



REQUEST FOR PROPOSAL

Ohio Competitive Grant Program for Enology Research

Contact: Christy Eckstein, Executive Director, Ohio Grape Industries Committee

Date of Issue: May 20, 2021

Deadline: Friday, July 23, 2021

Overview

The Ohio Grape Industries Committee (OGIC) is requesting proposals for enology research projects for FY22-23 (July 1, 2021-June 30, 2023.)

The competitive enology research grant program will provide funding for innovative applied and basic enology research projects that strive to enhance and improve the quality of Ohio wines and grape products made from midwestern-grown grapes, juice, and/or bulk wine. Principal investigators may be located within or outside of Ohio. Research partnerships and collaborative projects are strongly encouraged.

Background

The OGIC is a quasi-state agency housed within the Ohio Department of Agriculture. The mission of the OGIC, as mandated by the General Assembly in 1981, is to create viable, income-producing grape enterprises in the State of Ohio by providing marketing and promotion efforts, and research and extension opportunities to improve the quality of grape products and profitability of grape growing as an agri-business.

Wines produced in Ohio are made from Ohio-grown grapes and outsourced grapes from around the world. Ohio produces wines from *vitis vinifera*, hybrid and *labrusca* grapes, as well as fruit and mead.

The Ohio grape and wine industry is comprised of 360+ licensed wine manufacturers and approximately 150 vineyards. Nearly 90% of Ohio's winemakers produce 5,000 gallons or less annually. The Ohio industry, ranked 6th in the country, has seen tremendous growth in the number of wineries and vineyards in the past five years with the industry growing from 244 licensed wine manufacturers in 2016 to 365 in 2021. The rapid growth in the number of new wineries and vineyards has led to the establishment of many wine and grape enterprises with limited skills and experience in winemaking and grape growing.

In order for Ohio's grape and wine industry to remain competitive regionally, nationally and internationally, these limited skills need to be addressed by research and extension in the areas of enology and viticulture including entomology, plant pathology and weed science.

Enology Priorities

In November 2017, the Ohio Grape Industries Committee (OGIC) conducted a statewide survey to identify research and outreach priorities of the grape and wine industry. *Survey responses are attached.*

The priorities for enology research focused on producing premium quality wine in Ohio include:

- Chemical composition and modification (phenolics, color, flavor, vineyard residues, oak, lees)
- Control of off-characters (volatile acidity, cork taint, microbial spoilage)

- Effect and management of microorganisms on wine quality (yeast, native flora, lactic bacteria, Brettanomyces, spoilage organisms)
- Fermentation technology
- Fruit composition and extraction
- Impact of viticultural practices on wine quality
- Method development/process optimization
- Process technology and aging stuck/sluggish fermentations
- Wine stability

Proposal Requirements

The proposal should focus on addressing the applicant's ability to provide the services outlined in the Enology Priorities section above. Applicants must provide the following information:

1. Detailed description of enology research to be completed, including recommended personnel, estimated timeline and budgetary request
2. Description of how the research addresses industry priority(ies)
3. Explanation of how information developed during the grant project would be communicated to end users, including the Ohio Grape Industries' Enology Extension provider - The Ohio State University.
4. Proposals should not exceed 8 pages in length.
5. Applicant should be aware that proposal information and progress reports will be widely disseminated to industry stakeholders

Budget

The OGIC has allocated up to \$90,000 each fiscal year or \$180,000 in total for the enology research grant program.

Indirect costs/overhead charges are not covered. Awards cannot be used for tuition, tuition reimbursement, or travel not related directly to the project.

Review Process

Each proposal received will initially be evaluated by the OGIC's Research Subcommittee and if deemed desirable forwarded to the Ohio Grape Industries Committee for final evaluation. Research projects will be selected for award based on a combination of both scientific merit and relevance to industry priorities. Multi-institutional proposals are encouraged to address specific issues and to allow the results of the sponsored research projects to have a broader reach.

Proposal Submissions

All proposals should be submitted to the OGIC, Attn: Christy Eckstein, 8995 E. Main Street, Reynoldsburg, OH 43068 or christy.eckstein@agri.ohio.gov, no later than 4:30 p.m. on Friday, July 23, 2021.

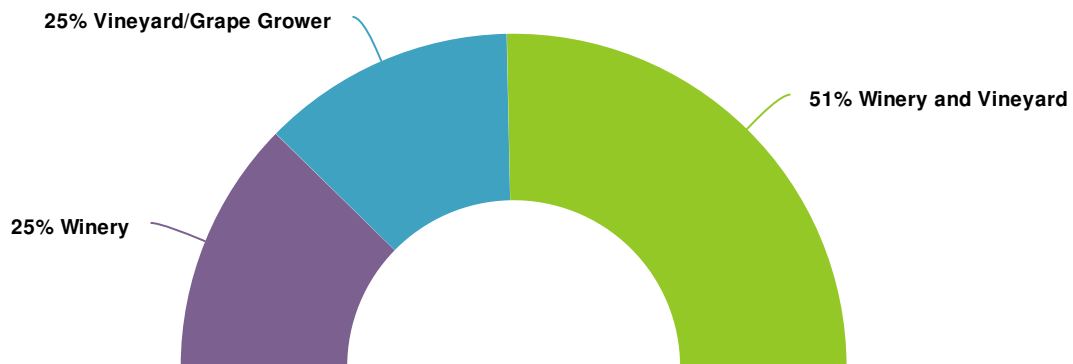
Report for FY19-FY24 Ohio Grape Industries' Extension, Production and Research Prioritization Survey

Response Counts

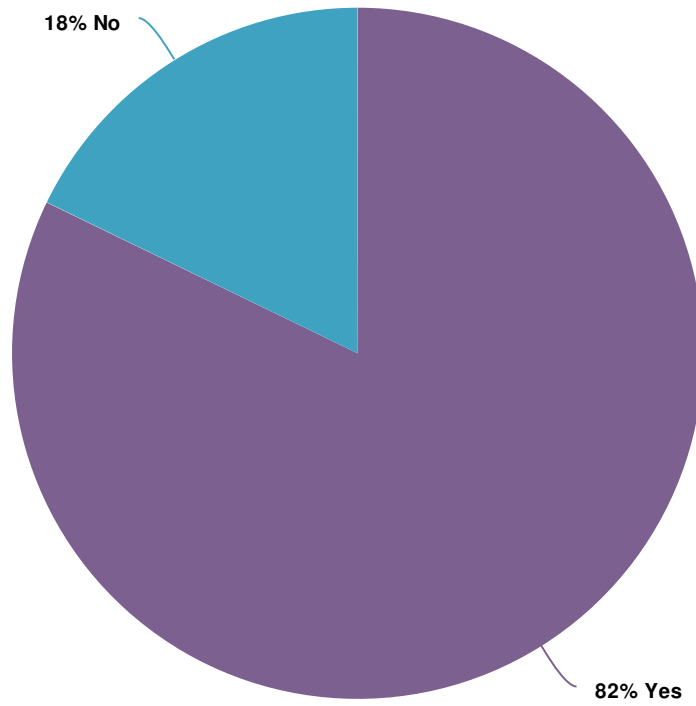
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	Complete		73

Totals: 73

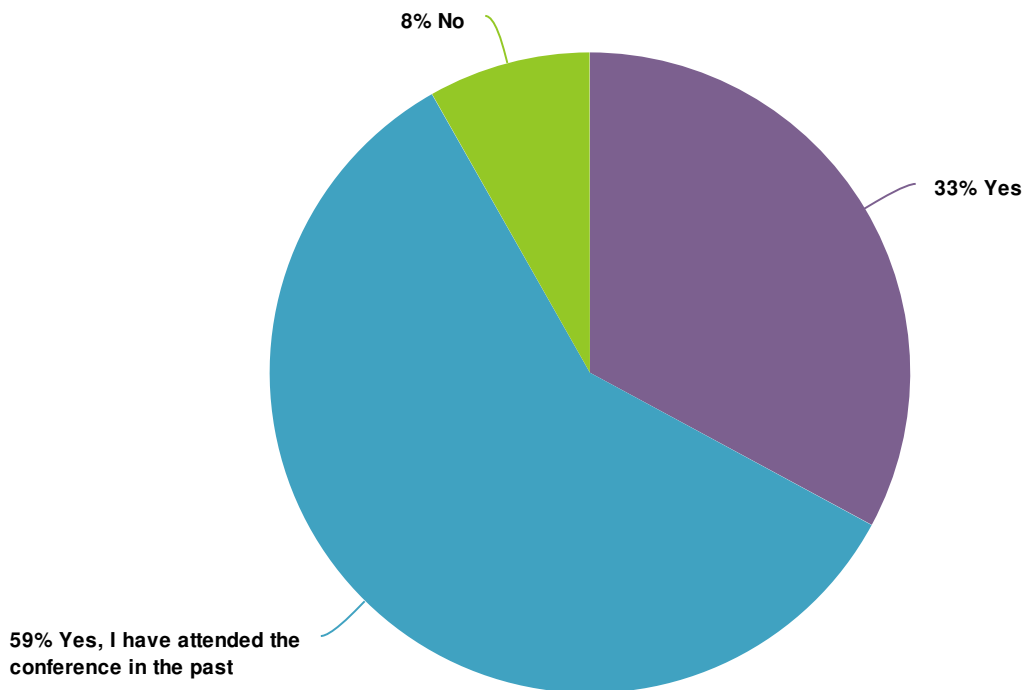
1. Please check the stakeholder group that best describes your operation.









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

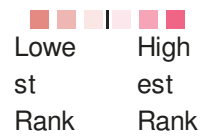


3. Are you aware of the Ohio Grape & Wine Conference (OGWC) where the findings of the industry's research and extension efforts are shared annually?



4. On a scale of 1 to 6, with 1 being the most important and 6 being the least important, please rank the following industry challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Identifying best enology/winemaking practices (i.e., quality effects, production, winemaking techniques, etc.)	1		223	51
Availability of Ohio-grown fruit	2		185	51
Industry communication (i.e., OGEN, The Grape Exchange, web sites, etc.)	3		183	54
Regulation	4		182	52
Diversity of industry (urban vs. rural; use of juice vs. grapes vs. bulk wine for blending, etc.)	5		165	48
Rapid growth of industry	6		141	49



5. Additional industry challenges.

Count Response

1	I think a major challenge is enough grapes to harvest in a young vineyard for the farm winery. The challenge is the low yield until the maturity of the vine. This along with limits of what grapes can be brought in makes it difficult to have enough wine to sell.
1	Biggest challenge is the state laws and regulations for manufacturers that also have retail stores.
1	Contracting with local growers to ensure quality grapes
1	Having a way to know if wine is made from fruit versus kits.
1	I think we need to do some restructuring to give more of an incentive to make wine from Ohio fruit rather than kits or out-of-state/country fruit. A license for a Farm Winery is the same price as a license for a Kit Winery, for example. Shiner imports seem to be increasing, b.t.w. We need to look at ways to preserve historical vineyard property and/or economically convert it to higher value grape production. In the Economic Impact Study, there are 2 different numbers for gallons of wine produced in Ohio (1,228,000 and 5,938,738). Which one is correct? If the higher one is correct, then the 5,500 tons of grapes produced in Ohio account for only about 15% of the wine production. If this is true, then we need re-focus the Grape Industries towards Grape Production as a path to Wine Production.
1	Industry identification, what makes us and how to continue to gain new customers
1	Learning the ins and outs of the wine industry. Starting up there isnt very much information available to help new wineries get started.
1	National recognition for table wine . . . to be consumed with meals . . . dry wines . . vinifera wine grapes
1	Starting out. Knowing all state and fed tax forms to be filed. Colas and label registration.
1	The need for wineries to make wine. Not buy all bulk wine and shiners
1	Wine that has obvious flaws being presented as Ohio wine.
1	attention to fruit wine production is neglected in Ohio.
1	identifying industry wide needs. (survey is good start) Providing assistance effectively to greatest needs
1	music licensing
1	too much wine "not" being made from Ohio fruit - shiners

Notice: Enable a chart or summary table to see your data.

6. On a scale of 1 to 6, with 1 being the most important and 6 being the least important, please rank the following wine quality challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Winery best practices - harvest to bottling (i.e., fining, oxygen management, etc.)	1		197	52
Winemaking techniques (i.e., variety selection, acid reduction, yeast strains, etc.)	2		190	51
Winery best practices - production and facilities	3		189	53
Definition of "quality" when referring to Ohio wines	4		179	51
Consistency of wines produced in Ohio	5		172	50
Use of grapes/juice vs. kits	6		170	53

Lowest Rank Highest Rank

7. On a scale of 1 to 5, with 1 being the most important and 5 being the least important, please rank the following winery best practices challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Sanitation practices	1		171	52
Laboratory analysis and testing (i.e., sensory and chemical analysis)	2		170	51
Essential and affordable equipment for quality production	3		165	51
Controlled temperatures in fermentation and storage	4		145	55
Winery set-up procedures	5		130	50

Lowest Rank Highest Rank

8. Additional production and facility challenges.

Count Response

- | | |
|---|--|
| 1 | - Laboratory analysis is not sensory analysis, those really should be split into two questions. I think we do have a problem with winemakers being able to identify flaws. - "Essential equipment" is a matter of some opinion. When we think about what is essential, we need to remember that most of our wineries are small. That changes the equipment that is essential. For example, there is often talk of sterile filtering wine. If you are like most small Ohio wineries using gravity fed fillers sterile filtering is practically impossible. So when we talk about equipment we should keep the limitations of the most common size wineries in Ohio in mind and help them learn about and acquire equipment that is practical and essential. |
| 1 | Changing regulations |
| 1 | Grape ripeness is the most critical winery practice. |
| 1 | Guidelines should be published and educational activities made available for vintners. Round table meeting would be great. Especially with current crop losses in California. Ohio needs to become a forefront in wine production to advance our industry across the country. |
| 1 | Having wineries follow best practices |
| 1 | Something is wrong with the software Can't make selections for all the choices. |
| 1 | Work space, helpers, controlling fruit flies, and long hours! |

Notice: Enable a chart or summary table to see your data.

9. On a scale of 1 to 5, with 1 being the most important and 5 being the least important, please rank the following winery best practices challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Laboratory analysis and testing (i.e., chemical and/or sensory analysis)	1		180	53
Fining/filtering/wine stability	2		178	51
Acceptable parameter ranges (i.e., pH, TA, SO2, etc.)	3		156	51
Oxygen management	4		154	54
Bottling procedures (i.e., corks vs. screw caps; pouches vs. bottles, etc.)	5		118	52

Lowest Rank Highest Rank





10. Additional harvest to bottling challenges.

Count Response

- 1 - Once again, sensory analysis and chemical analysis should not be in the same category. - Oxygen management is important, but only one of the things that create obvious flaws in some winery's offerings. I would term this more "flaw management" and include oxygen as one of those things.
- 1 Filtering, plate and frame pad set up and keeping sanitation wnl. Plate and frame vs canister in small winery.
- 1 Labor

Notice: Enable a chart or summary table to see your data.

11. On a scale of 1 to 5, with 1 being the most important and 5 being the least important, please rank the following winemaking technique challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Grape variety selection for different styles of wine	1		176	52
Yeast strains (i.e., influence of yeast and bacterial strains, including native strains on fermentation, sensory properties, etc.)	2		155	50
Phenolics (measurement and management - i.e., tannins, anthocyanins, color stability, wine maturation and stabilization)	3		154	50
Options for acid reduction	4		148	49
Post-harvest considerations (i.e., aging, barrel and oak choices, etc.)	5		131	52


 Lowest Rank Highest Rank







12. Additional winemaking technique challenges.


Count Response

- 1 I think Flaw Management should also be a category. I guess it could fit into post-harvest considerations, but the "i.e." does not really describe that very well.
- 1 Proper timing of treatments and analysis
- 1 Yeast strain to get best outcome.

Notice: Enable a chart or summary table to see your data.

13. On a scale of 1 to 6, with 1 being the most important and 6 being the least important, please rank the following regulatory challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Industry-wide quality standards	1		192	51
Clearly written rules/policies (i.e., food sanitation, use of temporary liquor permits, etc.)	2		192	52
Designation or differentiation between wineries using Ohio-grown sources and kits	3		188	50
Designation or differentiation between wineries using Ohio-grown grapes and those making wine from grapes/juice sourced from outside of Ohio	4		185	52
Zoning/enforcement (variation between counties for issues such as septic, sewer, health, etc.)	5		168	51
Implementation of check-off style program for winemakers to help fund additional extension/research	6		161	52


 Lowest Rank Highest Rank

14. Additional regulatory challenges.

Count Response

1	Awareness of existing regulations. Willing compliance with existing regulation.
1	I have no idea what the "Implementation of a check-off" questions refers to. We need more information.
1	It would be helpful for our resources to be consistent with their advice/information. We have been given totally different answers to the same question.
1	Problem with quality standards is who determines quality? And what is the definition of quality?

Notice: Enable a chart or summary table to see your data.

15. On a scale of 1 to 6, with 1 being the most important and 6 being the least important, please rank the following industry challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Grape/Vine quality	1		233	49
Best viticultural practices	2		204	46
Industry communication tools (i.e., OGEN, The Grape Exchange, web sites, etc.)	3		194	53
Regulation	4		143	48
Regional variation	5		142	49
Decline in vineyard acreage	6		134	45

Lowest Rank Highest Rank

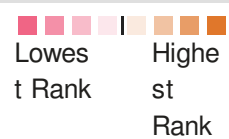
16. Additional industry challenges.

Count	Response
1	Costs of material
1	Improved varieties for cold hardiness and wine quality
1	Labor shortage
1	New regulations to purchase what is needed.
1	Not enough growers with vinifera. Can b tough to compare or seek advice from your peers.
1	Out of area grapes/wine coming in at very low (uncompetitive) prices and sold/advertized as 'Ohio Wine'. 'Come to xxx winery to taste Ohio wines'... none of their grapes are from Ohio.
1	right variety for right location
1	spray programs and keeping up with new chemicals. OSU extension is a fabulous resource but it is certainly a challenge to keep current!! This may be addressed later in this survey as well.

Notice: Enable a chart or summary table to see your data.

17. On a scale of 1 to 7, with 1 being the most important and 7 being the least important, please rank the following vineyard quality challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Improving fruit quality	1		268	50
Impact of cold protection	2		228	51
Fruit maturity management	3		218	51
Vinestock quality	4		202	49
New fruit quality production parameters/attributes in winegrapes to predict wine quality	5		196	49
New variety evaluation	6		193	53
Vineyard site identification	7		138	48










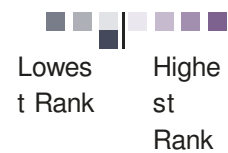
18. Additional vineyard quality challenges.

Count	Response
1	Best trellis system evaluationimprove trellising system and pruning practice evaluate these for vinifera
1	NA
1	Obviously bouncing back from the polar vortex and the May frost this year. Disease pressure has been high.
1	Parameters beyond sugar/acid/pH to help determine best 'quality' window. Example: Acid ratio, tannin 'quality', flavor/aroma/precursor development
1	wildlife protection/deterrance

Notice: Enable a chart or summary table to see your data.

19. On a scale of 1 to 7, with 1 being the most important and 7 being the least important, please rank the following vineyard best practices challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Plant pathology/disease	1		265	54
Weed control	2		222	51
Plant pests/insects	3		217	51
Vine nutrition and health (develop nutrient/water quality management for optimal vine health)	4		209	51
Crop load management	5		190	50
Herbicide drift	6		183	49
Training systems	7		150	49








20. Additional vineyard best practices challenges.


Count Response

1	Dicamba and ester 24-d volatility damage every year.
1	Grapevine nutrition/recommendation as it relates to fruit quality and hardiness has been lacking since the days of Garth Cahoon.
1	Have better/more responsive communication with pathologist.
1	NA
1	Providing growers with identification tools to understand deficiencies.
1	this was a tough one to answer. It's difficult to put an "order" to these challenges.

Notice: Enable a chart or summary table to see your data.

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

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Marestail	1		199	50
Thistle	2		170	50
Foxtail	3		152	52
Grass	4		130	51
Poison Ivy	5		114	48



 Lowest Rank | Highest Rank

22. Additional weed issues.

Count Response

1	All of the genetic resistance weeds from gmo grain crops raise non gmo weed control crops such as grapes Marestail giant ragweed pigweed that our herbicide resistant. See all of these in the vineyard which raises our cost to control.
1	Common Purslane Giant Ragweed
1	Garlic mustard
1	Herbicide resistance
1	I think techniques for applying weed control is an important thing.
1	NA
1	Other options for weed control outside of Roundup. Resistance occurs too quickly with Roundup, at least in my vineyard. Weeds are now laughing at me when I spray.
1	Queen Anne's Lace
1	Under-trellis cover crops management would be of interest.
1	Wild Vines that try to choke out the grapevine.
1	Wild onion control
1	vine type weeds, ie. morning glory

Notice: Enable a chart or summary table to see your data.

23. On a scale of 1 to 5, with 1 being the most important and 5 being the least important, please rank the following insect issues:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Japanese beetle	1		186	53
Multi-colored Asian lady beetle	2		163	52
Phylloxera	3		160	51
Spotted wing drisophila	4		146	50
Grape berry moth	5		123	49

Lowest Rank Highest Rank




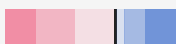
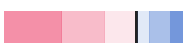
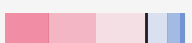
24. Additional insect issues.


Count Response

1	Grape cane gallmaker
1	Kind of unfair in ranking these. As a vineyard owner, all of these could render my harvest as not-saleable. They all are a one in my book.
1	NA
1	Spotted wing drisoplila may or may not be an issue. More detailed studies might be warranted.

Notice: Enable a chart or summary table to see your data.

25. On a scale of 1 to 6, with 1 being the most important and 6 being the least important, please rank the following disease issues:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Downy mildew	1		230	50
Powdery mildew	2		212	52
Black rot	3		205	51
Crown Gall	4		160	49
Anthracnose	5		137	51
Phomopsis	6		136	51


 Lowest Rank Highest Rank

26. Additional disease issues.

Count	Response
1	Again, I would ranks all of these as a one.
1	Botrytis Bunch Rot
1	I am a new site so all are important education for my future
1	NA
1	Sour rot

Notice: Enable a chart or summary table to see your data.

27. On a scale of 1 to 3, with 1 being the most important and 3 being the least important, please rank the following regulatory challenges:

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Industry-wide standards for vineyard quality	1		114	51
Implementation of check-off style program for grape growers to help fund additional extension and research	2		110	54
Zoning/enforcement (variation between counties)	3		93	52

Low Rank High Rank

28. Additional regulatory challenges.

Count Response

1	Again, I have no idea what the last item refers to.
1	Off target spray enforcement for drift/herbicides. Quick response team needed to analyze injured crops and legally back up grower when justified.
1	These should have equal importance
1	minimizing any regulatory impact on growers. If a potential grower sees a wall of regulation to comply with, he won't become a grower.
1	music????
1	na

Notice: Enable a chart or summary table to see your data.

29. On a scale of 1 to 3, with 1 being the most important and 3 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		159	70
Ohio winegrape pricing reports	2		148	65
Creation of sample purchasing agreement between grower and winery	3		98	66

Lowest Rank Highest Rank

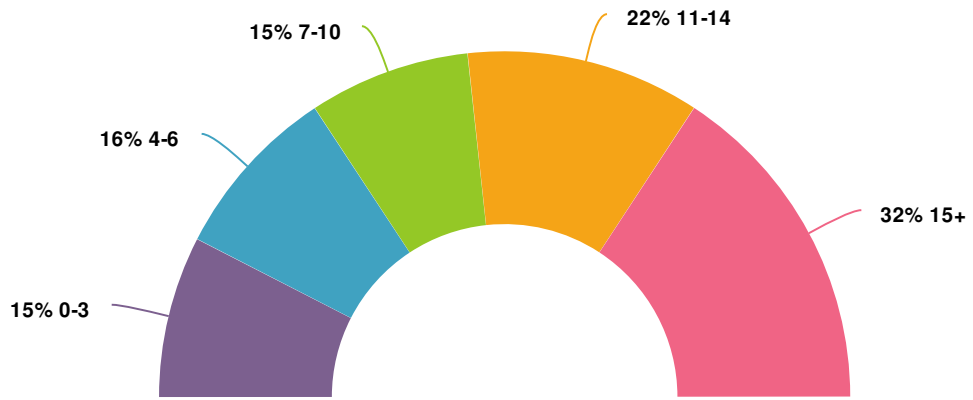
30. Additional grower/winery communication challenges.

Count Response

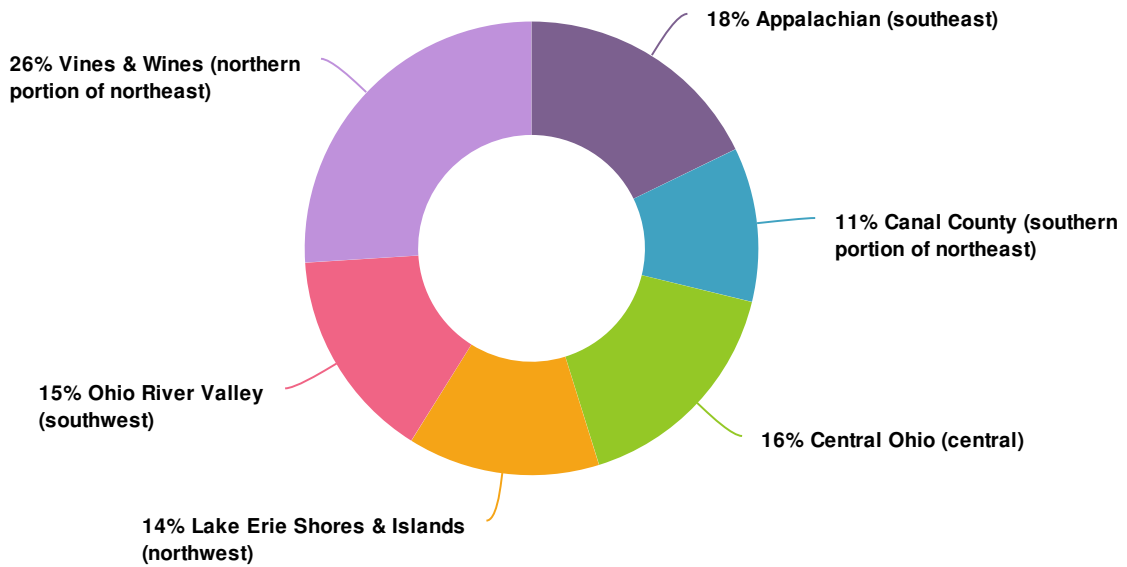
1	Local grapes have different (often better/sometimes lesser) characteristics/qualities/acid/flavors/pH, etc than many outside sourced grapes. Outreach to enhance knowledge/production/promotion of local wines from local grapes. We are NOT Napa of the east. We should embrace who/what we are.
1	NA
1	Those new to industry need some additional help at times.
1	we don't purchase grapes

Notice: Enable a chart or summary table to see your data.

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



32. Region:



33. Additional comments and/or suggestions:

Count Response

1 Grand River Valley AVA

1 My belief is that every wine is different depending on the producer even from the same fruit. Total control of the winery environment by the winemaker is paramount. Having anyone coming in and forcing any change in the winemaking environment is destructive of individual creativity and style of winemaking. There is no history of food safety issues in winemaking and sanitarians do not have a place in any winemaking consideration. If someone is operating another business out of a winery that is another matter that should be addressed in liquor codes, there are exceptions currently in Ohio administrative liquor code for a limited number of other products that have other regulatory requirements.

1 NA

1 Please please take note of hard cider growth ! The fruit can be grown with far less input (chem.+ labor), and is far more resilient. Follow michigan and washington state's example. The fruit has as broad expression of character equaling that of grapes ! Josh Klatt 917-365-9075

1 TTB only list ohio river vally appellation in cola.

1 Thanks for the hard work!

1 We are in West Central Ohio, Mercer County

1 We need to put more emphasis on wineries growing grapes and producing wine. Many new wineries do not grow grapes or make wine. Basically bars called wineries.

1 found the survey confusing. Is considering a concern important mean that more work needs to be done or it's ok yet important?

Notice: Enable a chart or summary table to see your data.