



2023 Home Garden Vegetable Trials

Overview

The Home Garden Vegetable Trial is a citizen science project for gardeners in the state of Ohio. Each year, five cool-season and five warm-season vegetables are tested. There are two varieties of each vegetable in a trial. Gardeners are allowed to select the number of trials in which they would like to participate. They are asked to grow a 10-foot row of each variety or the equivalent number of plants. There are no mandates as to how the vegetables are grown. Gardeners track the progress of their vegetables and report the results at the end of the growing season. The results are then posted in order to help other gardeners in the selection of vegetables that they would like to grow in the coming years.

2023 is the fifth year of the project. There were 96 participants from 35 counties. This report documents their results and recommendations.

Table of Contents

Participants and Variety Selection....p. 2

Gardening Methodsp. 3

TRIAL RESULTS

Cool-Season

Beetsp. 4

Carrots.....p. 5

Lettucep. 6

Peasp. 7

Spinachp. 8

Warm-Season

Cucumbers p. 9

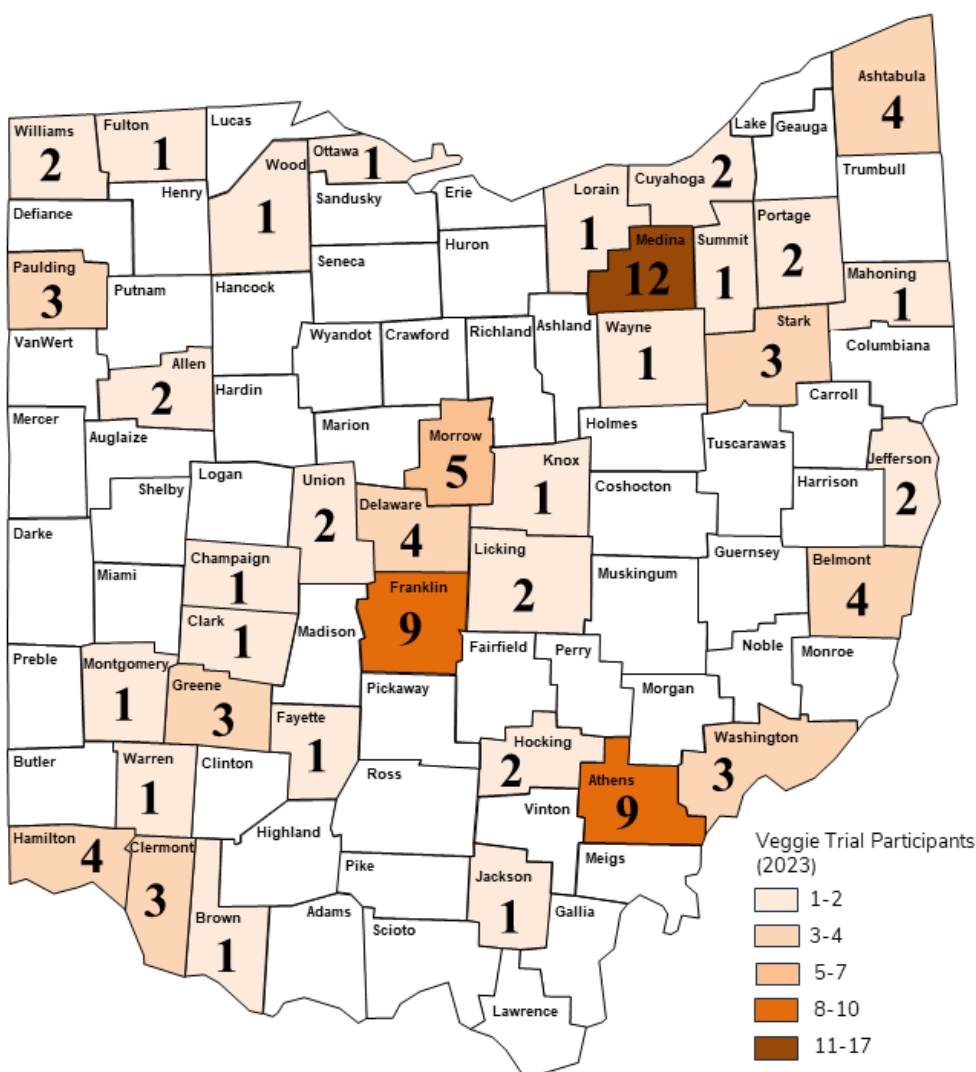
Green Beansp. 10

Summer Squash.....p. 11

Cherry Tomatoes.....p. 12

Roma Tomatoes.....p. 13

96 gardeners from 35 counties elected to participate. The trials are open to any resident in the state of Ohio.



Age Group	Number of People
<5 years	14
10 years	16
20 years	13
30 years	25
40 years	5
50 years	10
60 years	7
70 years	2

- Seeds were donated from **Rupp Seeds**
- Variety pictures are from the seed company website
- Seeds were selected using a variety of criteria and may include:
 - Old favorites vs. a new release
 - Popular commercial variety vs. popular home-garden variety
 - Two, new variety releases
 - Hybrid vs. heirloom variety
- Days to maturity was used to pair varieties with similar maturity times

- Participants reported on a comparative scale with six key indicators

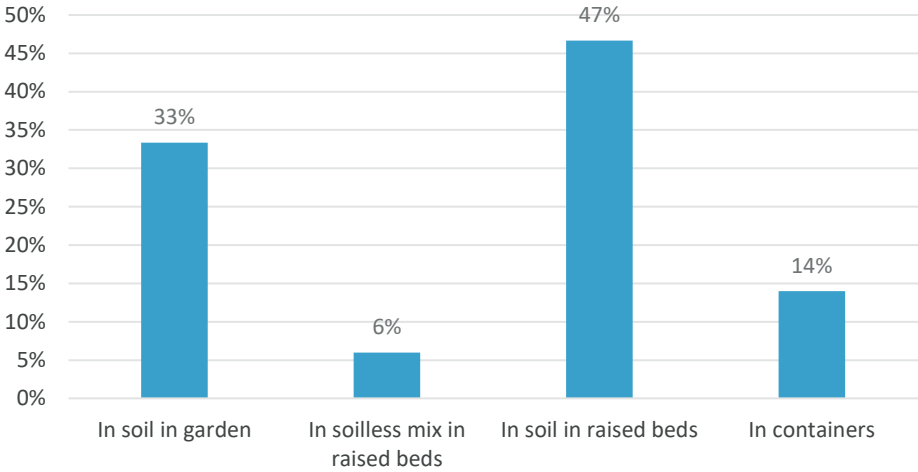
- First to germinate
- Healthier plants
- First to reach harvest time
- Better appearance of fruit or plant
- Yielded the most produce
- Tasted better
- **A variety was ranked as better, equal, or worse than the other variety**
- **If a variety was ranked as better or equal, then it is recorded as a positive response. In this way, response totals and combined percentages may be greater than 100%**

Example: Variety 1 was ranked as having a germination time that was ranked 61% better or equal to variety 2



Gardening Methods

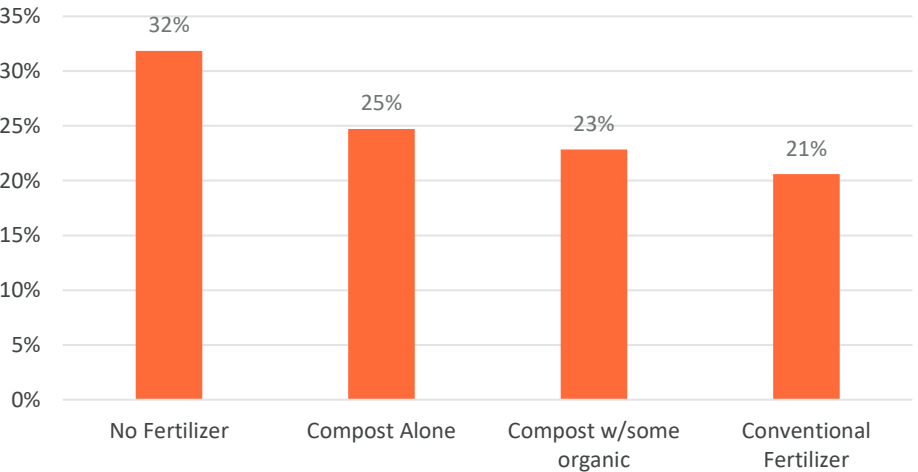
Type of Garden



How are the gardens being grown?

As with previous years, a majority of gardeners planted their vegetables in raised beds. Most are still using garden soil found on site with 6% choosing to use a soilless mix. There was an increase in gardeners choosing to raise vegetables in containers at 14% of trials being grown in this manner.

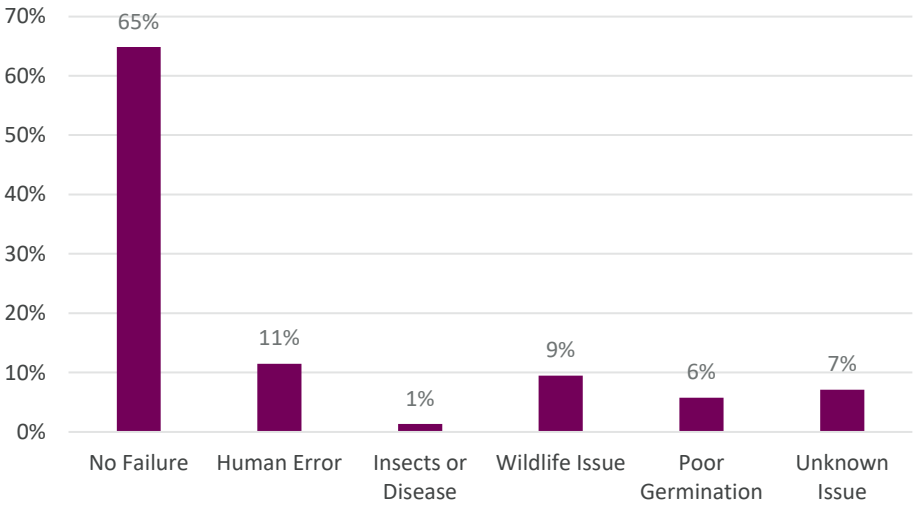
Type of Fertilizer



Fertilizing the garden

The trials highlight the fact that gardeners have different philosophies on how they choose to feed their vegetables, with almost 32% choosing not to use any form of fertilization. An additional 25% chose to depend on compost alone.

Garden Failure



Garden failures

While 65% of gardeners in the trials had success, there was a 35% failure rate. Failure happened for a variety of reasons with the highest percentage coming from human error with wildlife issues following close behind.

Surprisingly, insect and disease problems were cited as the least cause of garden failure.

Cool-Season Vegetables

Beets



Performance



Recommend growing

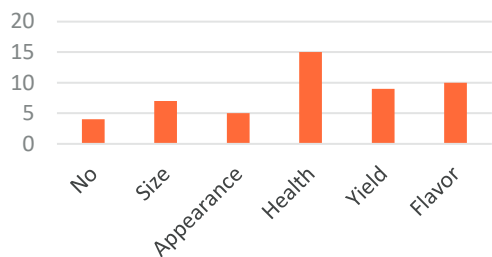


30 Reviews

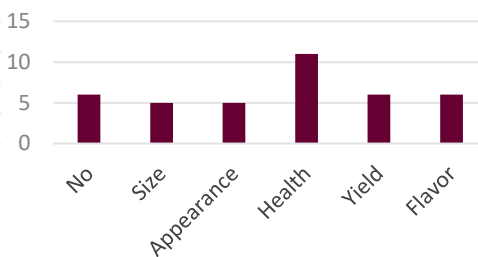
Camaro

Touchstone Gold

Recommend Camaro



Recommend Touchstone



Analysis:

Touchstone Gold beets ranked higher on all criteria. Some found it difficult to compare two different types of beets. Camaro held a slight edge as a recommended variety for Ohio gardeners.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"Touchstone yielded a novelty fruit, but the flavor of the Camaro was better. Critters nibbled the Camaro so severely that many plants died. Personally, did not taste the greens of either plant."

"Beets did not get as large as I thought they would, I'm sure the weather was an issue, too hot in June"

"Camaro better appearance , more beet flavor"

"For both varieties my beets were very very small and more so in the Touchstone gold. Possibly related to how grown?"

"Touchstone Gold seed germination far superior in comparison to Camaro."

"I grew these from plants I started indoors in August, we had good fall weather, but generally I would recommend starting earlier for a fall crop."

"I loved the touchstone gold beet flavor"

"Touchstone failed to produce from seed at the rate of Camaro"

"Touchstone Gold was only able to produce 2 full plants"

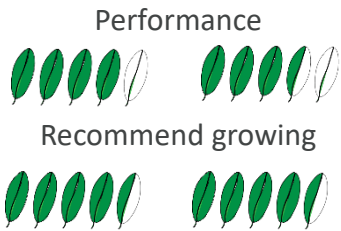
"Experienced better germination from Touchstone Gold. Both continue to grow and are healthy. They have been thinned and developing slowly with the cooler weather. Hard to directly compare a red vs a yellow fruit."

"Besides one being red and one being yellow, these were very similar to grow,"

"Touchstone Gold was pithy. I also feel like I wasn't ready for an off-color beet."

Cool-Season Vegetables

Carrots



Enterprise

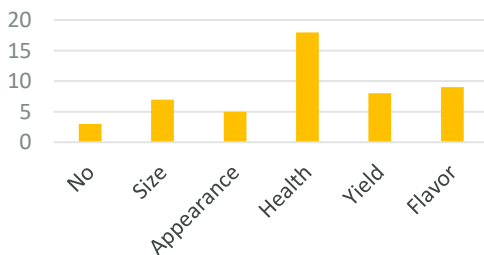
Chantenay Red

33 Reviews

Recommend Enterprise



Recommend Chantenay



Analysis:

Although gardeners reported Enterprise outperforming Chantenay Red Cored carrots in all criteria, this was not a significant difference. In the end, both varieties were recommended for Ohio gardeners at over a 90% rate.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste

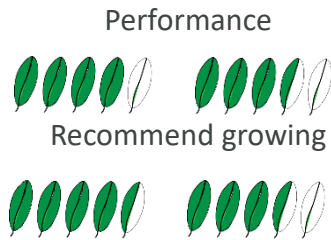


Gardener Comments:

- "Plant yield was similar, but Chantenay Red was sweeter; enterprise a bit woody"
- "Both were excellent taste and yields"
- "Both plants germinated and grew about the same. However, neither grew to more than 6-7" in height, and both produced "baby" size carrots about the diameter of a pencil (maybe slightly larger) and about 4 inches long. I blame soil conditions and weather (late planting, in May). "
- "These varieties were very easy to grow, high yield for both, and no disease issues."
- "Chantenay Red was a disappointment. It did germinate faster but the carrot itself was split, double and triple carrot formation, deformed."
- "I think due to the fact these grew in containers, some of the plants looked like they were full-sized due to their width but were 2-3 inches long."
- "Both are equal"
- "No material difference"
- "Both are performing equally and maturing well."
- "For me, both of these carrots were smaller, maybe I didn't leave them longer? The Chantenay Red was shorter and rounder than Enterprise. The Enterprise definitely out produced Chantenay for me."
- "Chantenay did not receive as much sunlight. My basil took over its area. I think that contributed to them being smaller. But they were wider than enterprise. Enterprise was thinner and longer. "

Cool-Season Vegetables

Lettuce



Freckles

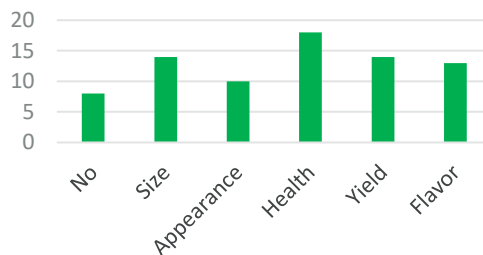
Breen

37 Reviews

Recommend Freckles



Recommend Breen



Analysis:

Freckles lettuce had a definite advantage in almost all performance criteria. When it came to taste, there was an equal division between our gardeners. For this reason, Freckles was more highly recommended for Ohio gardeners.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"Breen was very pretty but very slow to grow. Breen had pretty somewhat waxy leaves I found more tough/thicker than a lettuce should be, flavor more like consistency of swiss chard or spinach. Freckles was a great grower, it took off and I made many salads, very fluffy, pretty lettuce and very tender great flavor. Will grow again next year! Started both with soil blocking in my house under lights then also planted with more seeds in the container outside."

"Freckles was slower to bolt and more attractive plant. Also held up better against weather"

"Both were crunchy & did great in salad"

"Breen got bitter very early, so didn't enjoy for a long time. Freckles yielded a long time, with good flavor."

"Freckles lettuce added nice appearance to salads and was tasty but did not yield as well as Breen"

"Freckles took a very long time to germinate. Breen had bolted while Freckles was just coming up. The leaves of Freckles were so thin they tended to cling to the roof of your mouth. However, there are still Freckles plants just coming up."

"Planted in a youth garden; a majority of the elementary students liked Freckles best"

"Neither germinated well for me. The garden was watered due to the spring being dry but other things did great in my garden so I do not think the very poor germination was do to dryness."

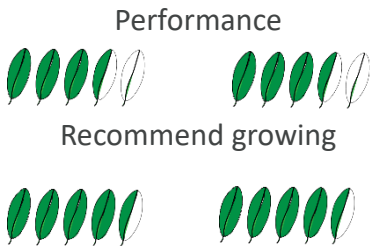
"Freckles lettuce was tender and offered a touch of color, as well. Breen leaves were fairly thick and a bit tough. The plants did not produce soon or plentifully enough and bolted early. I would grow Freckles, again."

"easy to grow germinated quickly, you can leave them alone"

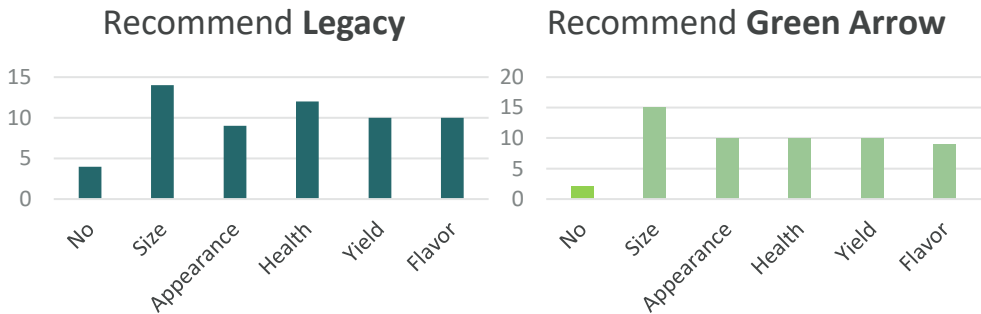
"Freckles out paced Breen in yield, but Breen has a nice color leaf. Breen caught up and both ended up yielding into the fall. Yum!"

Cool-Season Vegetables

Peas



26 Reviews



Analysis

These two pea varieties were both recommended for Ohio gardeners. Both had high marks in all criteria. Large plant size was indicated as the most recommended characteristic in choosing to grow these two varieties.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste

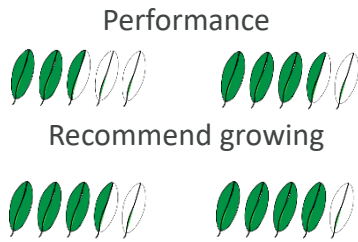


Gardener Comments:

- "The Green Arrow plants succumbed to the heat much sooner than Legacy. Even though, each received the same amount of water from the programmed irrigation system."
- "Neither of the peas did very well at all. legacy wound up being a breeding ground for Japanese Beetles. It was just too hot for peas this year I think."
- "Legacy produced the longest."
- "The students were split evenly on taste; quite a large yield of both; already replanted in fall garden & both have germinated; students looking for to peas at Thanksgiving."
- "Legacy produced more pods but Green Arrow pods had more mature peas. Didn't weigh peas so don't know yield comparison"
- "Both had plants that grew to over 6 feet in length. Very tasty."
- "Legacy produced for a longer time than Green Arrow."
- "I think I would have been more successful if I had had a trellis of some sort for the peas to hang on to give them more space. Will try that next year! :-)"
- "Legacy had more tender and flavorful pea pods"
- "Both were good growers overall"

Cool-Season Vegetables

Spinach

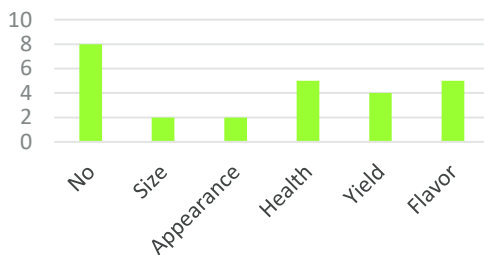


Bloomsdale

Olympia

27 Reviews

Recommend Bloomsdale



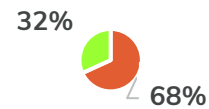
Recommend Olympia



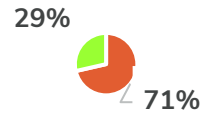
Analysis

Spinach always seems to be a struggle for our gardeners to grow each year. For those who were successful, Olympia proved to provide better results with significant differences in most criteria of evaluation.

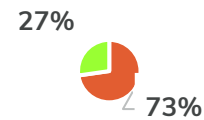
Germination



Health



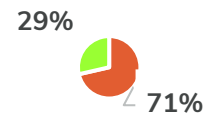
Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"5/28 pulled both Bloomsdale and Olympia, both bolted from hot weather. Olympia grew with nice round leaves but Bloomsdale grew with different sized leaves-some long leaves and some oval. Not as uniform as Olympia but both had good flavor."

"Both were planted in the same soil and conditions but Olympia was the only one that germinated and grew. However, only a few plants of the Olympia germinated. They reached about 2 inches tall then shriveled up and died. I planted a third row of commercial spinach seeds, and they germinated and grew to full size but was not plentiful. I don't think the soil, fertilizer, or weather was a factor since the commercial seeds were OK, but I think there was an issue that prevented all of the seeds from performing their best."

"Bloomsdale bolted so early. Hardly had a chance to eat it. Olympia produced a viable product much longer in the season."

"My friends LOVED Bloomsdale. It had the best taste by far. The crop was very small compared to Olympia. Olympia was tougher and not as much flavor. Both plants were very buggy with aphids."

"Olympia just a nice overall plant"

"Both varieties bolted much earlier than other varieties I have grown."

"Planted in a youth garden; we did not get a lot of spinach; we are going to plant it again in a week or two at the same garden but a different bed."

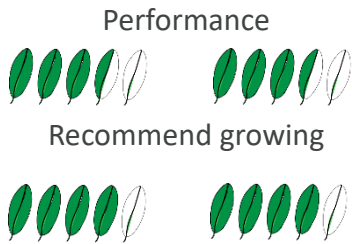
"Neither performed particularly well. Less than half of the seeds germinated in both cases, but Olympia had more."

"Both grew well, Olympia had slightly better/more tender flavor"

"Not impressed with either variety"

Warm-Season Vegetables

Cucumbers

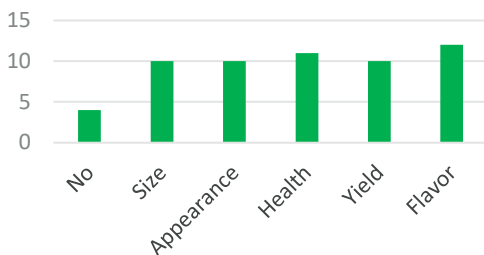


Cobra

Brickyard

21 Reviews

Recommend Cobra



Recommend Brickyard



Analysis

Both varieties were rated highly with similar recommendations. There was no significant difference across all criteria.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"Cobra only yielded 1 healthy plant, and as of 7/7 hasn't produced any cukes. Brickyard has multiple cucumbers that should be able to be harvested within the next 5 days."

"I started Brickyard and Cobra in soil blocks inside under lights. Cobra was first to produce, I got 3 6-8" cukes before 7/1, and so far a total of about 5. They tasted good. Brickyard produced less but were good flavor. I normally do not get a lot of cukes in my smart pots, they were planted in 20 gal smart pots."

"Cobra's fruit had a more uniform size. Brickyard's fruit had a tendency to curl which made it hard to peel. My soil was new soil on my raised beds, so that may affected the growth as well as the dry month of June. After they received rain, the vines produced much better."

"Cobra was by far superior in flavor, disease and pest resistance, and length of production. Still growing fruit as of September 25!"

"...Cobra was more productive with 39.75 lbs. while brickyard yielded 28.01 lbs. Cobra was taller but was first to wilt."

"Our brickyard had a lot of baby cucumbers but only 1 or 2 out of every 5 grew beyond an inch in length"

"Cobra outperformed Brickyard ... there were at most 10 brickyard cucumbers and 150 Cobra from 7/23 thru middle of August"

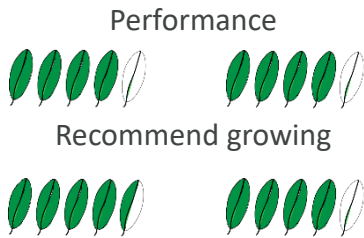
"I have 30 pickle jars because of the abundance"

"Both were transplanted into the garden on 9/1 We were 2 weeks short of a decent harvest. Cannot rate production or flavor but Cobra produced twice the number of female blossoms and early fruit."

"Brickyard produced more and bigger cucumbers"

Warm-Season Vegetables

Green Beans



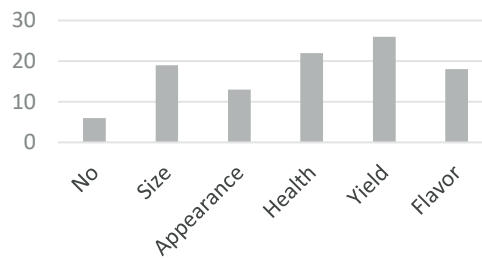
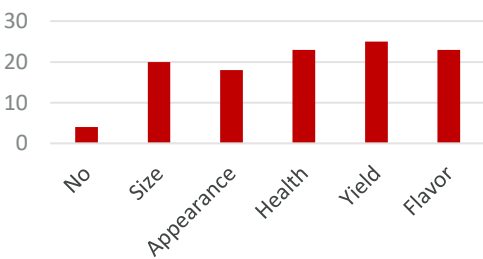
Strike

Contender

44 Reviews

Recommend Strike

Recommend Contender



Analysis

Both varieties performed well and were recommended for Ohio gardeners. Strike edged out Contender in appearance and flavor.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"Both seed varieties came up very nicely and consistently. The Japanese beetles attacked Contender more than Strike for some reason. I've grown contender in the past and had some beans that had strings which I hate. This year no strings. I have used Strike before and been real pleased and again pleased this year. The strike plants seemed more dense and maybe a bit more productive. No strings at all. Both had good green bean flavor but we liked the strike a bit more. We kept growing green beans into the fall."

"Both were quick to set beans for a second harvest; strike's second were tougher

"Didn't realize there would be such a difference between different varieties. Especially liked how Strike produced very straight, long fruits."

"Both of my bean varieties got the cucumber mosaic virus. The plants were stunted some but rebounded very nicely. I ended up with big healthy plants. Contender did VERY well.. A great crop of beans."

"Had best green beans in several years. Both varieties were tasty, nice long, straight beans and just pulled them up last week."

"Both varieties very easy to grow and I did not experience any disease issues."

"Contender beans were curved and had a metallic taste. The curve made them harder to prepare."

"Contender continued to produce until late September. Last harvest was 9/23/23. Strike was already spent by then."

"Strike is a pretty green, straight bean, but hard to beat the taste and yield of Contender. They both yielded beans into October. Contender produced 38.46 lbs. and strike produced 30.25 lbs."

"Strike's beans were smaller in circumference, but produced more on their stems and a bit more tastely; Contender's circumference was a bit larger and the length was longer. I had beans on both Contender and Strike well into the fall. The deer finished them off! :-)"

"Contender had 3 good pickings. Strike was 1 excellent picking (once and done)"

Warm-Season Vegetables

Summer Squash



Liberty



Golden Glory

Performance

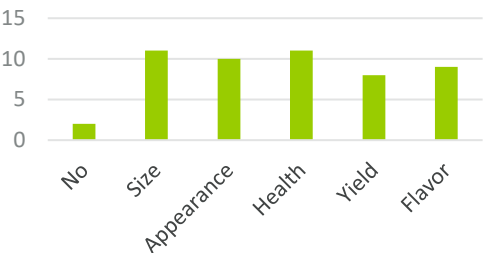


Recommend growing

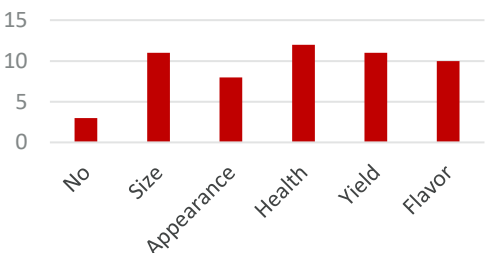


22 Reviews

Recommend Liberty



Recommend Golden Glory



Analysis

While both varieties were rated similarly on most criteria, Golden Glory excelled in yield. Most gardeners recommended both varieties for Ohio gardeners.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste

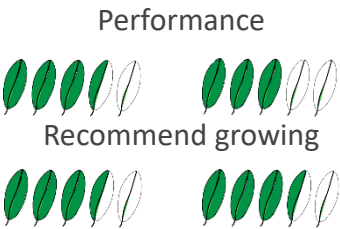


Gardener Comments:

- "Both varieties were rather compact which can be beneficial for small spaces. At the same time, they weren't nearly as prolific as some other varieties I have tried. A notable thing was that neither ever got powdery mildew, so plant resistance seems to be good. All plants are eventually succumbed to vine borers and were especially favored by squash bugs, but I was still able to get a decent harvest before the end of plants' life"
- "Both produced well and tasted great."
- "Golden Glory produced far more fruit. Both varieties were impacted by the Vine Borer, which eventually killed all but one plant (a Liberty which is still producing as of 9/25)"
- "Both were straight and beautiful squashes. The golden was a beauty! It produced 42.33 lbs. while the Liberty produced 28.19 lbs. At first, we thought the plants had powdery mildew but realized it was the color of the leaves. Golden produced longer."
- "Golden glory was slower to produce but produced more and much longer"
- "There was so much yield! We loved the squash and gave it away to family because so much was produced."
- "I planted later to avoid disease and pests, however both plants contracted powdery mildew after production began due to humid, rainy conditions. Both responded well to milk/baking soda mixture sprayed generously on leaves. There was a marked halt/slow down in production at that point. Fruits began to grow but did not mature. As September arrived, Liberty stopped producing at all, which I found odd for a zucchini variety. ...Golden Glory set fruit again in early September which only grew to pinky-size or so and then stopped maturing.... Concerning flavor, Golden Glory's skin (which I enjoy left on) was more tender and with a milder flavor. Liberty had more of a squash-like flavor."
- "Both were excellent producers. Golden Glory did produce longer into the season."
- "Squash from Liberty were had much more tender skin"

Warm-Season Vegetables

Cherry Tomatoes

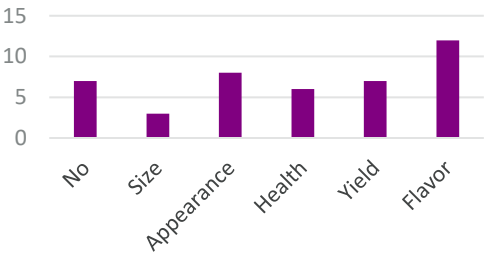


Sweet Gold

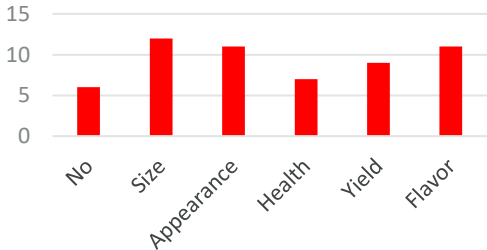
Tidy Treats

25 Reviews

Recommend **Sweet Gold**



Recommend **Tidy Treats**



Analysis

The cherry tomatoes in this year’s trial had similar performance. Tidy Treats excelled in yield and appearance. Both varieties were not as highly recommended as in previous trials.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste

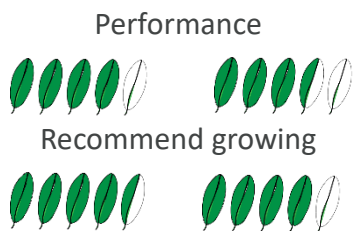


Gardener Comments:

- “Tidy treats had a stout dense plant which made it nice for containers but the tomatoes were very small, tough skinned and not very sweet. The plant started dying out in July from the center. It’s just a skeleton now. It would be okay if you had very little room and wanted a red cherry. Sweet gold’s tomatoes were just okay, nothing special, not very sweet and lacked “tomatoey” taste. The yield was good, the plant didn’t die out like tidy treat.”
- “Sweet gold were delicious; the tidy treats were too acidic and had a tougher skin”
- “Tidy treats had superior “tomato-y” taste; plants were neater in size and sprawl; ripened together along cluster for easy harvest”
- “Both seeds were started indoors..... Both started very well with 70% of the Tiny Treats germinating and 60% of the Sweet Gold seeds germinating. The Tiny Treats grew more slowly and were more stocky as a seedling. the Sweet Gold seedlings grew very rapidly but were “stringy”. At transplanting the Tidy Treats did not survive. Of the Sweet Gold seedlings, only one survived to be transplanted”
- “Tidy Treats are extremely good and I still have a huge crop and it is 21 Sept. They just keep going. My friends are over weekly to get more. They love the sweet flavor. The sweet gold is not productive at all. Many of the tomatoes split and the skins were tougher.”
- “Sweet gold plant very leggy nice fruit but not many Tidy Treats great producer and great flavor”
- “Constant battle of Early Blight with Tidy Treats, but not with Sweet Gold. Very long production for Sweet Gold.”
- “Tidy Teats fruit ran on the small size but the taste was great. It was difficult to know when to harvest S.G. I was always late. The fruit would crack immediately.”
- “These varieties were almost too prolific. I would recommend only growing two plants of each, and still plan on sharing them outside of your household.”

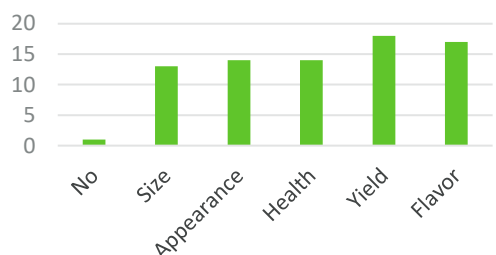
Warm-Season Vegetables

Roma Tomatoes

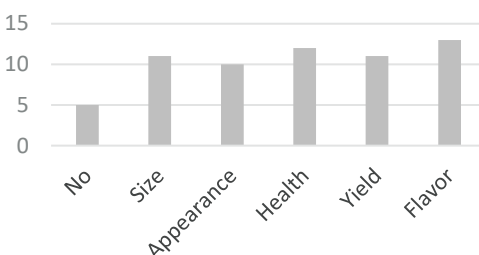


25 Reviews

Recommend San Marzano



Recommend Mariana



Analysis

This is the first year to have Roma tomatoes in the trials. The results were almost equally divided. Gardeners had both good and bad experiences with both varieties. San Marzano held a slight advantage in being recommended for Ohio gardeners.

Germination



Health



Appearance



First Harvest



Higher Yields



Taste



Gardener Comments:

"San Marzano is having a lot of blossom rot, Mariana is not. I added some lime and mixed into the soil, and I water daily because I planted them in smart pots. Plants seem healthy."

"San Marzano produced large tomatoes (about the size of a closed fist)"

"Almost all Mariana had blossom end rot. San Marzano did not."

"The yield on both were exceptional! I got a late start getting them in the ground, and still had the most tomatoes I've ever grown!"

"Once fruit started to ripen, plants started showing signs of early blight."

"Only 8 of the 10 Mariana seeds germinated. All of the 10 San Marzano germinated. This could be why San Marzano produced 78.10 lbs and Mariano 63.42 lbs. Mariana had thicker and shorter stems. It had early blight and more blossom end rot and smaller tomatoes. San Marzano was still producing heavily in October, The MGVS were evenly split on which one tasted better in a blind test."

"Both are excellent producers, Mariano is a more compact plant, San Marzano continues to grow and extend its vines. Mariana has larger more dense fruits. I found San Marzano to be more susceptible to blossom end rot -- it was a very dry summer in Athens. Both varieties are still producing fruits in late September."

[Table of Contents](#)

p. 13



THE OHIO STATE UNIVERSITY
EXTENSION

go.osu.edu/OhioVeggies

COLLEGE OF FOOD, AGRICULTURAL, AND
ENVIRONMENTAL SCIENCES

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.