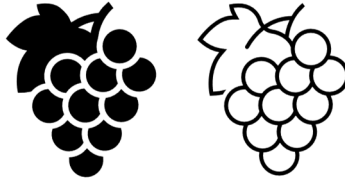


Size and Scope of the Ohio Grape Industry

Results of the 2021 Ohio Grape Grower Survey



OVERVIEW:

The Ohio Grape Industry is a significant and growing part of Ohio’s diverse agricultural sector. However, tracking the size, scope, and trends in the industry can be difficult. The USDA National Agricultural Statistics service conducted a periodic inventory of grape production in Ohio for many years but discontinued this practice in 2018. To fill this gap, the Ohio Grape Industries Committee (OGIC) commissioned researchers at the Ohio State University (OSU) to carry out a full census survey of growers who grew grapes in Ohio in 2021. This report summarizes findings from that survey and compares some results with the most recent NASS report that profiled Ohio grape plantings in 2017.

A comprehensive list of potential grape growers in Ohio was constructed in winter 2021 from state agency and university research and extension experts working in the industry. The research team implemented a combined mail/internet survey between February-April 2022 and was able to get useable responses from 148 farms (an 83% response rate). The survey focused on acres and production of grapes by variety. Below we summarize the findings. To protect the identity of respondents and the confidentiality of the information they provided, results are presented in aggregated tables.

HIGHLIGHTS

- The 2021 Ohio Grape Grower Survey was completed by 148 farms (83% response rate)
- These growers raised 1,222 acres of grapes, including 95 acres of newly planted vines. Growers reported harvesting over 3,260 tons of grapes in 2021.
- Ohio growers raised 112 varieties of grapes. Fourteen varieties comprised 71% of all acres. The most common varieties raised were Concord, Vidal Blanc, and Riesling.
- 36% of grape acres were planted to Vinifera varieties, 34% were in Hybrids, while 30% were planted to Native varieties.
- Roughly 80% of grape acres and production were used for wine in 2021.
- Twenty percent of growers raised more than 10 acres; these farms were responsible for 69% of total production.
- Grapes were raised in 55 Ohio counties in 2021. Ashtabula was the leading county, with 20% of grape farms, 42% of grape acreage, and 58% of total grape production

Citation: Jackson-Smith, Douglas and Kaustubh Kumar. August 2022. *Size and Scope of the Ohio Grape Industry: Results of the 2021 Ohio Grape Grower Survey*. Available at: <https://go.osu.edu/grapes>

DETAILED FINDINGS

Overall Size of the Industry

A total of 148 farms responded to the 2021 Ohio Grape Grower Survey (see Table 1). This represented 83% of the eligible operations on the integrated sampling frame (see technical appendix for details). Of these growers, 133 raised grapes for use in production of wine, while 32 raised grapes for juice or table uses. The total acres reported was 1,222 acres, which included 978 acres of wine grapes and 244 acres of juice or table grapes.

Compared to the numbers reported in the 2017 USDA annual survey of grape growers, the 2021 survey captured 67 fewer growers and 278 fewer total grape acres. The number of wine grape growers was only slightly lower and total wine grape acres increased by 28 acres in the current survey. However, there were significantly fewer producers who reported any juice/table grapes, and acres of juice/table grapes were much lower (244 in 2021 vs. 550 acres in 2017).

Given that the 2021 survey relied on a new constructed sample frame of potential grape growers (not the original USDA NASS master list), it is likely that the decline in juice/table grape grower numbers and acreage is partly due to coverage error on the 2021 sample frame. However, anecdotal information from producers and industry experts (and long-term trends based on Census of Agricultural data) suggest that the scale of commercial grape production for juice has declined significantly in recent years.

As a result of these methodological changes, the results of the 2021 Grape Grower Survey would appear to be most authoritative for tracking the scale, varieties, and trends in the production of grapes for use in the wine industry in Ohio.

TABLE 1: Changes in Farm Numbers and Acres between 2017 USDA Survey and 2021 Ohio Grape Grower Survey.

Type of Grape	2021 Survey		2017 USDA		Difference 2017-2021	
	Farms	Acres	Farms	Acres	Farms	Acres
By Use						
Wine	133	978	153	950	-20	28
Juice/Table	32	244	174	550	-142	-306
Ohio Total	148	1,222	215	1,500	-67	-278

Grape Vineyards by Farm Size

Most Ohio grape growers (80%) raise less than 10 acres of vines (Table 2). Among the respondents to the 2021 Ohio Grape Grower Survey, 40% (n=59) raised less than 3 acres, and a similar number raised between 3-10 acres. However, these smaller farms manage only about a third of all vineyard acres. By contrast, the 30 farms with more than 10 acres in grape vines were responsible for 69% of total acreage.

TABLE 2: Number of Ohio Farms Raising Grapes in 2021, by Size of Vineyard.

Acres of Grapes Raised in 2021	Farms	% of	
		Farms	Acres
Less than 3 acres	59	40%	90
3 to 9.99 acres	59	40%	292
10 or more acres	30	20%	840
Total	148	100%	1,222

Grape Acres by Bearing Status

The 2021 Survey asked producers to report acres separately by bearing vs. nonbearing vines. We also distinguished between newly planted vines and other nonbearing vines. Production data were only captured for bearing vines. Results are shown in Table 3. The results suggest that 83% of all grape acreage among respondents had bearing vines. The other 17% were nonbearing in 2021, a much larger share than found in the 2017 USDA report (in fact, nonbearing acreage was nearly double in 2021).

Of the 210 acres of nonbearing vines, roughly half (95 acres) were newly planted in 2021. This number reflects new investments being made by Ohio grape growers to expand or replant vineyards.

Some of the increase in reported nonbearing acreage may reflect an over-reporting of nonbearing acres by growers (compared to 2017). Based on follow-up phone calls with a sample of the growers who filled out the survey, it was clear that some acreage reported as nonbearing included vines that bore fruit, but that were not able to be harvested for one reason or another.

TABLE 3: Farm Acres by Bearing and Nonbearing Status.

	2021 Survey		USDA Report 2017	
	Planted Acres	Percent of Total Acres	Acres	Difference Acres
Bearing Vines	1,012	83%	1,400	-388
Nonbearing Vines	210	17%	100	110
<i>Newly Planted NB</i>	95	8%	<i>n.a.</i>	
<i>Other Nonbearing</i>	115	9%	<i>n.a.</i>	

Newly Planted Varieties

Producers reported new plantings of 44 distinct varieties in 2021. The varieties with at least 1.5 acres of new plantings (74% of all newly planted grape acres) are listed in Table 4. The most commonly planted new varieties were Muscat Valvin, Chambourcin, Albarino, Vidal Blanc and Petite Pearl.

TABLE 4: Acres of Newly Planted Varieties in 2021, by Variety

Variety¹	Acres Planted 2021
Muscat Valvin	8.0
Chambourcin	5.5
Albarino	5.0
Vidal Blanc	4.8
Petite Pearl	4.3
Cabernet Franc	3.8
Cayuga White	3.0
Semillon	3.0
Itasca	2.9
Frontenac	2.6
Frontenac Blanc	2.5
Pinot Blanc	2.5
Catawba	2.2
La Crescent	2.1
Noiret	2.1
Norton (Cynthiana)	2.0
Chardonel	1.8
Pinot Noir	1.7
Chardonnay	1.6
Foch (Marechal)	1.5
Cabernet Dorsa	1.5
Marquette	1.5
Aromella	1.5
Riesling	1.5
Traminette	1.5
All other varieties	24.2

Note: ¹ = Only lists varieties with 1.5 or more acres.

Types of Grapes Raised in Ohio

More detailed information about farm numbers, acres, and production of grapes by variety category, color and use are shown in Table 5. Results suggest that roughly a third of acres and production were devoted to Native grape varieties. Vinifera grapes comprised just under 40 percent of acres and production, while Hybrid varieties were represented on 34 percent of acres and accounted for 29 percent of reported production.

Compared to estimates in the 2017 USDA NASS report, acres of Native varieties raised in Ohio have declined significantly, while acres of Hybrid and Vinifera grape varieties increased slightly.

TABLE 5: Farm Numbers, Acres, and Production by Type of Grape.

Type of Grape	2021 Survey					2017 USDA Acres	Difference 2017-2021
	Farms	Acres Raised in 2021	Percent of Total Acres	Estimated Production 2021 (tons)	Percent of Total Production		
Category							
Hybrid	122	419	34%	946	29%	380	39
Native	75	367	30%	1,153	35%	700	-333
Vinifera	53	435	36%	1,163	36%	420	15
Use							
Wine	134	978	80%	2,427	74%	950	28
Juice	18	197	16%	659	20%	<i>n.a.</i>	<i>n.a.</i>
Table	16	47	4%	176	5%	<i>n.a.</i>	<i>n.a.</i>
<i>(combined Juice/Table)</i>	32	244	20%	835	26%	550	-306
Color							
Red	141	699	57%	1,858	57%	995	-296
White	128	523	43%	1,404	43%	505	18
Ohio Total	148	1,222	100%	3,261	100%	1,500	-278

Production of wine grapes dominated responses to the 2021 Ohio Grape Grower Survey (Table 5). Wine grapes were raised by 134 farms and comprised 80% of vineyard acres (978 acres) and 74% of production (a total of 2,427 tons). A total of 32 farms reported any juice or table grapes; these respondents only reported 197 acres of juice grapes and 47 acres of table grapes.

Roughly 57% of grape varieties raised by Ohio growers in 2021 were red varieties, a similar percentage to that reported in the 2017 USDA survey.

Grape Varieties by Color and Category

The acres and production of red versus white varieties by type of grape reported in the 2021 Ohio Grape Grower Survey are summarized in Table 6. Red grapes were the most common among Native varieties, while white grapes were more commonly raised for Hybrid and Vinifera varieties.

TABLE 6: Farm Numbers, Acres, and Production by Color and Category of Grape.

	Acres Raised in 2021			Production (tons) in 2021		
	Red	White	Total	Red	White	Total
Hybrid	184	235	419	383	562	946
Native	314	54	367	974	179	1,153
Vinifera	202	234	435	500	663	1,163
Ohio Total	699	523	1,222	1,858	1,404	3,261

Overall, farmers reported raising 112 unique grape varieties in Ohio in 2021. This includes 56 red varieties and 54 white grape varieties. Fourteen varieties comprised 71% of all acreage (see Table 7). The most commonly planted red grape varieties in Ohio in 2021 were Concord (37% of red total), Cabernet Franc, Cabernet Sauvignon, Pinot Noir, Catawba, Chambourcin, Frontenac and Marquette. The most commonly planted white varieties were Vidal Blanc and Riesling (each representing 15-16% of whites), Chardonnay, Pinot Gris, Niagara, and Traminette.

“Other” varieties include 22 red varieties reported by farmers and 26 white varieties that each appeared on less than 2 total acres in Ohio in 2021. There were also a small number of acres reported on the survey for which varieties were not identified. Named varieties capture 99% of reported red acres and 97% of reported white varieties.

Table 6 also lists the acres of each grape variety that were reported in the 2017 USDA NASS survey. A comparison of 2017 and 2021 acreages suggests that production of Concord grapes declined dramatically over the 5-year period. Importantly, differences between 2017 and 2021 may reflect real shifts in grapes raised each year, but are also influenced by the methodological differences and distinct sample frames discussed above. As a result, estimates of changes in variety acreages should be used with caution.

TABLE 7: Reported Acres by Color and Variety, 2021, and Comparison to 2017 USDA Report.

	2021			Diff. Acres 2017- 2021		2021			Diff. Acres 2017- 2021
	Red Variety Acres	Est. Tons	2017 Acres (USDA)			White Variety Acres	Est. Tons	2017 Acres (USDA)	
Arandell	2	3	NR	--	Albarino	5	0	NR	--
Baco Noir	3	4	NR	--	Aromella	7	9	7	0
Cabernet Dorsa	2	0	NR	--	Brianna	3	5	4	-2
Cabernet Franc	56	152	49	7	Cayuga White	12	29	9	3
Cabernet Sauvignon	52	136	40	12	Chardonel	16	30	11	5
Catawba	39	78	45	-6	Chardonnay	46	154	58	-12
Chambourcin	38	130	36	2	Diamond	2	3	NR	--
Chancellor	3	2	6	-3	Elvira	2	0	NR	--
Concord	258	863	575	-317	Frontenac Blanc	11	6	NR	--
Corot Noir	4	6	3	1	Frontenac Gris	7	16	6	1
DeChaunac	11	45	23	-12	Gewurtztraminer	18	35	10	8
Delaware	6	20	17	-11	Gruener Veltliner	7	19	NR	--
Dolcetto	3	5	NR	--	Itasca	9	4	NR	--
Dornfelder	5	11	3	2	La Crescent	13	15	12	1
Foch (Marechal)	11	20	13	-3	Muller-Thurgau	2	2	NR	--
Frontenac	29	53	21	8	Muscat Ottonel	2	3	NR	--
Ives	2	2	NR	--	Muscat Valvin	9	1	NR	--
Landot Noir	2	3	NR	--	Niagara	53	178	55	-2
Lemberger	4	11	NR	--	Petit Manseng	3	9	NR	--
Leon Millot	4	4	NR	--	Pinot Blanc	3	0	NR	--
Malbec	7	20	5	2	Pinot Gris (Grigio)	45	126	45	-1
Marquette	25	31	16	9	Prairie Star	2	4	2	0
Merlot	13	31	16	-3	Riesling	77	272	105	-28
Noiret	18	33	6	12	Sauvignon Blanc	9	27	10	-1
Norton (Cynthiana)	7	7	8	-1	Semillon	5	8	3	2
Petit Verdot	4	8	NR	--	Seyval Blanc	12	33	14	-2
Petite Pearl	11	5	3	8	Traminette	25	50	25	0
Pinot Noir	43	110	41	2	Vidal Blanc	81	307	92	-11
Pinotage	2	5	NR	--	Vignoles	8	13	4	4
Regent	7	13	6	1	Vincent	4	22	NR	--
Saperavi	2	0	NR	--					
St. Croix	3	7	2	1					
Steuben	2	6	NR	--					
Syrah	4	11	NR	--					
Other Red	22	24	61	-39	Other White	28	25	33	-5
Total	699	1858	995	-296	Total	523	1403	505	18

Notes: Only includes named varieties with at least 2 acres; all other varieties included in other row. NR = variety not reported in 2017 USDA Survey. Production totals are actual estimated harvested tons on bearing acres, while acreage estimates include both bearing harvested, bearing nonharvested, and nonbearing acres.

Grape Growers by County

Respondents to the 2021 Ohio Grape Grower Survey reported production of grapes in 55 different Ohio Counties. The number of farms, acres, and production levels by county are shown in Table 8. This table only lists counties with at least 3 farms reporting, but these counties represent 68 percent of farms, 82 percent of acres, and 91 percent of total state grape production.

The county with the most farms, acres, and production in Ohio is Ashtabula, which is home to 20 percent of grape growers, 42 percent of grape acreage, and 58 percent of reported production. Other major counties include Lake, Lorain, Erie, and Holmes. It is noteworthy that the top 4 grape growing counties are all proximate to Lake Erie, and benefit from the favorable climate conditions associated with being in this geographic location. Nevertheless, it is also clear that grapes are produced in all regions of Ohio.

Table 8: Number of Farms, Acreage, and Grape Production by County.

County	2021 Survey				2017 USDA			Difference 2017-2021	
	Farms	Acres	Production (tons)	Avg Farm Size	Farms	Acres	Avg Farm Size	Farms	Acres
Ashland	4	13	15	3.1	3	8	2.7	+1	+5
Ashtabula	29	518	1886	17.9	38	700	18.4	(-9)	(-182)
Athens	3	9	20	2.8	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Brown	3	16	38	5.5	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Coshocton	3	21	52	6.9	6	28	4.7	(-3)	(-7)
Darke	3	11	22	3.5	4	10	2.5	(-1)	+1
Erie	4	123	270	30.7	5	14	2.8	(-1)	+109
Fairfield	5	14	29	2.8	5	13	2.6	+0	+1
Geauga	4	9	17	2.2	5	17	3.4	(-1)	(-8)
Harrison	3	8	6	2.5	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Holmes	4	33	122	8.3	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Lake	8	80	286	10.0	12	180	15.0	(-4)	(-100)
Licking	3	6	6	1.8	3	4	1.3	+0	+2
Lorain	4	46	87	11.4	9	76	8.4	(-5)	(-30)
Medina	4	32	17	8.0	4	13	3.3	+0	+19
Muskingum	3	7	6	2.2	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Sandusky	3	15	15	5.1	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Stark	3	9	26	2.8	4	19	4.8	(-1)	(-11)
Summit	3	15	35	5.1	3	7	2.3	+0	+8
Wayne	5	19	22	3.7	10	24	2.4	(-5)	(-5)
Others	50	222	283	4.4	104	387	3.7	(-54)	(-165)
Total	148	1,222	3,261	8.3	215	1,500	7.0	(-67)	(-278)

Notes: Only includes counties with at least 3 producers. n.a. = not reported in 2017 USDA report. Additionally, three farms operated vineyards in 2 different counties, but are only counted once in the total. As a result, the total farm numbers may not equal the sum of the county totals.