# Missouri Specialty Crop Survey 

Summary of Findings

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## Introduction

The Missouri Specialty Crop Survey, which was funded by the Missouri Department of Agriculture's Specialty Crop Block Grant Program, was designed to better understand the farming operations and impact Missouri specialty crop producers have in Missouri. The survey asks farm producers growing specialty crops to provide information on their farm, their specialty crop sales, their distribution outlets, and the types of specialty crops they grow.

This report provides summary results from the survey. The first section focuses on overall findings across all types of specialty crop operations and includes data on farm characteristics, gross sales, and distribution outlets. This is followed by sections summarizing data for five main categories of specialty crops: 1) Fruits and berries, 2) Tree nuts, 3) Vegetables, potatoes, and melons, 4) Nursery and flowering plants, and 5) Horticultural goods.

## Methods

In the summer of 2017, a team comprised of agricultural economists from MU Extension's Commercial Ag Program and researchers from the Assessment Resource Center (ARC) collaborated to develop the Missouri Specialty Crop Survey. After the initial drafting of the survey, it was sent out for review to MU Extension specialists across the state and revisions were made based on their suggestions. ARC programmed the electronic version of the survey into Qualtrics, a web-based survey platform.

The survey was distributed in late June 2017. MU Extension mailed the paper survey to a contact list of 2,543 specialty crop producers and included a link to the survey in an email that was sent to 1,086 separate addresses. There was some duplication across these two lists, with 835 contacts sent both a paper and an electronic survey. In all, the survey was sent to 2,794 unique contacts. The survey closed on Sept 1, 2017, with a response rate of $18.6 \%$ (Table 1).

Table 1. Survey Distribution and Response

| Survey Format | Sent | Returned | Response <br> Rate |
| :--- | ---: | ---: | ---: |
| Paper | 2,543 | 304 | $12.0 \%$ |
| Electronic | 1,086 | 215 | $19.8 \%$ |
| Total contacts | 2,794 | 519 | $18.6 \%$ |

Note: Total contacts discounts 835 duplicate contacts across lists.
The data were downloaded/coded into IBM SPSS Statistics for analysis. Seventeen of the 519 contacts who returned a survey were no longer producing specialty crops and 33 respondents were not selling the crops that they were growing. These 50 respondents were not included in the findings of this report. The total number of respondents used for analysis was 469.

## Overall Results

## Counties Represented

As shown in Figure 1, the survey elicited responses from specialty crop producers across the state, with producers represented from 106 separate counties. When asked where their farm is primarily located, the most common counties (selected by at least 10 specialty crop producers) included: Boone, Jackson, Franklin, Greene, St. Charles, Vernon, Moniteau, Morgan, Platte, Callaway, Jasper, Lafayette, and Lawrence.

Figure 1. Primary Farm County


Note: This map includes all respondents who provided information about the specialty crops they had grown in 2016. Some of these respondents were excluded from further analysis because they were not selling their specialty crops at the current time.

## Years in Specialty Crop Production

Specialty crop producers were asked to indicate how many years they had been operating farms growing specialty crops. Most producers completing the survey had been farming specialty crops for at least five years; however, beginning farmers were also represented, with over $10 \%$ of respondents having grown specialty crops for less than three years (Table 2).

Table 2. Years Growing Specialty Crops

| Years Growing | Number | Percent |
| :--- | ---: | ---: |
| 2017 is my first year | 18 | $3.9 \%$ |
| $1-2$ years | 33 | $7.1 \%$ |
| $3-4$ years | 74 | $15.9 \%$ |
| $5-9$ years | 131 | $28.1 \%$ |
| 10 or more years | 210 | $45.1 \%$ |
| Total | 466 | $100.0 \%$ |

Not reported: 3

## USDA Census of Agriculture Survey Participation

Every five years, the USDA Census of Agriculture Survey collects county-level agricultural data on all commodities produced in the US, including specialty crops. The survey was last conducted in 2013, asking producers to report on their 2012 farming operation. Part of the motivation for the Missouri Specialty Crop Survey was a concern that specialty crop producers might be underrepresented by the agricultural census because they tend to operate on a smaller scale in less traditional markets. For this reason, the Missouri survey asked respondents if they received the 2012 Census of Agriculture Survey and if, yes, whether or not they had completed it.

Among the producers who had been farming specialty crops at least 5 years, over half either reported that they had not received the USDA Census of Agriculture survey or were unsure if they had. Although the majority of respondents who remember receiving the survey reported that they had completed it, just under one-third reported that they had both received and completed the survey (Figure 2).

Figure 2. Participation in 2012 USDA Missouri Census of Agriculture Survey

$N=323$

## Area in Specialty Crop Production

Specialty crop producers were asked to estimate their total area in specialty crop production over the past three years. They were provided a table that included space to indicate total acres in the open and total square feet under glass or other protection. Producers were also given the opportunity to describe other area in specialty crops that were not measured in acres or square feet. The "other" category did not produce enough meaningful data to report.

In all, 416 respondents completed the table asking about area in specialty crop production. Of these respondents, 388 provided the number of acres of specialty crops they had in the open and 180 respondents provided the number of square feet under protection for at least one of the three years asked about on the survey. Thirty-six percent of the 416 respondents reported both acres in the open and square feet under protection.

The data collected on acres/square feet farmed were not normally distributed but were positively skewed due to a few respondents reporting very large areas in production. For this reason, the mean area is inflated and not a good representation of the "average" specialty crop producer. The median area is a more meaningful statistic in this case.

As shown in the tables below, the median acreage in specialty crops was relatively small (3.0 acres) across the three years asked about on the survey. The total acreage across all respondents exceeded 10,000 acres in 2017 (Table 3). The same pattern was true for square feet under protection, with the median being from 3,000 to 4,000 square feet (less than one-tenth of an acre) across the three years. Respondents reported almost 1.5 million square feet under glass or other protection, which translates to roughly 34 acres (Table 4).

Table 3. Acres of Specialty Crops in the Open (2015-2017)

| Year | Min | Max | Mean | Median | Total <br> Acreage | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2015 | .01 | 1025 | 28.0 | 3.0 | 9,955 | 355 |
| 2016 | .01 | 1000 | 24.5 | 3.0 | 8,470 | 345 |
| 2017 | .01 | 3200 | 31.0 | 3.0 | 10,989 | 354 |

Table 4. Square Feet of Specialty Crops under Protection (2015-2017)

| Year | Min | Max | Mean | Median | Total <br> Sq. Ft | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2015 | 13 | 152,460 | 8,838 | 3,000 | $1,334,574$ | 151 |
| 2016 | 13 | 152,460 | 9,604 | 4,000 | $1,382,966$ | 144 |
| 2017 | 4 | 152,460 | 9,183 | 3,264 | $1,478,391$ | 161 |

## Specialty Crop Sales

Respondents were asked to consider the last three complete years (2014-2016) and select from a list of sales ranges the one that best estimates their average yearly gross sales. Over $80 \%$ of respondents selected one of the three lowest sales ranges, with the most commonly selected range being \$1,000$\$ 9,999$. Ten producers had gross sales of at least one million dollars (Table 5).

Table 5. Specialty Crop Annual Gross Sales

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 100 | $23.0 \%$ |
| $\$ 1,000-\$ 9,999$ | 147 | $33.9 \%$ |
| $\$ 10,000-\$ 49,999$ | 111 | $25.6 \%$ |
| $\$ 50,000-\$ 74,999$ | 16 | $3.7 \%$ |
| $\$ 75,000-\$ 99,999$ | 17 | $3.9 \%$ |
| $\$ 100,000-\$ 249,999$ | 17 | $3.9 \%$ |
| $\$ 250,000-\$ 499,999$ | 10 | $2.3 \%$ |
| $\$ 500,000-\$ 999,999$ | 6 | $1.4 \%$ |
| $\$ 1,000,000$ or more | 10 | $2.3 \%$ |
| Total | 434 | $100.0 \%$ |

Not reported: 35
As illustrated in Figure 3, the data on gross sales were positively skewed, similar to the data on area in production.

Figure 3. Specialty Crop Annual Gross Sales


## Distribution Outlets for Specialty Crops

The survey asked respondents to indicate where they sold their products by providing percentage of sales for 10 separate locations, including an "other" category. Half of all respondents selected just one distribution outlet (Figure 4).

Figure 4. Number of Distribution Outlets


The most commonly selected distribution outlet was sales on-farm or a farm stand, followed by farmers markets, and other (Figure 5). The category of "other" included a wide variety of distribution sites.
Among the most commonly reported were wineries, nurseries, festivals, social networks, wholesale, and face-to-face.

Figure 5. Use of Distribution Outlets


## Fruits and Berries

Among the 469 specialty crop producers who completed the survey, 136 respondents (37\%) reported growing fruits and/or berries in 2016. Blackberries were the most commonly grown fruit/berry, followed by apples, grapes, and blueberries (Figure 6).

Figure 6. Fruit and Berry Production (2016)


Specialty crop producers were asked to provide acreage for crops that they grew in 2016 that were at least 0.1 acres. Fruit and berry producers reported a total of 898 acres of peaches, the largest combined crop. It should be noted that a large share of this acreage is represented by one large peach farm (750 acres). The median acreage across all fruits and berries ranges from 0.2 to 3.5 acres (Table 6).

Table 6. Fruit and Berry Acreage (2016)

| Fruit/Berry | Min | Max | Mean | Median | Total <br> Acreage | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Blueberries | 0.1 | 100 | 5.0 | 1.0 | 134.3 | 27 |
| Grapes | 0.1 | 12 | 3.7 | 3.5 | 107.0 | 26 |
| Blackberries | 0.1 | 4 | 0.7 | 0.3 | 18.1 | 25 |
| Apples | 0.2 | 435 | 24.2 | 3.0 | 509.9 | 21 |
| Elderberries | 0.1 | 32 | 5.1 | 2.0 | 99.5 | 18 |
| Strawberries | 0.1 | 5 | 0.8 | 0.5 | 11.4 | 14 |
| Peaches | 0.1 | 750 | 69.1 | 3.0 | 898.3 | 13 |
| Pears | 0.2 | 1.5 | 0.7 | 0.5 | 4.0 | 6 |
| Raspberries | 0.1 | .5 | 0.3 | 0.3 | 1.6 | 6 |
| Plums and Prunes | 0.1 | 0.3 | 0.2 | 0.2 | 0.4 | 2 |
| Apricots | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1 |

## Sales and Distribution for Primary Fruit and Berry Producers

The remainder of this section focuses on 87 producers with at least $50 \%$ of their sales coming from fruits and berries. Seventy percent of these growers earned $100 \%$ of their specialty crop income from fruit and berry sales. As shown in Table 7, the most commonly reported sales range for fruit and berry growers was $\$ 1,000-\$ 9,999$. Six producers with at least $50 \%$ of their sales in fruits and berries had annual sales of at least $\$ 100,000$.

Table 7. Annual Gross Sales: Fruit and Berries (At Least $\mathbf{5 0 \%}$ of Sales)

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 21 | $24.7 \%$ |
| $\$ 1,000-\$ 9,999$ | 36 | $42.4 \%$ |
| $\$ 10,000-\$ 49,999$ | 22 | $25.9 \%$ |
| $\$ 50,000-\$ 74,999$ | 0 | $0.0 \%$ |
| $\$ 75,000-\$ 99,999$ | 0 | $0.0 \%$ |
| $\$ 100,000-\$ 249,999$ | 3 | $3.5 \%$ |
| $\$ 250,000-\$ 499,999$ | 1 | $1.2 \%$ |
| $\$ 500,000-\$ 999,999$ | 1 | $1.2 \%$ |
| $\$ 1,000,000$ or more | 1 | $1.2 \%$ |
| Total | 85 | $100.0 \%$ |

Not reported: 2. Note: Annual gross sales was reported for all specialty crops, not exclusively fruits and berries.

Producers with at least $50 \%$ of their sales in fruits and berries were most likely to sell their specialty crops on-farm or at a farm stand. The significance of grape production is shown in the fact that wineries/wine making was the third most commonly reported distribution outlet (Figure 7).

Figure 7. Distribution Outlets: Fruit and Berries (At Least 50\% of Sales)


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## Tree Nuts

Among the 469 specialty crop producers who completed the survey, 33 respondents (7\%) reported growing tree nuts in 2016. Pecans were the most commonly grown tree nut (Figure 8).

Figure 8. Tree Nut Production (2016)

*Heartnuts were written in by 2 respondents in the "other" category.

Specialty crop producers were asked to provide acreage for crops that they grew in 2016 that were at least 0.1 acres. Tree nut producers reported a total of 752 acres of pecans, the largest combined crop. It should be noted that a large share of this acreage is represented by one large pecan grove ( 534 acres). No acreage was reported for hazelnuts or heartnuts. The median acreage across all tree nuts ranges from 4 to 10 acres (Table 8).

Table 8. Tree Nut Acreage (2016)

| Tree Nut | Min | Max | Mean | Median | Total <br> Acreage | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pecans | 1 | 534 | 107.4 | 10 | 752.0 | 7 |
| Chestnuts | 1 | 17 | 8.3 | 4 | 41.5 | 5 |
| Walnuts | 5 | 5 | 5 | 5 | 5 | 1 |

## Sales and Distribution for Primary Tree Nut Producers

The remainder of this section focuses on 11 producers with at least $50 \%$ of their sales coming from tree nuts. Forty-five percent of these growers earned $100 \%$ of their specialty crop income from tree nut sales. As shown in Table 9, the most commonly reported sales range for tree nut growers was $\$ 1,000-$ $\$ 9,999$. Two producers with at least $50 \%$ of their sales in tree nuts had annual sales of $\$ 250,000$ \$499,999.

Table 9. Annual Gross Sales: Tree Nuts (At Least 50\% of Sales)

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 2 | $18.2 \%$ |
| $\$ 1,000-\$ 9,999$ | 4 | $36.4 \%$ |
| $\$ 10,000-\$ 49,999$ | 3 | $27.3 \%$ |
| $\$ 50,000-\$ 74,999$ | 0 | $0.0 \%$ |
| $\$ 75,000-\$ 99,999$ | 0 | $0.0 \%$ |
| $\$ 100,000-\$ 249,999$ | 0 | $0.0 \%$ |
| $\$ 250,000-\$ 499,999$ | 2 | $18.2 \%$ |
| $\$ 500,000-\$ 999,999$ | 0 | $0.0 \%$ |
| $\$ 1,000,000$ or more | 0 | $0.0 \%$ |
| Total | 11 | $100.0 \%$ |

Note: Annual gross sales was reported for all specialty crops, not exclusively tree nuts.

Producers with at least $50 \%$ of their sales in tree nuts most commonly select "other" as a distribution outlet. The six producers selecting "other" listed the following outlets: chestnut roasts; growers group; my rental office/bakeries; negotiated contract sales; wholesale to nursery; wholesale/word of mouth (Figure 9).

Figure 9. Distribution Outlets: Tree Nuts (At Least 50\% of Sales)


## Vegetables, potatoes, and melons

Among the 469 specialty crop producers who completed the survey, 198 respondents (42\%) reported growing vegetables, potatoes, and/or melons in 2016. Tomatoes were the most commonly grown vegetable, followed by peppers, cucumbers/pickles, and onion (Figure 10).

Figure 10. Vegetable, Potato, and Melon Production (2016)


Other includes: Edible flowers, Gourds (4), Kohlrabi (2), Brussels sprouts, Microgreens (3), Popcorn, and Rhubarb (2).

Specialty crop producers were asked to provide acreage for crops that they grew in 2016 that were at least 0.1 acres. Vegetable, potato, and melon producers reported a total of 185.8 acres of watermelon, the largest combined crop. It should be noted that a large share of this acreage is represented by one large watermelon farm (145 acres). The median acreage across all vegetable, potato, and melon crops ranges from 0.2 to 2.3 acres, with the exception of cabbage (median=25.1). Only two farms reported at least 0.1 acres of cabbage, one of which reported 50 acres. (Table 10).

Table 10. Vegetable, Potato, and Melon Acreage (2016)

| Vegetable, potato, or <br> melon | Min | Max | Mean | Median | Total <br> Acreage | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pumpkins | 0.1 | 30.0 | 3.7 | 2.3 | 122.6 | 33 |
| Tomato | 0.1 | 7.0 | 0.8 | 0.5 | 23.6 | 30 |
| Cantaloupe \& musk melon | 0.2 | 7.0 | 1.9 | 1.0 | 36.5 | 19 |
| Watermelon | 0.2 | 145.0 | 9.8 | 1.0 | 185.8 | 19 |
| Sweet corn | 0.1 | 25.0 | 4.4 | 1.5 | 74.6 | 17 |
| Squash, winter | 0.1 | 15.0 | 2.3 | 1.8 | 36.2 | 16 |
| Cucumbers \& pickles | 0.1 | 2.5 | 0.7 | 0.5 | 7.9 | 11 |
| Onion | 0.1 | 1.0 | 0.4 | 0.3 | 3.8 | 9 |
| Squash, summer | 0.3 | 8.0 | 1.6 | 1.0 | 14.1 | 9 |
| Peppers | 0.1 | 4.0 | 0.7 | 0.2 | 5.9 | 8 |
| Sweet potato | 0.1 | 2.0 | 0.7 | 0.5 | 5.5 | 8 |
| Greens | 0.1 | 9.0 | 1.6 | 0.5 | 11.5 | 7 |
| Potatoes | 0.1 | 0.8 | 0.4 | 0.2 | 2.4 | 7 |
| Asparagus | 0.1 | 1.0 | 0.5 | 0.4 | 3.1 | 6 |
| Beans, snap or green | 0.1 | 10.0 | 2.1 | 0.4 | 12.6 | 6 |
| Turnip | 0.2 | 5.0 | 1.6 | 1.0 | 9.7 | 6 |
| Garlic | 0.2 | 0.6 | 0.3 | 0.2 | 1.3 | 4 |
| Okra | 0.1 | 0.3 | 0.1 | 0.1 | 0.6 | 4 |
| Carrots | 0.1 | 0.5 | 0.3 | 0.3 | 0.9 | 3 |
| Eggplant | 0.2 | 3.0 | 1.1 | 0.2 | 3.4 | 3 |
| Beets | 0.1 | 2.0 | 1.1 | 1.1 | 2.1 | 2 |
| Broccoli | 0.4 | 1.5 | 1.0 | 1.0 | 1.9 | 2 |
| Cabbage | 0.2 | 50.0 | 25.1 | 25.1 | 50.2 | 2 |
| Cauliflower | 0.4 | 1.5 | 1.0 | 1.0 | 1.9 | 2 |
|  |  |  |  |  |  |  |

## Sales and Distribution for Primary Vegetable, Potato, and Melon Producers

The remainder of this section focuses on 119 producers with at least $50 \%$ of their sales coming from vegetables, potatoes, and melons. Forty-two percent of these growers earned $100 \%$ of their specialty crop income from vegetable, potato, or melon sales. As shown in Table 2, the two most commonly reported sales ranges for vegetable, potato, and melon growers were $\$ 1,000-\$ 9,999$ and $\$ 10,000-$ $\$ 49,999$, with $70 \%$ of growers falling into one of these two ranges. Seven producers with at least $50 \%$ of their sales in vegetables, potatoes, and melons had annual sales of at least $\$ 100,000$ (Table 11).

Table 11. Annual Gross Sales: Vegetables, Potatoes, and Melons (At Least 50\% of Sales)

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 9 | $7.9 \%$ |
| $\$ 1,000-\$ 9,999$ | 40 | $35.1 \%$ |
| $\$ 10,000-\$ 49,999$ | 40 | $35.1 \%$ |
| $\$ 50,000-\$ 74,999$ | 10 | $8.8 \%$ |
| $\$ 75,000-\$ 99,999$ | 8 | $7.0 \%$ |
| $\$ 100,000-\$ 249,999$ | 4 | $3.5 \%$ |
| $\$ 250,000-\$ 499,999$ | 1 | $0.9 \%$ |
| $\$ 500,000-\$ 999,999$ | 1 | $0.9 \%$ |
| $\$ 1,000,000$ or more | 1 | $0.9 \%$ |
| Total | 114 | $100.0 \%$ |

Not reported: 5. Note: Annual gross sales was reported for all specialty crops, not exclusively fruits and berries.

Producers with at least $50 \%$ of their sales in vegetables, potatoes, and melons were most likely to sell their specialty crops at farmers markets (Figure 11).

Figure 11. Distribution Outlets: Vegetables, Potatoes, and Melons (At Least 50\% of Sales)


## Nursery and Flowering Plants

The nursery and flowering plants category is comprised of three separate subgroups included on the survey: floriculture and bedding crops, nursery stock crops, and cut Christmas trees. Among the 469 specialty crop producers who completed the survey, 126 respondents (27\%) reported growing nursery and flowering plants in 2016 . Out of concern for survey length, growers were not asked about specific plant varieties; however, we do know that the most commonly grown subgroup in the nursery and flowering plant category was floriculture and bedding crops (Figure 12).

Figure 12. Nursery and Flowering Plant Subgroups


For each of the three subgroups of nursery and flowering crops, respondents were asked to provide both the number of acres in the open and number of square feet under glass or protection. Nursery stock crops represented the largest total combined acreage within this category; however, the cut Christmas tree growers had a higher median acreage (Tables 12).

Table 12. Nursery and Flowering Plant Acreage (2016)

| Nursery and Flowering <br> Plants | Min | Max | Mean | Median | Total <br> Acreage | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Floriculture and Bedding <br> Crops | 0.04 | 10 | 1.8 | 0.4 | 39.8 | 22 |
| Nursery Stock Crops | 0.3 | 85 | 12.0 | 1.7 | 263.9 | 22 |
| Cut Christmas Trees | 3.0 | 100 | 23.6 | 15.0 | 212.0 | 9 |

Floriculture and bedding crop growers more commonly reported their growing area in square feet, with 298,827 combined square feet (approximately 6.7 acres) reported across all growers (Tables 13).

Table 13. Nursery and Flowering Plant Square Footage (2016)

| Nursery and Flowering <br> Plants | Min | Max | Mean | Median | Total <br> Sq. Ft. | Number <br> reporting |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: |
| Floriculture and Bedding <br> Crops | 50 | 40,000 | 6,587 | 4,250 | 289,827 | 44 |
| Nursery Stock Crops | 120 | 25,000 | 3,514 | 1,050 | 70,284 | 20 |

## Sales and Distribution for Primary Nursery and Flowering Plant Producers

The remainder of this section focuses on 69 producers with at least $50 \%$ of their sales coming from nursery and flowering plant sales. Seventy-three percent of these growers earned $100 \%$ of their specialty crop income from nursery and flowering plant sales. As shown in Table 14, the two most commonly reported sales ranges for nursery and flowering plant growers were \$1,000-\$9,999 and $\$ 10,000-\$ 49,999$, with $50 \%$ of growers falling into one of these two ranges. Seventeen producers with at least $50 \%$ of their sales in nursery and flowering plants had annual sales of at least $\$ 100,000$ (Table 2).

Table 14. Annual Gross Sales: Nursery and Flowering Plants (At Least 50\% of Sales)

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 9 | $13.2 \%$ |
| $\$ 1,000-\$ 9,999$ | 17 | $25.0 \%$ |
| $\$ 10,000-\$ 49,999$ | 17 | $25.0 \%$ |
| $\$ 50,000-\$ 74,999$ | 4 | $5.9 \%$ |
| $\$ 75,000-\$ 99,999$ | 4 | $5.9 \%$ |
| $\$ 100,000-\$ 249,999$ | 7 | $10.3 \%$ |
| $\$ 250,000-\$ 499,999$ | 5 | $7.4 \%$ |
| $\$ 500,000-\$ 999,999$ | 2 | $2.9 \%$ |
| $\$ 1,000,000$ or more | 3 | $4.4 \%$ |
| Total | 68 | $100.0 \%$ |

Not reported: 1. Note: Annual gross sales was reported for all specialty crops, not exclusively nursery and flowering plants.

Producers with at least 50\% of their sales in nursery and flowering plants were most likely to sell their specialty crops on-farm or at a farm stand (Figure 13).

Figure 13. Distribution Outlets: Nursery and Flowering Plants (At Least 50\% of Sales)


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## Horticultural Goods

The horticultural goods category is comprised of three separate subgroups included on the survey: honey, maple syrup, and sod. It also includes some agricultural products written in by respondents, including hops, vegetable or grass seed, wool, and sorghum. Among the 469 specialty crop producers who completed the survey, 93 respondents (20\%) reported growing horticultural goods in 2016. The majority of these were beekeepers (Figure 14).

Figure 14. Horticultural Goods Subgroups


Beekeepers in Missouri who responded to the survey managed a total of 7,256 bee colonies, 6,000 of which were part of one operation (Table 15).

Table 15. Honey Colonies (2016)

| Number of Honey <br> Colonies | Min | Max | Mean | Median | Total <br> Colonies | Number <br> reporting |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 6,000 | 94 | 9 | 7,256 | 77 |

Not reported: 3

## Sales and Distribution for Primary Horticultural Goods Producers

The remainder of this section focuses on 40 producers with at least $50 \%$ of their sales coming from horticultural goods. Ninety-five percent of these growers earned $100 \%$ of their specialty crop income from horticultural goods. As shown in Table 16, the most commonly reported sales range for producers of horticultural goods was less than $\$ 1,000$. Four producers with at least $50 \%$ of their sales in horticultural goods had annual sales of at least $\$ 100,000$ (Table 2).

Table 16. Annual Gross Sales: Horticultural Goods (At Least 50\% of Sales)

| Annual Gross Sales | Number | Percent |
| :--- | ---: | ---: |
| Less than \$1,000 | 18 | $45.0 \%$ |
| $\$ 1,000-\$ 9,999$ | 13 | $32.5 \%$ |
| $\$ 10,000-\$ 49,999$ | 4 | $10.0 \%$ |
| $\$ 50,000-\$ 74,999$ | 0 | $0.0 \%$ |
| $\$ 75,000-\$ 99,999$ | 1 | $2.5 \%$ |
| $\$ 100,000-\$ 249,999$ | 0 | $0.0 \%$ |
| $\$ 250,000-\$ 499,999$ | 1 | $2.5 \%$ |
| $\$ 500,000-\$ 999,999$ | 1 | $2.5 \%$ |
| $\$ 1,000,000$ or more | 2 | $5.0 \%$ |
| Total | 40 | $100.0 \%$ |

Note: Annual gross sales was reported for all specialty crops, not exclusively horticultural goods.

Producers with at least $50 \%$ of their sales in goods were most likely to sell their specialty crops on-farm or at a farm stand, followed closely by farmers markets (Figure 15).

Figure 15. Distribution Outlets: Horticultural Goods (At Least 50\% of Sales)



[^0]:    *Winery/wine making was written in as "other" by 20 fruit and berry growers.

[^1]:    * The Retail/Landscapers category was created from written in "other" outlets and includes landscapers, nurseries and florists.

