

2022 Home Garden Vegetable Trials

Overview

The Home Garden Vegetable Trials 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.

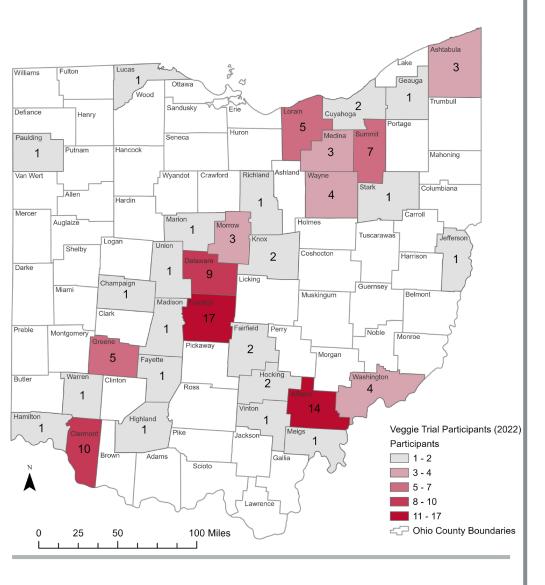
2022 is the fourth year of the project. There were 108 participants from 32 counties. This report documents their results and recommendations.

Table of Contents

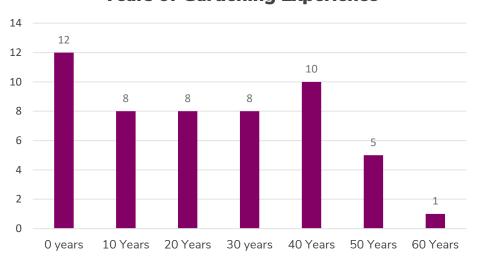
Participants and variety selectionp. 2
Gardening Methodsp. 3
TRIAL RESULTS
Cool-Season
Beetsp. 4
Radishesp. 5
<u>Lettucep. 6</u>
Peasp. 7
Spinachp. 8
Warm-Season
<u>Cucumbers p. 9</u>
Green Beansp. 10
Summer Squashp. 11
Cherry Tomatoesp. 12
Winter Squashp. 13

Participants

108 gardeners from 32 counties elected to participate. The trials are open to any resident in the state of Ohio.



Years of Gardening Experience



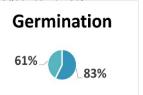
Seed Source and Selection

- Seeds were purchased from Johnny's Selected Seeds and Harris Seed
- Variety pictures are from the seeds company websites
- 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

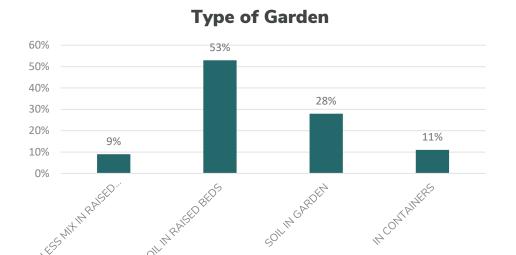
Reading the charts

- 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



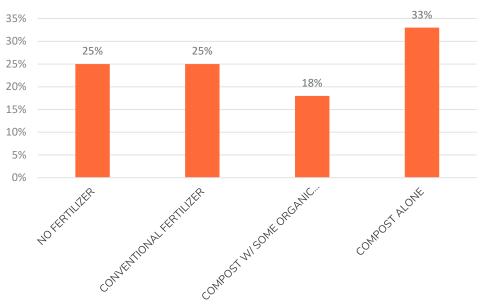
Gardening Methods



How are the gardens being grown?

The big change this year is that 62% of the gardeners planted their vegetables in raised beds. Most are still using garden soil found on site with 10% chose to use a soilless mix. The 11% who chose to grow in containers was similar to previous years.

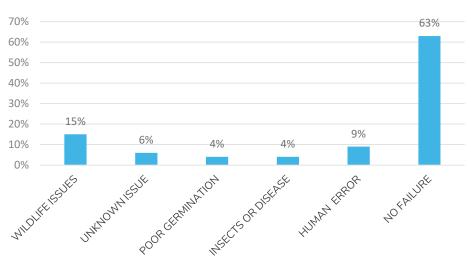




Fertilizing the garden

The trials highlight the fact that gardeners have different philosophies on how they choose to feed their vegetables, with almost 25% choosing not to use any form of fertilization. An additional 33% chose to depend on compost alone.

Garden Failure



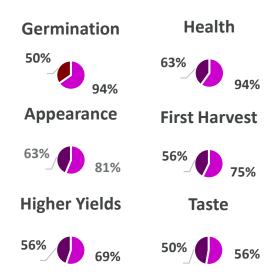
Garden failures

While 63% of gardeners in the trials had success, there was a 37% failure rate. Failure happened for a variety of reasons with the highest percentage coming from wildlife issues.

Rabbits were reported to be the biggest issue, followed by deer. An additional 9% reported that the gardener was the biggest issue for failure.

Analysis

While both beets had a similar taste and yield, the Red Ace did outperform Guardsmark in the speed of germination, appearance and overall health of the plant.



Gardener Comments:

"The flesh of Guardsmark was more mushy compared to Red Ace. Guardsmark was less sweet than Red Ace."

"I planted Guardsmark in a raised bed and Red Ace in the ground. Both did well but Red Ace did much better because it received more sun"

"Red Ace had a bitter flavor over Guardsmark"

"We also like the traditional flavor and appearance of the Red Ace beets, especially when they were oven roasted, although the Guardsmark beets would look lovely in a salad. Both varieties germinated well; Red Ace hardier, more attractive; Deer ate greens before bulbs matured"

"I liked Guardsmark for the tap roots and Red Ace for the 'greens'"

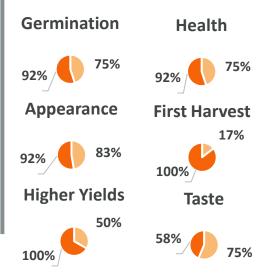
"Both plants yielded small fruits"

"They both came up and quite frankly looked the same side by side. The Guardsmark seemed a bit healthier plant overall. I liked the traditional red beet better, but both were great performers and very tasty. Will grow both again. For some reason, I didn't realize that the Guardsmark were not red beets until I cooked them. ;) I ate some roasted in salads, but ended up pickling a bunch of them. My mom said they were the best pickled beets she's ever had, which is saying something, as she loves pickled beets (she may also be biased, since I'm related to her;). All but one of the seeds came up for each variety. I believe I planted 50 of each. The leaf tops were very tasty too - used them both fresh in salads and cooked down. No issues at all with pests or the fruits. Very easy to grow."

Radishes Performance Performance Performance Performance Recommend growing Pink Beauty French Breakfast 12 Reviews Recommend French Breakfast Recommend French Breakfast

Analysis

The French Breakfast radish outperformed the Pink Beauty in almost all categories, but gardeners preferred the taste of the Pink Beauty.



Gardener Comments:

"French Breakfast did a little better"

"Pink Beauty had a milder flavor, medium spicy, crunchy and moist. French Breakfast was more peppery and had a pithy interior."

"both were good size, flavor was good, French Breakfast had a little more heat"

"Although both varieties germinated well and grew quickly, warm temperatures caused both varieties to go rapidly to seed and thus reduced yield. I will try a fall crop."

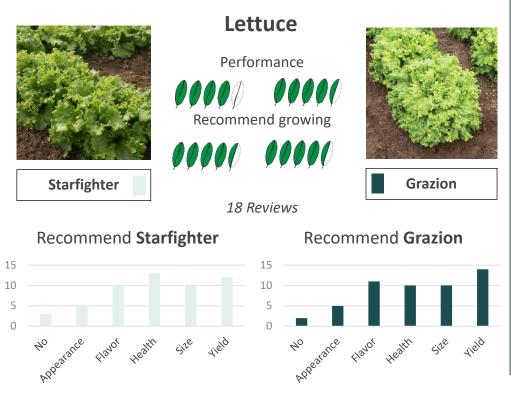
"French Breakfast were mushier"

"Planted both varieties every 2-3 weeks for continuing harvest. I preferred the Pink Beauty for the milder radish taste."

"Both radishes are very nice. I preferred the texture of the French Breakfast over the Pink Beauty but both are great for snacking and salads."

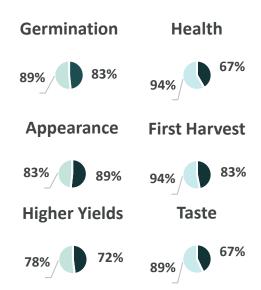
"Not worth the garden space for the yield. I would suggest buying them from a farm market or store. (I'm sorry to say.)"

"Both did very well in the garden; I preferred the Pink Beauty slightly more because the radish was slightly more spicy which is something I prefer"



Analysis

Grazion and Starfighter were very similar in many categories. Starfighter seemed to produce healthier plants and a slight edge in flavor.



Gardener Comments:

"Not vigorous varieties? Was seed exposed to heat during shipment? Soil temps too low? I have never had a problem getting lettuces to germinate. Tried TWO seedings with little success; More than ample rainfall; No harvest. Always have huge success with lettuce, more than we can use, have to share"

"I picked the side leaves of both types of head lettuce. They were still producing July 8th and started making heads. Both produced large outer leaves with no bitterness. Finally at the end they became bitter."

"I planted four successions of each and while similar in performance, I enjoyed Starfighter more."

"Graizon had less leaf tip burn from heat compared to Starfighter. When eating, starfighter leaves had a thinner texture where Graizon were thicker, more spinach like without the stronger flavor. The two varieties would work well growing together and mixed together in a salad to add different texture and flavor."

"Grazion tasted bitter just prior to bolting. Starfighter maintained great flavor into July"

"Only one of my Starfighters emerged, out of 10 planted. Have no idea why, as they were in the same soil as the Grazion. 7 of my 10 Grazion came up. Both tasted delicious, especially when young and tender. Heads were large and pretty. Once they emerged, I covered them with a row cover to keep them in the shade and away from pests. Had some issues with aphids towards the end, but that is probably because I waited to long for the final harvest. The Grazion grew great and I will plant it again."

[&]quot;Grazion was slightly tough"

[&]quot;very easy to take care of and very slow to bolt (if it weren't such a hot july, I believe it would have taken longer to bolt)"

[&]quot;Grazion was a little smoother and better tasting- They were both somewhat coarse"

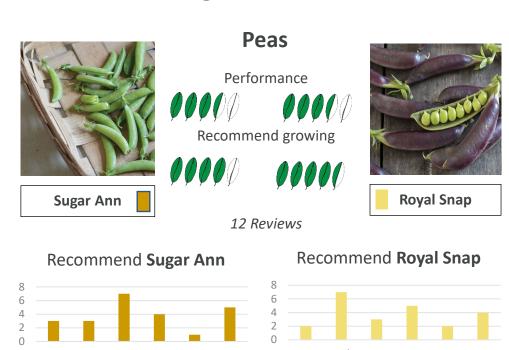
[&]quot;preferred the flavor of Grazion compared to Starfighter"

[&]quot;Starfighter had better flavor"

[&]quot;These 2 lettuce varieties seemed pretty similar in overall performance, but we thought the Starfighter lettuce was slightly more bitter in flavor than the Grazion lettuce."

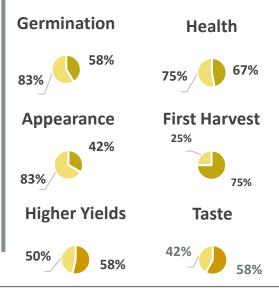
[&]quot;Utilized multiple mediums, including indoors in hydroponic solution."

[&]quot;Both varieties started well (Starfighter emerged first), but the deer got to them before they matured"



Analysis

Both varieties performed similarly in most categories. Sugar Ann had an edge in flavor and speed of maturity, while Royal Snap had a better appearance with its purple shell.



Gardener Comments:

"both were good growers, but both had issues with the pods being not full, most had beans missing"

"Royal snap II was a lovely plant, but flavor and yield and longer producing season for Sugar Ann"

"Royal Snaps were fun to watch mature."

"Sugar Ann: Almost 100% germination, vigorous plants, good crunch to peas, but disappointing yields. Royal snap: Marginal germination; Beautiful bi-color/pink blossoms, red fruit. (Double the yield of Sugar Ann). Tough, leathery, not crisp, slower to mature, less sweet"

"Both began to sprout 4/14. Sugar Ann had lighter colored leaves. First pea 5/25. Royal was a darker green and beautiful plant. Both were climbing the trellis. June 12-sugar Ann first round, June 25-Royal Snap first round. Colored peas were more tasty if developed more. Sugar Ann tended to have strings. Royal Snap had more peas in size and number when allowed to mature. Basically complete 7/11."

"Sugar Ann did not geminate at all"

"I enjoyed the flavor of the Sugar Ann a little more than the Royal Snap II peas. Neither variety grew as well as other varieties I've grown in the past; this could be due to growing in containers"

"Within two to three days of planting, ants (I think) had stolen 90% of the Sugar Ann seeds I had planted. I planted over 50 and ended up with only 5 that made it through. These 5 Sugar Anns were fairly small and didn't produce a lot, but the flavor was nice and sweet. The Royal Snap II did much better. The Royal Snap II are fun for kids, as they magically turn colors when cooked. They were best when they were young and small. I prefer the Sugar Ann for fresh eating, but either are great in stirfrys and side dishes. Love the color contrast between them - I would seek to grow both again next year. Just need to find a way to keep the ants away from my Sugar Anns! Maybe I can start them inside instead. We shall see."

Spinach Performance Performance Recommend growing Lizard 17 Reviews



Analysis

Gardeners around the state had different opinions as to which variety performed better. With the combined results, there was no significant difference in any of the performance traits.

Germination	Health
81% 69%	75%
Appearance	First Harvest
88%	81% 75%
Higher Yields	Taste
69% 63%	75% 75%

Gardener Comments:

- "Lizard had a better spinach flavor. The Seaside was rather bland."
- "Both were delicious, and slow to bolt."
- "Very early bolt for both of them but it was a very hot summer."
- "both germinated really well, very pleased"
- "Both varieties performed well. Lizard bolted before Seaside"
- "These two spinach varieties performed well and were very similar in overall performance, but we had a slight preference for the Seaside flavor."
- "Seeds germinated but neither variety grew to a harvestable size. In a similar location to spinach last year that grew really well. Reason for failure unknown."
- "Seaside was very spotty with germination."
- "Lizard Spinach was healthy, sturdy, robust, darker green, waxy cuticle. Seaside was paler, weaker plants overall."
- "Lizard a mild both had had larger leaves and picked a few on May 16. Seaside was caching up May 17th. Both had a to mild taste and no bitterness. They began to bolt June 17th."
- "Both performed well in five succession plantings, but I really liked the overall performance of Seaside best"
- "I planted twice. Early May did not germinate. Not sure why. Mid May planting germinated but never got taller than 2 inches. Maybe too hot?"
- "Lizard did not germinate well and Seaside seemed to have pests."
- "Utilized multiple mediums, including indoor hydroponic system. Outdoor raised beds in compost produced the most."
- "I was trying to grow them in straw bales gardens and after initial sprouting they disappeared. I am not sure if they were eaten off or if that type of bed is simply no good for spinach. I am sorry :-("
- "both varieties started to grow well, but they were harvested by deer first and then scratched up by chickens. Before the critters got to the spinach, the Lizard variety was growing a little faster and had a richer dark green color"

Warm-Season Vegetables Analysis Both varieties had similar Cucumbers performance across most categories with Raider having a Performance slight edge in higher yields and an overall better growing recommendation for gardeners. Recommend growing Germination Health **Speedway** 58% Raider 12 Reviews **Appearance** First Harvest Recommend Raider Recommend **Speedway** 10 8 6 4 2 **Higher Yields** Flavor

Gardener Comments:

"Much more pest resistant than any other cucumber I tried to grow. Both were very healthy with great yields."

"Raider did not germinate well, re-seeded 3 times and still had only 4 plants. Speedway made up for Raider though. Had soooooo many cukes this year!"

"Speedway did not germinate at all. Skins of Raider are tough and bitter, must peel for consumption."

"Both were of equal size 5/27. Raider had the first cucumber. Growing by June 22. Both setting on. Taste test 7/8 Raider not much taste and producing well. By 7/11 Raider was producing more 3-1. 7/10 taste test-Speedway better favor and very crispy."

"Speedway developed wilt which spread to all plants of both varieties. I tried to control it by pulling plants but I was too late. Entire crop was gone by mid August!"

"Raider were first to bloom, small in size, good flavor, more product. Speedway was large in size, good flavor, first plant to succumb to beetle infestation."

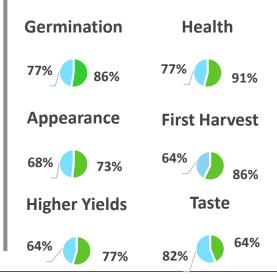
"First time growing cucumbers in containers and it did not produce good results compared to previous growing seasons of cucumbers in raised garden beds. Speedway and Raider preformed the same in regards to growing time and flavor, but both varieties did not grow very big, or have very good yields"

"Everything around it flourished (squash, tomatoes), but it didn't do well. It also didn't help that the deer ate much of the early growth leaves (before moving onto other plants)."

Warm-Season Vegetables Green Beans Performance Recommend growing Aldrin Savannah 21 Reviews Recommend Aldrin Recommend Savannah

Analysis

Aldrin excelled at having healthier plants, but Savannah performed better in flavor and having higher yields. This led to Savannah earning a higher growing recommendation.



Gardener Comments:

- "Many Aldrin plants grew into pole bean size, also stopped producing quickly"
- "both did not have full pods"
- "Aldrin was good, Savannah was great."
- "I had my MGV taste test both at a meeting. The consensus was Savannah was sweeter tasting."
- "Savannah had slightly better germination and was a little more vigorous. Aldrin had a few strings but a better. Flavor"
- "We liked both so much that we want to grow both of them next year!"
- "Aldrin was first harvest out of the garden but Savannah continued to produce long after Aldrin was done.. Trying Savannah as a fall crop now."
- "Aldrin was brighter green Both resistant to insects."
- "Both varieties did well and were high producers.
- "The Aldrin variety plants stayed upright even with a heavy rainstorm just before harvest. I prefer the taste and smooth texture of Aldrin."
- "Aldrin had all seeds up as Savannah started sprouting. Aldrin lighter green and larger leaves, taller somewhat. Aldrin set on first and then dry weather hit June 14-30. Taste test 7/3 and 7/20 Savannah tasted better."
- "I don't know why these failed so badly. They started off GREAT but stopped growing at about 7 inches and never developed flowers or beans. Over the summer they just seemed to get fried in the heat. Not sure what happened."
- "Both performed equally well. No noticeable difference."
- "Both varieties did great they had healthy plants that both provided a lot of produce; I was picking green beans every week for 9-10 weeks. I preferred the color of Aldrin slightly more than Savannah but overall really happy with both"

 Deer ate everything.
- "Aldrin seemed to be disease free and pest free the whole season. The Savannah's had beetles and the plants showed signs of that. It didn't affect the fruit, though. The beans from both plants were flawless."
- "both did so well a ground hog ate everything, but after better protection, both were producing until 11/1"
- "The Aldrin had a slightly better germination rate and bigger plants, but the plant size might be based on location. Savannah was between two other types of beans (not from the trial) and Aldrin was at the end of the bean section, with a big gap between them and the squash, so they may have just had more room to grow. Both beans had good yields with tasty fruit. Couldn't really tell them apart once cooked. Will plant again."

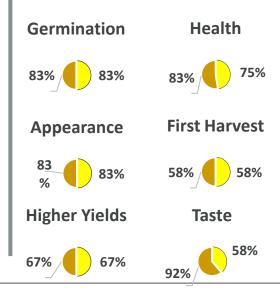
Warm-Season Vegetables

Recommend Lioness Summer Squash Performance Performance Performance Performance Performance Performance Cougar 12 Reviews Recommend Cougar

8

Analysis

Both varieties had similar performance ratings with Lioness having a slight advantage in taste. The biggest complaint was the thicker skin of Cougar.



Gardener Comments:

8

6

"Both were very healthy plants with great yields"

"both varieties produced so many squash that I eventually pulled them out in self defense"

"Lioness tended to have "squishier" fruits at times."

"Lioness was up first. Lioness had larger leave and grew taller. (May 27th) Both were blooming and the same height now,. Lioness set on June 24th and picked the first squash on July 1. July 8th, on squash each variety. I felt that they did not produce real well this year. Lioness began to vine and vine, but without many squash produced. Lioness had few more squash than Cougar. "

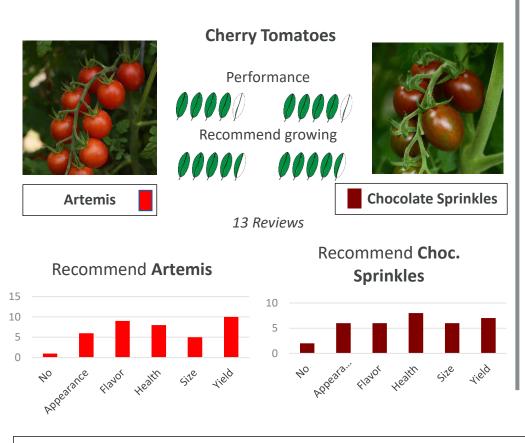
"Only able to plant 5 seeds each packet. All germinated. Plants looked healthy, full upright. Lioness flowered and produced a few weeks earlier. First time growing squash."

"Both varieties looked nice and produced a lot of produce. The Lioness produced larger fruit, was tender, and had a mild flavor. I did not like the Cougar variety; it looked very nice while growing and produced a lot but the skin of the produce was very thick and hard/chewy ... the skins could not be eaten"

"Lioness had only male flowers for so long, Cougar had tough skin, "

"One of my Lioness seeds didn't germinate, but all of the others of both types did. Very high yielding plants. I liked the thinner skin of the Lioness, but flavor was pretty much the same. At the height of their growth, I could not give them away anymore, as all my friends, family and neighbors still had some from the previous time I shared them. SO MANY. I ended up freezing a bunch for adding to sauces or stir frys in the future. The plants were super healthy and gigantic until the squash beetles showed up. I didn't cover these and maybe will next year to keep the beetles away. Will plant again, though will probably only plant 2 of each variety so I don't have too many;)"

Warm-Season Vegetables



Analysis

Gardeners were really divided on these two varieties with both having their fans. Artemis did edge out Chocolate Sprinkles in taste and yields. These are two that you might have to grow and decide for yourself.

Germination	Health
92% 100%	85% 69%
Appearance	First Harvest
69% 77%	69%/
Higher Yields	Taste
62%	62% 46%

Gardener Comments:

"Loved Cho Sprinkles flavor; Artemis skin was tough"

"I really enjoyed growing both of these varieties. Chocolate Sprinkles is a big cherry tomato as compared to Artemis. It, also, had a tougher skin"

"Chocolate Sprinkles did not product plump tomatoes and the taste was off."

"preferred flavor of Artemis, both varieties succumbed to late blight in September"

"Neither did well in hot, humid weather this year. "

"Besides liking the flavor and appearance of Chocolate Sprinkles better, the fruit seemed to last longer after being picked. Artemis tended to wrinkle sooner."

"I planted both varieties in the raised garden beds as well as in containers (5 gal buckets with drainage holes); both varieties did better in the garden rather than in containers. I preferred the flavor of the Artemis variety"

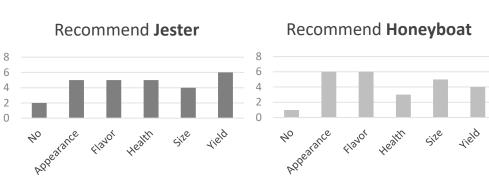
"Artemis was definitely sweeter but the skin cracked more easily"

"Artemis was clearly a better plant. Chocolate Sprinkles was big, but didn't produce much."

"Chocolate Sprinkles had blander taste, by itself OK, but side by side Artemis tasted better, late planting but still producing in Oct"

Warm-Season Vegetables





Analysis

These delicata winter squash had the fewest reviews in the trials. For those that did review, the results were very similar with Honeyboat earning a slight edge in appearance and flavor. Both earned a recommend for growing in Ohio.

Germination	Health
89% 67%	67%
Appearance	First Harvest
89% 67%	78%
Higher Yields	Taste
56%	78% 67%

Gardener Comments:

"I enjoyed planting both varieties and feel that I would have gotten a higher yield with Honeyboat but one of the two plants planted got powdery mildew which slowed down production."

"Honeyboat was up first with secondary leaves by May 27th. Jester was just coming up. Growing and vining by June 30th. Honeyboat taking over. Nothing set on by June 8th. July 11th, first squash set on Honeyboat. Wasn't until 7/16 for Jester. In the taste test, Honeyboat had a sweeter taste. Jester was a much denser. Not much taste."

"I didn't actually receive the Jester seeds. Only planted Honey boar. It did well until vine borers got it."

"Utilized multiple mediums, including hydroponics. Raised bed utilizing compost most successful overall. "

"Both good growers and producers"

Table of Contents

p. 13

go.osu.edu/OhioVeggies

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

