

# Report for FY24-FY30 Ohio Grape Industries' Extension, Production and Research Prioritization Survey

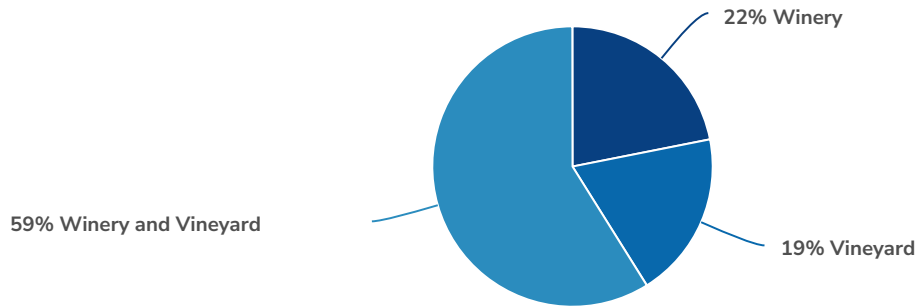
## Response Counts

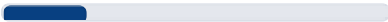
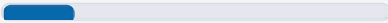



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Totals: 73

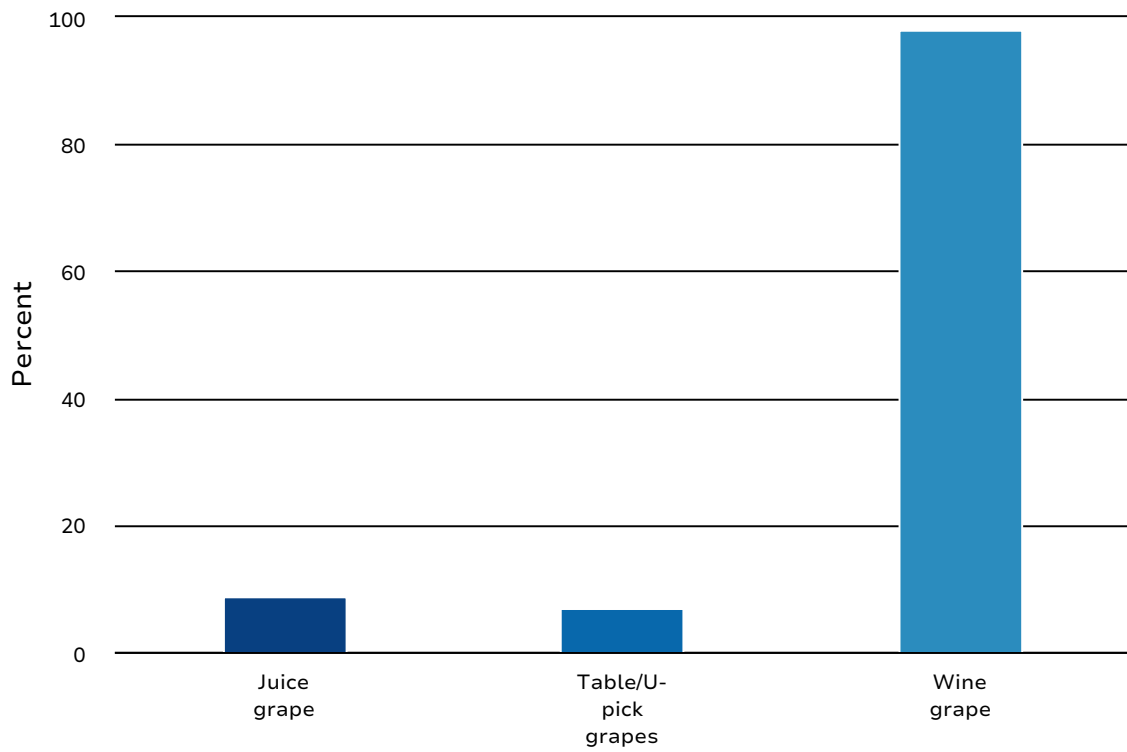
1. Please check the stakeholder group that best describes your operation.



Value	Percent	Responses
Winery	21.9% 	16
Vineyard	19.2% 	14
Winery and Vineyard	58.9% 	43

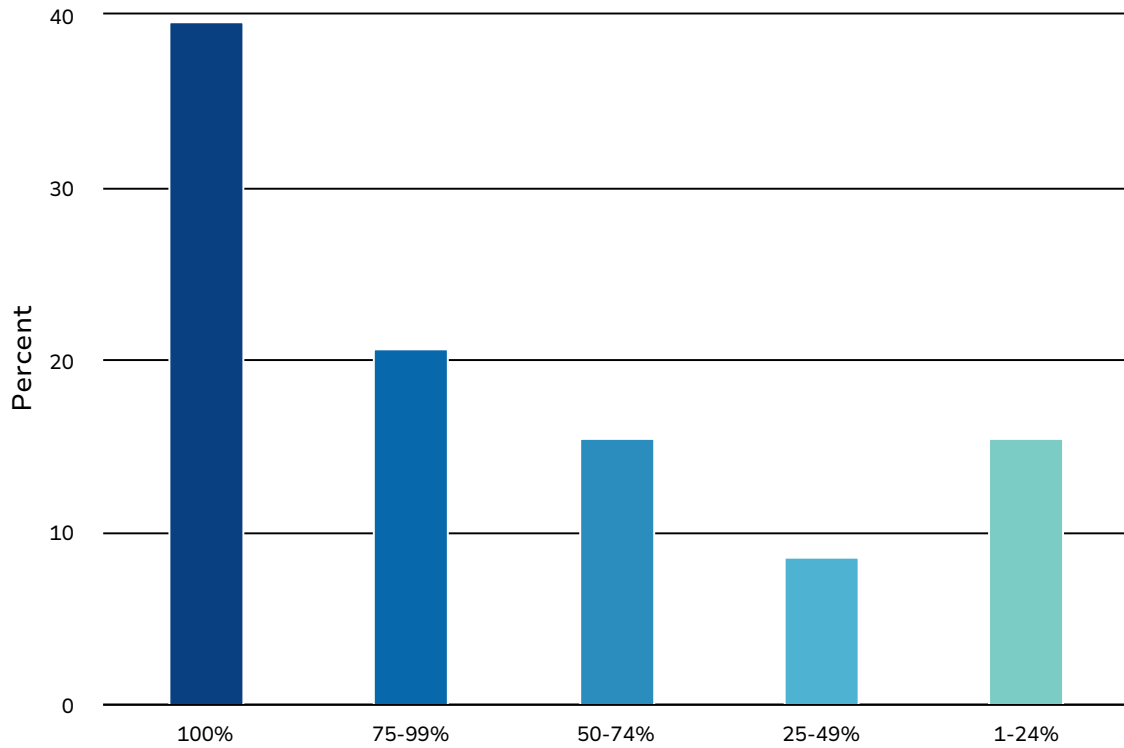
Totals: 73

## 2. Type of vineyard production



Value	Percent	Responses
Juice grape	8.8%	5
Table/U-pick grapes	7.0%	4
Wine grape	98.2%	56

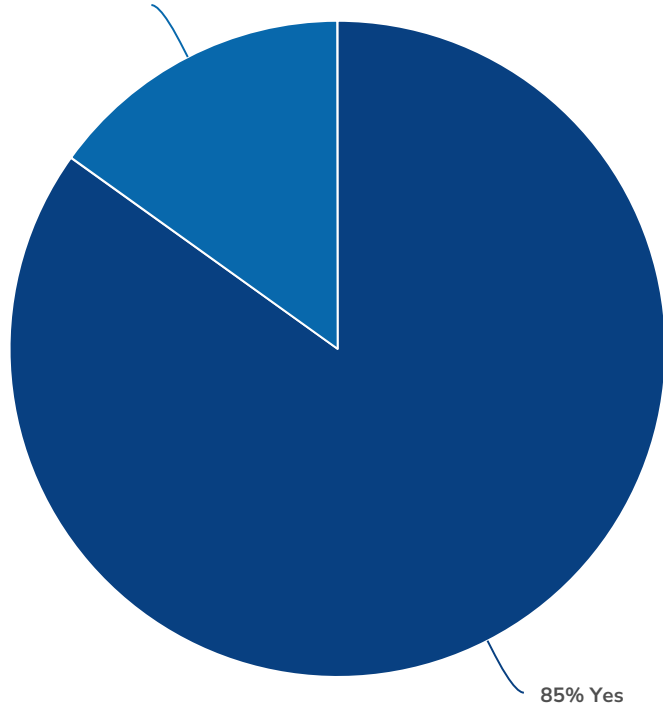
### 3. Of the products you produce, what percentage of in-state fruit and/or juice is used in your operation?



Value	Percent	Responses
100%	39.7%	23
75-99%	20.7%	12
50-74%	15.5%	9
25-49%	8.6%	5
1-24%	15.5%	9

4. Are you aware that the Ohio Grape Industries Committee (OGIC) contracts for extension and research services on behalf of the industry annually?

15% No

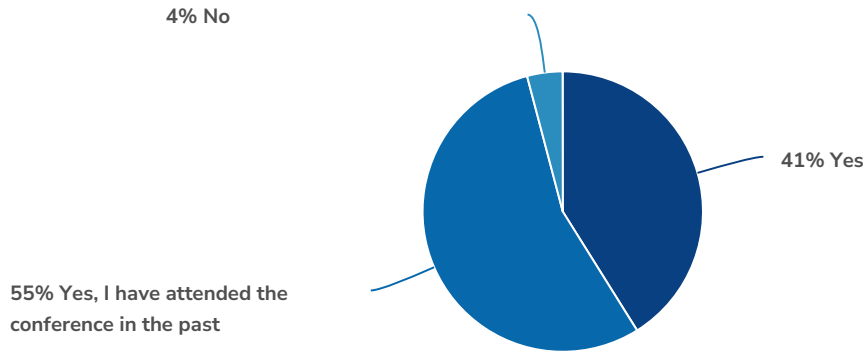


85% Yes

Value	Percent	Responses
Yes	84.9%	62
No	15.1%	11

Totals: 73

5. Are you aware of the Ohio Grape & Wine Conference (OGWC) where the findings of the industry's research and extension efforts are shared annually?



Value	Percent	Responses
Yes	41.1% 	30
Yes, I have attended the conference in the past	54.8% 	40
No	4.1% 	3

Totals: 73

## 6. What is your single most concerning wine production challenge?

ResponseID	Response
36	Complicated reporting requirements and poorly constructed regulatory paperwork.
37	testing
39	Weather
42	Climate change
45	Disease pressure
49	lack of Ohio grown grapes to accommodate production levels
52	Cold stabilization and tartrates
56	Ensuring every bottle is high quality.
58	Support from the state regarding equipment upgrades and land expansion.
63	post fermentation stabilization
65	I really don't have any.
66	Producing the best possible product with limited equipment and temperature control because the winery is just starting up and cash flow is limited.
69	temperature control without cooled tanks or vats.
70	capacity and capital
72	Access to more local Ohio-grown grapes. The need to establish new AVAs where it makes sense to further build and market our unique growing regions in our state.
73	REGULATIONS
78	Inflation (material & labor)
85	Equipment costs to upgrade.
87	Finding Ohio sourced fruit to supplement our vineyard production.
94	Cleaning, sanitizing / micro-contamination

**ResponseID Response**

95 Quality of grapes at harvest

97 Keeping sulfite levels up

99 De-acidification

100 Longevity in the bottle

103 Cold resistance and soil nutrients seen to be our biggest issues. Research has always focused on yield, it would be nicer if dinner research could be done on manual pruning and harvesting methods that can reduce time. Labor is too expensive and time is out number one inhibitor to maintaining the vineyard.

104 Space, expansion, next physical steps and the expanded infrastructure processes that accompany it. We have a good strategy.

105 Sensory and chemical analyses. We use Cornell University for our chemical analysis and Todd for sensory. I wish it was all integrated, whereas sensory and chemical could all be done through OSU. Access to a comprehensive service like this would inevitably lead to a huge improvement in the overall quality of Ohio wines. I'm shocked when I talk to Ohio winemakers that have been around 20+ years and have never used an external lab. How do they accurately calculate complicated things like residual sugar, free SO<sub>2</sub>, or even alcohol level?

107 Space

108 stable shelf life of wine grapes versus fruits

109 Testing and analysis

113 Ability to source more in state fruit.

117 Cost of sourcing supplies as a small winery (bottles, corks, additives). Cooperative buying would help immensely!

118 getting Ohio Grapes

119 Consistent supply of quality juice

121 complete alcoholic fermentation

122 Supply and Demand

123 Regeneration of yeast when making sweet wines.

127 None.



**ResponseID    Response**

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130            Winter injury

131            Oxidation and stability

134            Protein Stabilization

139            adequate space in my cellar

141            Capital for growth and expansion

142            availability of Ohio grown grapes, especially in the Lake Erie and Grand River Valley AVAs.

143            Turning out a quality product consistently. We are a small batch vineyard so our product will be fluid. Sensory clinic regularly would be amazing!!!! I was looking for one at the conference.

144            As the wine industry grows in Ohio and other states, the number of Vineyard acres is not growing fast enough to keep up with demand.

145            weather

146            Man power

151            Growing enough grapes

153            Access to laboratory testing

## 7. What is your single most concerning grape production challenge?

ResponseID	Response
37	harvesting
39	Weather
41	Money
42	Climate change
43	Increases in production inputs (chemicals and labor) looking for low spray, low maintenance varietal with excellent wine potential
45	Labor
49	pay levels are not high enough for skilled vineyard managers
52	Spray drift
53	Pest control. Example, bugs, deer, birds
54	Effective spray programs.
58	Changing climate
63	weather issues - understanding we can't control this.
66	Learning to identify and spray for fungal infections and pests.
69	Extending harvest date to increase ripeness without losing part of harvest to rot
71	pests
72	Skilled Labor throughout the season. We need to take better advantage of attracting workers to our industry. We have Kent State's VESTA viticulture program. Maybe we need to develop more short courses for training new recruits to the industry for learning basic vineyard skills.
73	HERBICIDE DRIFT
75	Fungicide program and nutrient program.
76	Weeds
78	Birds

**ResponseID Response**

82	The deer population in our area along with the short deer season.
85	Weather
87	Continuing to find new varieties (hybrids) that grow well in our area and produce quality wine or finding cold hardy vinifera that can match hybrid hardiness.
92	Weather
94	Late season disease, e.g. bunch rot / botrytis, sour rot
95	Weather
97	Possible 2 4 D Drift damage
99	Pre-emergent selection and weed control.
100	Managing disease
103	Time
104	Space same as above.
105	Weather, specifically frost. Last year we had a record harvest, and it was due entirely to a frost-free spring, the first one we've had in years. So some kind of frost protection, anything, even just a few degrees.
107	SLF
109	Grape sourcing. The vineyard that we usually pick is selling their property. Our vineyard is only 1 acre
112	Weather
117	Experiencing short and long-term effects of herbicide drift injury and lack of support from the Department of Agriculture during the investigatory process.
119	Birds
121	crown gall
123	Deer
126	Weed control

## ResponseID Response

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127 Warmer and wetter (rain) weather in January and February. VERY concerned that the plants will bud earlier than normal then the weather will turn extremely cold or have frost events.

131 The VEAP program is great but they only cover the smallest fraction of the cost to plant grapes, the actual vines. The majority of cost is in the trellis system. The VEAP program should cover any relevant cost if they want to increase the number of acres of grapes in Ohio.

132 weather, specifically climate change; winter hardiness, spring frost

133 Weather

134 Disease, changes in resistance management

138 Lack of extremely knowledgeable (on viticulture) extension agents in the southern part of the state Way south ie gallia county.

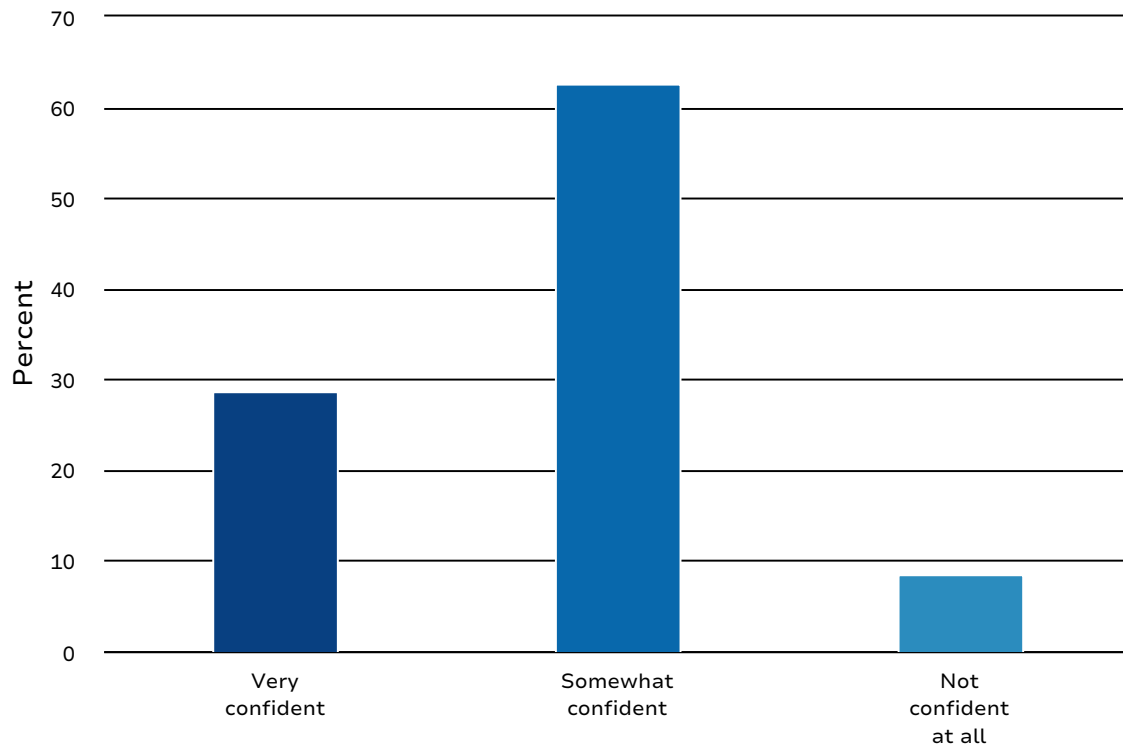
139 Temperature extremes are the reason for pulling some of our cab franc. But the most controllable variable is the frequency of herbicide drift that has caused significant reduction in yield.

143 Quality spray program and battling drift.

145 weather

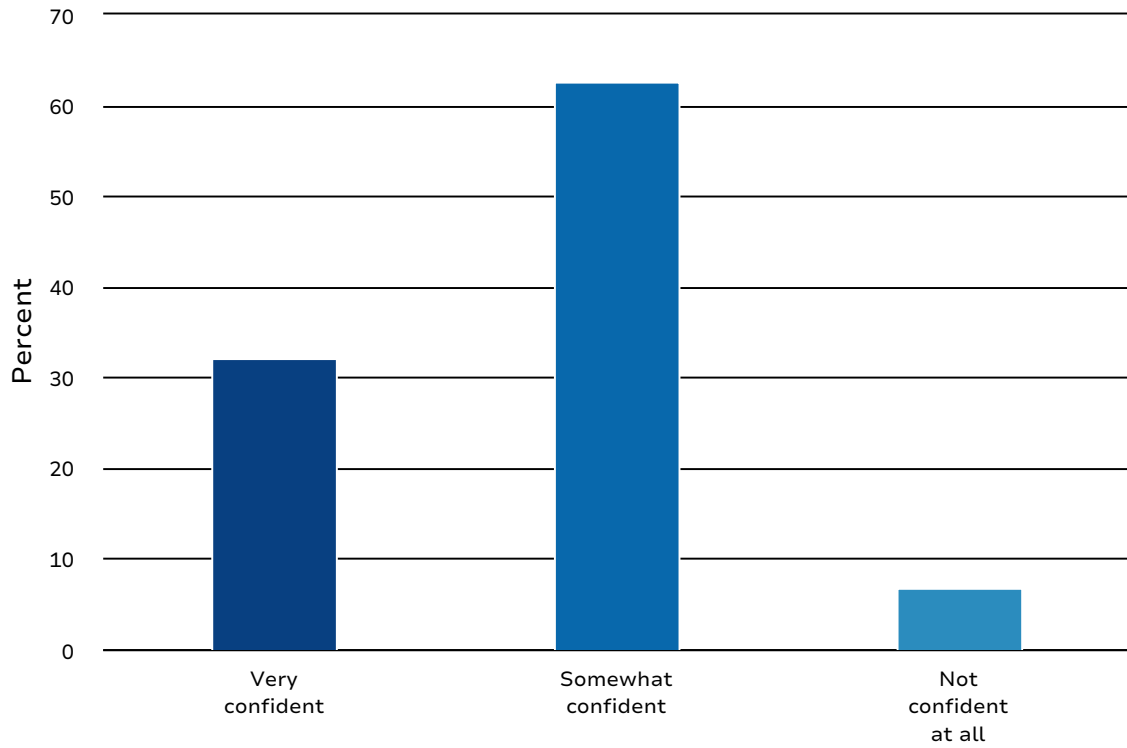
153 Unpredictable weather and extremes

## 8. How confident are you in determining varietal character via sensory evaluation?





Value	Percent	Responses
Very confident	28.8%	17
Somewhat confident	62.7%	37
Not confident at all	8.5%	5

## 9. How confident are you in being able to identify specific wine flaws via sensory evaluation?



Value	Percent	Responses
Very confident	32.2%	19
Somewhat confident	62.7%	37
Not confident at all	6.8%	4

10. On a scale of 1 to 9, with 1 being the most important and 9 being the least important, please rank the following industry challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Vineyard production challenges (i.e., best viticultural practices - variety selection, cultural practices, pest management, etc.)	1		445	64
Grape/wine quality	2		432	63
Grape/vine quality	3		420	65
Availability of Ohio-grown fruit (limited locally-grown grapes in Ohio)	4		384	65
Identifying best enology/winemaking practices (i.e., quality effects, production, winemaking techniques, etc.)	5		381	66
Defining and promoting geographical regions (appellations) of the state which exhibit superior viticultural opportunities	6		270	67
Regional variation	7		237	64
Rapid growth of industry	8		218	67
Food safety	9		209	67



## 11. Additional industry challenges.

ResponseID	Response
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41	Marketing. How to determine if a winery will be successful.
42	Incoming biological threats from china
49	lack of recognition of growers; all the focus is on winemakers
58	Awareness overall
71	weather, extreme change over short periods of time.
72	Skilled and experienced workforce for both better vineyard management and winemaking.
76	Weather
78	Drift
87	I think all of these have importance to the industry and depending on the specific topic within the category would have importance to us at some level.
92	Disease
94	High cost of insurance (currently 7% of our gross proceeds)...Market conditions that disfavor small producers... lack of advertising, one size fits all service charges (e.g. internet, security systems)
100	Customer education on the meaning of "Ohio Style" when it comes to wine, particularly wine from hybrid grapes.
103	Online Tax and reporting system training.
104	Deer
105	Ohio Department of Liquor Control. Such a dysfunctional group. I lost all hope when Elaine left. Compare them to the Ohio Department of Taxation, which answers email, returns calls, offers expert advice, has tons of online forms, and will even share your computer screen with you if needed.
112	Regulations
117	Cost of Supplies - cooperative buying power Herbicide drift injury
127	Weather



**ResponseID    Response**

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131            Educating consumers and retailers that there are good Ohio wines. We need to be able to give samples at restaurants at local events without having to have a temporary liquor license.

132            climate change; winter hardiness, spring frost

139            Need better education and enforcement regarding herbicide drift.

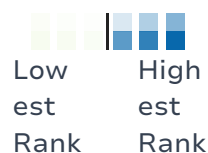
145            having a wine asso that works all not just the north east part of ohio

146            A lack of grower making know what if anything they have for sale to other Ohio wine producers

153            Lack of recognition of Ohio wine and grape production and quality beyond local/loyal customers. Challenge for both retail and wholesale.

12. On a scale of 1 to 11, with 1 being the most important and 11 being the least important, please rank the following winery best practices challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Sanitation practices	1		419	55
Identifying and remedying sensory challenges in wine products	2		394	56
Oxygen management	3		372	55
Temperature control (i.e., harvest and must management, fermentation, aging, bottling and storage)	4		369	56
Acceptable parameter ranges (i.e., pH, TA, SO2, etc.)	5		361	56
Fining/filtering/wine stability/clarification	6		337	55
Affordable and meaningful laboratory analysis of wines	7		323	55
Essential and affordable equipment for quality production	8		320	56
Sulfur dioxide management	9		314	55
Sterile bottling practices	10		296	56
Winery set-up procedures	11		224	55



### 13. Additional winery best practices challenges.

ResponseID	Response
42	Knowledge by winery owners of what a "bad" wine is!!
58	Am overall shift to premium quality wine production
72	Basic winery business management expectations and planning
76	Don't like the best practices sort of concept.
78	Time management
94	Small business coops to enable level competition with big producers... e.g bottle purchases, corks, labels, shipping, out of state grape procurement
104	Just need to keep learning. Very good to see what others are doing but very hard to get away and visit them, almost impossible.
105	Nutritional and ingredients labeling. It's coming, and it could be a good thing for the industry.
112	Previous question most items fell under first choice
121	Raising awareness of how important all these parameters are

14. On a scale of 1 to 7, with 1 being the most important and 7 being the least important, please rank the following winemaking technique challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Primary fermentation practices (i.e., yeast strains and sensory attributes, nutritional supplementation, and stuck fermentation protocols)	1		306	56
Grape variety selection for different styles of wine	2		247	56
Phenolics (measurement and management - i.e., tannins, anthocyanins, color stability, wine maturation and stabilization)	3		238	57
Options for acid reduction	4		204	57
Variety harvest parameters for different styles of wine	5		204	55
Malolactic fermentation practices (i.e., timing, bacterial strains and sensory attributes, monitoring and stuck protocols)	6		193	56
Post-harvest considerations (i.e., aging, barrel and oak choices, etc.)	7		174	53



## 15. Additional winemaking technique challenges.

ResponseID	Response
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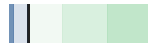
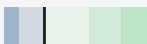





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72	Blending techniques to improve overall wine sensory attributes.
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105	Temperature control. Cold and hot stabilization.
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130	Blending wine workshop
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16. On a scale of 1 to 7, with 1 being the most important and 7 being the least important, please rank the following industry challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Grape fruit quality	1		300	54
Vine health maintenance	2		281	55
Best viticultural practices	3		273	54
Impacts of climate change on vine health	4		186	53
Decline in vineyard acreage	5		167	54
Workforce development	6		159	53
Regional variation	7		151	54



Lowest Rank      Highest Rank

## 17. Additional industry challenges.

ResponseID	Response
42	Victorian attitude of political systems to alcoholic beverages. We need to get America more like Europe where young people are intelligently introduced to alcohol consumption from adolescence
71	cost increases
72	Better Site selection for some growers needs more evaluation.
76	Cold winter weather.
78	Drift control
82	Destruction of fruit by animals.
92	Weather insects diseases
94	Objective discussions of relative pesticide safety in the vineyard and winery. Not helpful that all safety labels read the same. Their relative risks are not equivalent. Consumers think in all or nothing terms about pesticides.
103	Time reduction practices for pruning and harvesting.
105	Grape prices. Too low for all the required input.
107	Deer are decimating our harvests
117	Herbicide Drift Injury Invasive plant pests/pathogens
132	public education to appreciate OH grapes and wine

18. On a scale of 1 to 13, with 1 being the most important and 13 being the least important, please rank the following vineyard challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Cold injury from winter freeze and spring frost and protection methods	1		508	53
Vine nutrition and health (develop nutrient/water quality management for optimal vine health)	2		483	51
Knowledge of fruit quality production parameters/attributes in wine grapes to predict wine quality	3		426	50
Fruit maturity management	4		417	50
Herbicide drift/resistance	5		394	54
Crop load management	6		349	50
New variety evaluation - improved varieties for wine quality and horticulture	7		336	49
Improving microbial or chemical quality	8		323	49
Vinestock quality	9		322	48
New variety evaluation - higher levels of phenolics and tannins	10		305	50
Rootstock performance	11		280	51
Vineyard site identification	12		272	50
Training systems	13		246	49





## 19. Additional vineyard quality challenges.

ResponseID	Response
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42	None
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72	Evaluation of the marketing aspects to consumers for some of the new hybrid varieties. Defining the best wine style for some of these hybrids that will better appeal to consumers.
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105	Crown Gall. Help. Something, anything. Also, examples of effective spray programs.
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121	Understanding where we can make a difference and optimizing in those areas
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132	critter exclusion
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20. On a scale of 1 to 7, with 1 being the most important and 7 being the least important, please rank the following crop and pest management challenges:




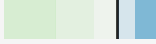

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Plant pathology/disease	1		281	54
Weed control	2		246	54
Plant pests/insects	3		244	53
Soil health	4		212	53
Herbicide drift	5		181	52
Variety selection to optimize efficient chemical and labor input	6		179	53
Input management	7		150	52


Lowest Rank      Highest Rank

## 21. Additional vineyard best practices challenges.

ResponseID	Response
42	None
72	More research on alternatives to weed control especially when some chemicals are becoming so costly and hard to allocate with supply chain shortages.
78	Birds
94	Residual pesticide in harvested fruit or wine
104	Tough to answer all are key. Deer!!
105	Working towards a more organic and sustainable approach to vineyard management.
107	Deer are a HUGE threat to GRV harvests
112	M
132	irrigation

22. On a scale of 1 to 5, with 1 being the most important and 5 being the least important, please rank the following weed management approaches:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Herbicides	1		218	55
Ground Cover	2		184	54
Mechanical tillage	3		160	54
Pre-planting perennial weed eradication	4		134	54
Mulching	5		128	55


  
 Lowest Rank                      Highest Rank

## 23. Additional weed management approaches/issues.

ResponseID	Response
42	What is perennial ween management pkanting
60	Flame weeder
72	We need to borrow some sheep
105	More non-chemical options, like sheep.
110	Flame weeding
112	M
117	Grazing systems

24. On a scale of 1 to 8, with 1 being the most important and 8 being the least important, please rank current information needs:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Disease spray program development	1		330	54
Disease management strategies for grape production	2		304	54
Fungicide resistance management	3		279	54
Herbicide efficacy on targeted weeds	4		227	54
Herbicide efficacy based on timing of application	5		220	55
Diagnostics	6		219	54
New technology	7		207	54
Impact of climate change on disease pressure and management	8		165	53

Lowest Rank      Highest Rank

## 25. Additional current information needs.

ResponseID	Response
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42	None
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72	Timeline suggestions for awareness for identifying common disease situations throughout the season.
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105	Herbicides are a fact of life for effective, modern row crop agriculture. But for specialty crops, we have options. Let's look at them.
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112	M
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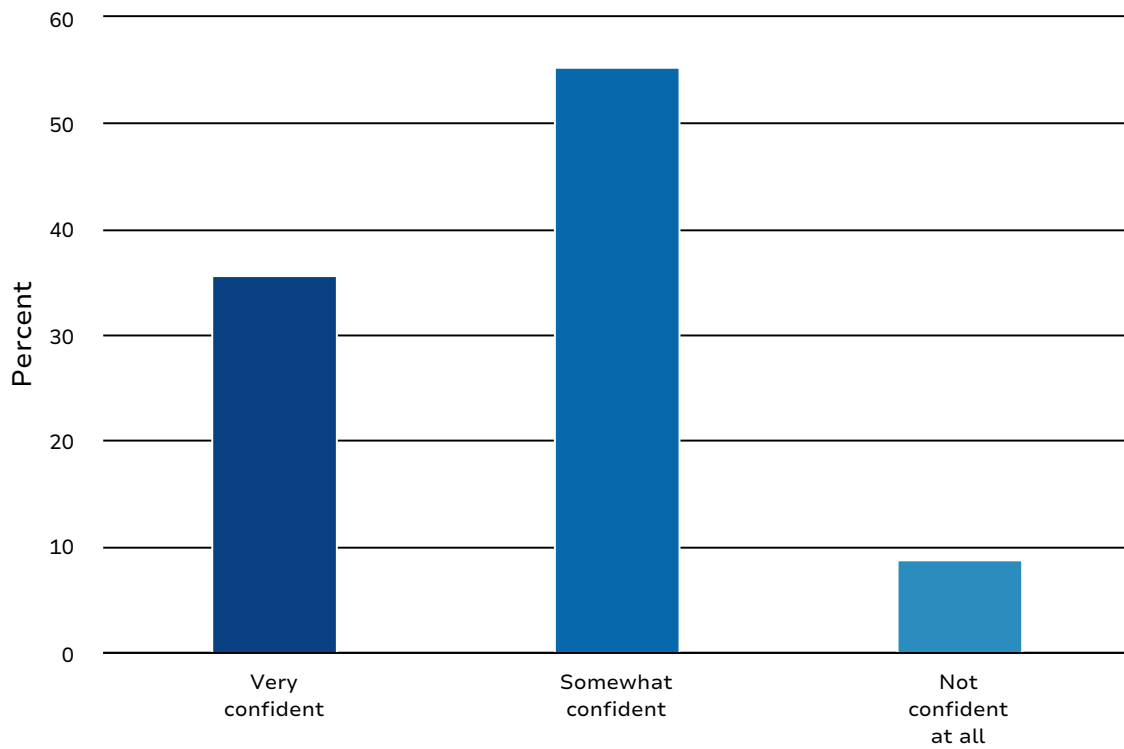
117	under vine cover crop options/systems of management
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26. How confident do you feel you can effectively control or manage a given disease or disorder?

	Very confident	Somewhat confident	Not confident at all	Responses
<b>Botrytis</b> Count Row %	11 20.4%	35 64.8%	8 14.8%	54
<b>Sour rot</b> Count Row %	4 7.4%	36 66.7%	14 25.9%	54
<b>Athracnose</b> Count Row %	16 30.2%	27 50.9%	10 18.9%	53
<b>Phomopsis</b> Count Row %	13 23.2%	33 58.9%	10 17.9%	56
<b>Downy mildew</b> Count Row %	23 41.1%	31 55.4%	2 3.6%	56
<b>Powdery mildew</b> Count Row %	25 44.6%	28 50.0%	3 5.4%	56
<b>Ripe rot</b> Count Row %	8 15.1%	30 56.6%	15 28.3%	53
<b>Viruses</b> Count Row %	4 7.5%	23 43.4%	26 49.1%	53
<b>Totals</b> Total Responses				56



## 27. How confident are you in managing weeds?



Value	Percent	Responses
Very confident	35.7%	20
Somewhat confident	55.4%	31
Not confident at all	8.9%	5

28. On a scale of 1 to 2, with 1 being the most important and 2 being the least important, please rank the following grower/winery communication challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Grower/winery interface (i.e., The Grape Exchange, OGEN, OGWC, workshops, web sites, etc.)	1		117	68
Creation of sample purchasing agreement between grower and winery, including premiums for definable quality goals, ways to solidify grower/winery relations.	2		87	67


  
 Low est Rank      Hig hest Rank

## 29. Additional grower/winery communication challenges.

### ResponseID Response

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72 Growing varieties that are needed and desired based on what is most marketable.

87 Based on topics above, not sure if this category is more of an internal to the industry challenge only. We seem to struggle more with communication to potential customers rather than getting information from OSU/OGIC. While improving, at times OWPA seems to focus on only promoting only vinefera varieties and seem to focus the bulk of its marketing efforts to the wineries on the lake, the rest of the state seems to be an afterthought for the most part. Need OGIC to help promote non-vinefera varieties/success stories.

105 Ohio wines have to use Ohio grapes or other Ohio fruit. Make it 100% Ohio. I always buy Ohio appellations, county, or state designations. I never buy anything identified as American. That stuff can come from anywhere.

108 best practices in purchasing product from grower in making wines

117 regular (ie quarterly) regional winery/vineyard meetings. Each party could bring case examples of vineyard management or wine production issue. Could review solutions or be a chance to seek advice from others.

121 sustainability based on realistic expectations on all fronts

131 We need to have advocates changing the state liquor laws. They are not favorable to small businesses. One example is that they should eliminate the Sunday sales laws. There should be one license for all 7 days. The amount of red tape to sell alcohol on Sundays is prohibitive to small wineries.

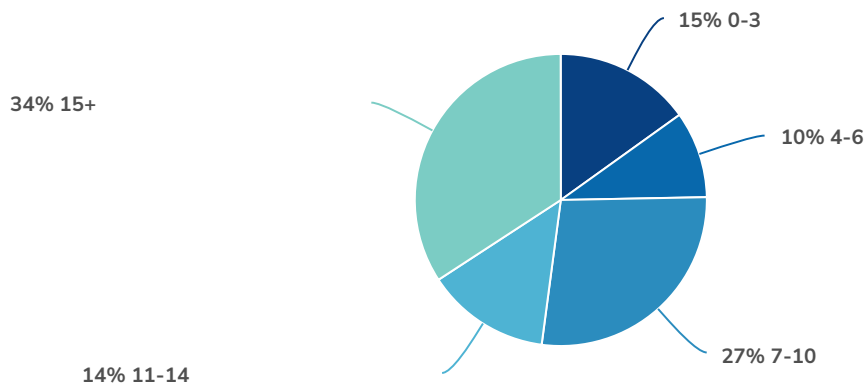
146 Winemaker should have a way of finding ohio grow grapes/juice available for sale.

### 30. Name (optional)

ResponseID	Response
37	O'Neill Paul
42	Iain Miller
52	JOHN DOWALTER / KNOXVIEW FARM WINERY
54	Mark Elsass
56	Chad Schindler
60	Providence Vineyards, Randy Croson
63	Crooked Tree Vineyard
65	Ron Fox
69	Rich Hill
70	Stephen
72	Gideon Owen Wine Company
73	Phillip Stotz
87	Jim Borton
92	Dan Mosher
94	Bruce Murch
95	Soine Vineyards
97	Paul Roberts
103	Andy Creighton
104	Bill Davis
105	Mark Chevalier
107	Tracy Hundley
109	Headley Inn
115	Debonne Vineyards

<b>ResponseID</b>	<b>Response</b>
117	Emma Alban
121	Lee Klingshirn
130	Nick Ferrante
133	Phillip
138	Robert Oehler / Squirrel Ranch Wines
139	Dragonfly
142	Tom Swank
146	Dan Garver

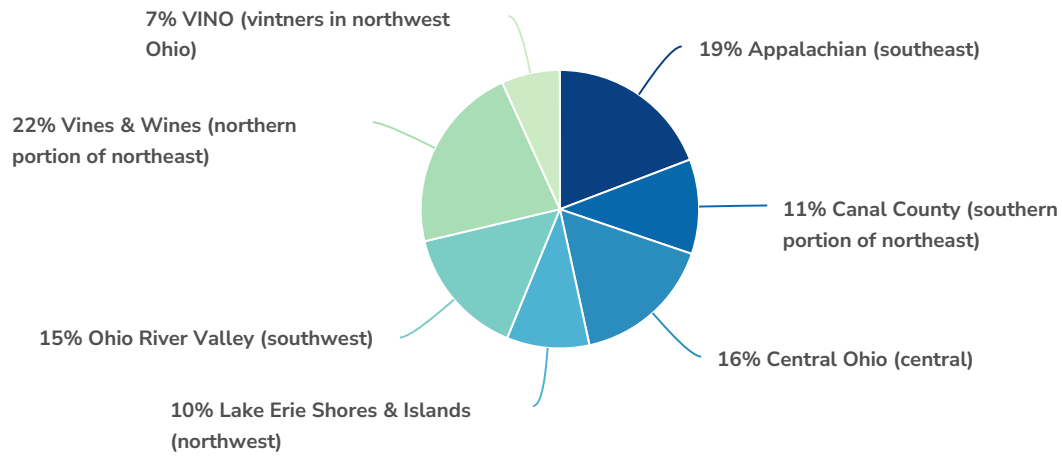
### 31. Please select the number of years you've been in business.

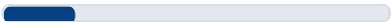
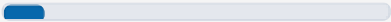
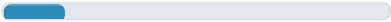
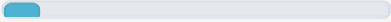
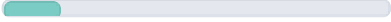
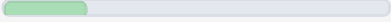
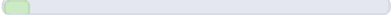


Value	Percent	Responses
0-3	15.1%	11
4-6	9.6%	7
7-10	27.4%	20
11-14	13.7%	10
15+	34.2%	25

**Totals: 73**

## 32. Region:



Value	Percent	Responses
Appalachian (southeast)	19.2% 	14
Canal County (southern portion of northeast)	11.0% 	8
Central Ohio (central)	16.4% 	12
Lake Erie Shores & Islands (northwest)	9.6% 	7
Ohio River Valley (southwest)	15.1% 	11
Vines & Wines (northern portion of northeast)	21.9% 	16
VINO (vintners in northwest Ohio)	6.8% 	5

Totals: 73

### 33. Additional comments and/or suggestions:

ResponseID	Response
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72	The need for more resources to help develop and write applications for applying for new AVAs
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95	Tough getting what is most important to least important. Many things carry the same weight.
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104	Been growing grapes 14+ years, wine making 7+ years
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105	It's confidential, right?
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110	Have workshops in different regions
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127	None
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131	Many small wineries need to sell additional alcohol to make the business model work. There should be lobbying to make one alcohol permit or at least let wineries sell wine, beer and cider.
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138	My business name has "wines" in it but right now I am selling grapes until we are established with enough acreage under vine.
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143	Develop additional trails that don't have the wineries so far apart. May require mixing different wineries from different regions
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