answer the following question for up to three varieties that we should focus on preserving because they are invaluable to you and where you don't currently have a viable replacement.

For each variety, please give the crop type, variety name, and describe why this variety is so important to you. **What are the key characteristics that make it so important?**

Example: Carrot, cultivar X, able to plant in early July for a fall harvested orange carrot that dependably produces a high percentage of marketable carrots; holds well in the ground; stores until March; great yields.

1. Crop Type _____

Variety Name _____

Reasons for Importance

2. Crop Type _____

Variety Name _____

Reasons for Importance

3. Crop Type _____

Variety Name _____

Reasons for Importance

Section III: Critical Crop Varieties that are no longer available

Have you had the experience of finally finding that "perfect" variety only to have it "disappear" from the seed catalogs? Usually it has been replaced by an "improved" variety that may be lacking critical characteristics of the original. By identifying these critical lost varieties - and what made them so perfect - we can potentially bring them back. Please answer this question for up to three "lost" varieties.

For each vegetable variety that you are no longer able to find, please state crop type, variety name, the seed company you last purchased it from, and what attributes it had that made it so important.

Example: Radish; X variety; Y Seed company; it's the only mild spring radish that would hold in the field without becoming woody.

1. Crop type _____

Variety Name _____

Last known Source _____

Best Attributes _____

2. Crop type _____

Variety Name _____

Last known Source _____

Best Attributes _____

3. Crop type _____

Variety Name _____

Last known Source _____

Best Attributes _____

Section IV: New Varieties that need to be developed

Are there varieties you grow that you really like but could be significantly improved with a few changes? Let us know what these varieties are, the most important attributes of the variety, and improvements that should be made. Please answer this question for up to three new variety improvements.

For each variety that you would like improved, please state the crop type, current variety to improve, what you like about the current variety, and suggested potential improvements.

Example: Potato, X variety, what I like - best flavor, early; improvements needed- resistance/ tolerance to leaf hopper, higher yield

1. Crop Type _____

Current variety to improve _____

What you like about this variety _____

Potential improvement needed _____

2. Crop Type _____

Current variety to improve _____

What you like about this variety _____

Potential improvement needed _____

3. Crop Type _____

Current variety to improve _____

What you like about this variety _____

Potential improvement needed _____

Section V: Production Challenges:

We would like to identify the main pest related production challenges organic growers currently have to make sure we work on incorporating solutions to them in future breeding. Let us know up to 5 serious pest problems you have. A serious pest problem would be one that you feel really effects your crop by reducing yield, quality, and/or marketability and is difficult to control (e.g. requires spraying nearly every year, row covers, and/or other special treatment).

For each pest problem, please state the pest, and the crop(s) it effects. You can include multiple crop types if the same pest is a problem in each crop.

Example: Cucumber Beetles; cucumber, summer squash

1. Pest Problem (include only one) _____

Crop Types _____

2. Pest Problem (include only one) _____

Crop Types _____

3. Pest Problem (include only one) _____

Crop Types _____

4. Pest Problem (include only one) _____

Crop Types _____

5. Pest Problem (include only one) _____

Crop Types _____

For the following traits, please individually rank their importance (generalized for all the crops you grow).

	High Priority. Please focus on this in your Breeding! (1)	(2)	Somewhat important (3)	(4)	Not Important (5)	Unsure (6)
Flavor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crop Storability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That the variety is available as certified organic seed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That the variety is an OP and not a hybrid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please include any additional information and thoughts you think that breeders and vegetable production researchers should know to better meet the needs of organic vegetable growers in the Northeast.

If you are interested in being involved in future vegetable breeding or trialing efforts please include your name, farm, and contact information. This is optional.

Your Name:

Farm Name:

Contact information:

Thank you for participating!