Written by Thomas Kalb, Extension Horticulturist
North Dakota State University Extension

Contact information:
Thomas Kalb, Ph.D.
North Dakota State University
2718 Gateway Avenue, Suite 304
Bismarck, ND 58503
701.328.9722
tom.kalb@ndsu.edu

For more information on the North Dakota Home Garden Variety Trials Program, go to
www.ag.ndsu.edu/homegardenvarietytrials/

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December 2019

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231-7708, ndsu.eoaa@ndsu.edu.
# North Dakota Home Garden Variety Trials

## RESULTS FOR 2019

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Introduction

The First Step to Success

The first step in growing a successful garden is to select a superior variety.

Gardeners who sow superior varieties can grow plants that yield abundantly, resist diseases, and produce quality food. Gardeners who sow inferior varieties are headed for frustrations. No matter how hard they work in the garden they may have disappointing results.

The benefits of selecting superior varieties for gardens are great. The National Gardening Association (NGA) estimates approximately one-third of households in North Dakota grow a vegetable garden.¹ This indicates there are approximately 100,000 households in North Dakota with vegetable gardens.

There are significant economic benefits to gardening. A recent survey of community gardeners in Bismarck showed each household saved an average of $105 on produce expenses per year.² Extrapolated statewide, these findings suggest that gardeners in North Dakota save millions of dollars each year by growing some of their own vegetables.

There is an important public health dimension to gardening. Vegetables and fruits are nature’s richest source of micronutrients, minerals and dietary fiber. A diet rich in vegetables and fruits is associated with a decreased risk of obesity and certain chronic diseases including cardiovascular disease, diabetes and some cancers. Nevertheless, only 25% of adults and 8% of children in North Dakota eat enough vegetables for a healthy diet.³

We need to eat more vegetables—growing a productive garden can help with this.

Compared to other crops, relatively little vegetable research is conducted at research stations in North Dakota. These plots provide some insight into the characteristics of varieties, but they do not test varieties under actual home gardening conditions. The environment at a field research station is dramatically different than at a home garden:

- The soils at field research stations are similar to soils at a farm: relatively fertile and undisturbed. Soils in a backyard garden are intensively managed and have been highly disturbed from home construction and land grading activities.
- Trials at stations utilize tractors, large-scale irrigation equipment and herbicides. Backyard gardeners use shovels, hoes (maybe a roto-tiller), garden hoses and watering cans.
- Trials conducted at stations are out in full sun. Many home gardens have shade for at least part of the day.

The Bottom Line

To identify superior varieties for gardeners, it makes sense to determine which varieties perform best in gardens under the management of gardeners.

Goals

This program has three major goals:

1. Gardeners will be introduced to new varieties. This will lead to more productive gardens and healthier diets.

² North Dakota State University Extension Service. 2016. Personal communication with Kelsey Sheldon, Burleigh County Program Assistant.
2. Gardeners will identify superior varieties of vegetables, herbs and flowers.

3. Youth will develop skills in science, eat a healthier diet, and enjoy increased levels of physical activity.

Selecting Varieties
Seed catalogs are carefully studied to identify varieties that are widely available and appear promising for North Dakota. In many situations, a promising new variety is compared with a variety that is widely grown in the state.

Preparation of Seed Packets
Seeds are ordered in bulk from seed companies. Seeds are subsequently packed into coin envelopes. Labels containing instructions (variety name, vegetable/herb/flower type, time to plant, and recommended spacing for sowing and thinning) are affixed onto packages. Most seeds are untreated; exceptions being sweet corn and a few cucurbit varieties. No genetically modified organism (GMO) varieties are used.

Distribution of Seeds
This program is promoted by North Dakota State University (NDSU) Extension faculty and staff across the state. Information is available at the website www.ag.ndsu.edu/homegardenvarietytrials/. Interested households can participate in up to seven trials. The fees are $1 per trial. A fee of $4.00 is charged for handling and postage.

Each gardener signs a pledge before receiving seeds, promising to grow and evaluate the varieties fairly.

Besides seeds, growers receive row labels to mark rows, and a string to help them lay out the 10-foot-long plots (Fig. 1). Gardeners receive simple, yet detailed instructions on laying out their plots (Appendix 1). We encourage a 10-foot plot length for obtaining representative data, but container gardening is allowed.

Gardeners are responsible for managing their crops. This includes fertilizing, watering, mulching, and using pesticides. They are encouraged to use their own practices so the varieties are tested under actual home garden conditions.

Weather in 2019
Cool temperatures in May delayed planting in most gardens (Fig. 2). Soil moisture levels were good in the southern half of the state, but drought persisted in the north until mid-summer.

In summer, temperatures were near normal. Rainfall amounts in summer were slightly above normal; this is a good thing in our semi-arid state.

The late summer and fall climate was much wetter than normal. Very cold temperatures in October delayed the maturity of melons and other spring-sown crops. Many crops sown in late summer (greens, radish and turnips) did not mature.

The first frost arrived for most gardeners when a blizzard swept across our state on October 9. This killing frost was about a week later than normal.
Fig. 2. Monthly air temperatures and precipitation amounts in 2019 and normal (1901–2000). Cool temperatures in May delayed planting in most gardens. In summer, temperatures were near normal. Rainfall amounts in summer were slightly above normal; this is a good thing in our semi-arid state. Late summer and fall were much wetter than normal. Very cold temperatures in October delayed the maturity of crops. Source: Nat. Oceanic and Atmos. Admin.

Quantity and Quality of Participation

In 2019, gardeners at 220 sites submitted results from their trials. Results from over 1,205 research trials were submitted. Data were obtained in 43 of the state’s 53 counties (Fig. 3). Our trials extended into Manitoba, Minnesota, Montana, Saskatchewan and South Dakota.

A pleasant finding of this program has been the quality of research conducted by home gardeners. These families demonstrate extraordinary enthusiasm in this project. They carefully fill out report forms and provide insightful comments. We especially appreciate their comments on food quality, which is rarely assessed in variety trials conducted at research stations.

Compiling Data

Gardeners compare the two varieties in each trial for germination rate, plant health, earliness, yield and quality of harvested product. We ask them which of the two varieties they prefer and which, if any, of the varieties they would recommend to other gardeners (Appendix 2). Comments are strongly encouraged.

Approximately 25% of reports this year were eliminated from our analysis and report. In most cases, these reports documented crop failures of both varieties due to deer, rabbits, flea beetles or flooding. A few reports with inconsistent data were eliminated.
Presentation of Results

Ratings, recommendations and comments of each gardener are presented in this publication (see below). Reports are categorized by the varietal preferences of the gardeners. For each trial, we start with the reports of gardeners who preferred “Variety A” and then later present the reports of gardeners who preferred “Variety B.”

These reports are separated by location going from east to west. We start with Minnesota, go to northeast North Dakota, across the central regions of the state to southwest North Dakota, and then include reports from Manitoba, Saskatchewan, South Dakota and Montana. Regions were identified by considering landforms, soil types, length of growing season and rainfall patterns.

Then we provide the ratings of each variety. Gardeners rated each variety on a scale of 1 to 10. These ratings are shown using a 5-star format. Each rating point equals a half star; thus a rating of “8” by the gardener would show as “★★★★.”

We document whether the gardener recommends the variety. A positive recommendation is shown by a smiling face and a negative recommendation is shown by a frowning face.

Garden type (organic or inorganic) was documented. We asked gardeners whether or not they used inorganic fertilizers (for example, Miracle-Gro or 10–10–10) or inorganic pesticides (for example, Sevin or Daconil). Most gardeners did not, and they are listed as “organic” in this report. Very few gardeners used inorganic pesticides except in managing flea beetles in autumn.

We tried to include as many ratings and comments as possible. In some cases, we deleted a few of the least informative reports when space on a page was limited. Reports where both varieties failed due to weather or wildlife damage were not presented.

Sharing the Final Results

Participating gardeners are e-mailed the final report in December. Results are presented online and at workshops to over 1,000 gardeners every spring. Newspaper and online columns are written to report findings. Reports of previous years are available online at www.ag.ndsu.edu/homegardenvarietytrials/.

Impacts

Evaluations of our project show gardeners in this project are introduced to new varieties and enjoy more productive gardens and healthier diets. Youth in this project sharpen their skills in science. Youth enjoy healthier diets and increased levels of physical activity. Impact reports are posted on our website.

Gardeners are introduced to new varieties. They enjoy more productive gardens and healthier diets.
Summary of Results

A team of volunteers in North Dakota and surrounding states/provinces evaluated promising vegetable, herb and cut flower varieties. A team of gardeners at 220 sites rated varieties for health, earliness, yield and food/ornamental quality. A total of 1,205 side-by-side comparisons were submitted.

In each trial they noted which of the two varieties they preferred (Pref) and which of the varieties they would recommend (Rec) to other gardeners. They rated the performance of each variety using a scale of 1 to 10, with 1 = poor and 10 = excellent. The mean rating is presented in this summary.

The following is a summary of data, including our conclusions for each trial. Additional data and comments from gardeners are in the full report available at http://www.ag.ndsu.edu/homegardenvarietytrials/.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Blue Lake 274</td>
<td>38</td>
<td>67</td>
<td>7.42</td>
</tr>
<tr>
<td>Lewis</td>
<td>63</td>
<td>83</td>
<td>8.29</td>
</tr>
<tr>
<td>(29 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crockett</td>
<td>84</td>
<td>94</td>
<td>8.73</td>
</tr>
<tr>
<td>Serengeti</td>
<td>16</td>
<td>67</td>
<td>7.39</td>
</tr>
<tr>
<td>(43 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky Blue</td>
<td>29</td>
<td>43</td>
<td>5.86</td>
</tr>
<tr>
<td>Monte Cristo</td>
<td>71</td>
<td>71</td>
<td>7.71</td>
</tr>
<tr>
<td>(8 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amethyst</td>
<td>40</td>
<td>56</td>
<td>7.25</td>
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<tr>
<td>Purp. Queen Imp.</td>
<td>60</td>
<td>75</td>
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<tr>
<td>(17 sites)</td>
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<td></td>
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<tr>
<td>Chiba Green</td>
<td>50</td>
<td>50</td>
<td>8.00</td>
</tr>
<tr>
<td>Tohya</td>
<td>50</td>
<td>50</td>
<td>7.00</td>
</tr>
<tr>
<td>(4 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Rush</td>
<td>57</td>
<td>71</td>
<td>7.57</td>
</tr>
<tr>
<td>Golden Rod</td>
<td>43</td>
<td>64</td>
<td>7.29</td>
</tr>
<tr>
<td>(16 sites)</td>
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</table>
Beet, Gold

‘Burpee’s Golden’ produced higher yields. The leaves of both varieties were attractive. Gardeners liked the color and flavor of both varieties’ roots. Most gardeners did not recommend ‘Golden Detroit’ due to its low yields.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
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<tr>
<td>Burpee’s Golden</td>
<td>60</td>
<td>63</td>
<td>6.63</td>
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<tr>
<td>Golden Detroit</td>
<td>40</td>
<td>25</td>
<td>5.50</td>
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(12 sites)

Beet, Red

Both varieties germinated well, had healthy plants, and produced bountiful yields at the same time. Gardeners liked the looks and flavors of both varieties. ‘Merlin’ had a slim edge in root appearance and taste qualities.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
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<tbody>
<tr>
<td>Kestrel</td>
<td>46</td>
<td>86</td>
<td>7.80</td>
</tr>
<tr>
<td>Merlin</td>
<td>54</td>
<td>79</td>
<td>7.67</td>
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</tbody>
</table>

(19 sites)

Beet, Red Canning

‘Cylindra’ was superior. It germinated much better, matured earlier and produced higher yields. More gardeners who had a taste preference chose ‘Cylindra’. ‘Forono’ had healthy plants but was not exceptional in any way.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Cylindra</td>
<td>65</td>
<td>76</td>
<td>8.06</td>
</tr>
<tr>
<td>Forono</td>
<td>35</td>
<td>47</td>
<td>6.59</td>
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</table>

(22 sites)

Carrot, Garden (Nantes)

Gardeners were pleased with the performance of both varieties. No consistent and significant differences were detected. ‘Goldfinger’ has been a strong performer for many years. ‘Ingot’ deserves further testing.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Goldfinger</td>
<td>52</td>
<td>78</td>
<td>7.80</td>
</tr>
<tr>
<td>Ingot</td>
<td>48</td>
<td>73</td>
<td>7.71</td>
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</table>

(49 sites)

Carrot, Large


<table>
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<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
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</thead>
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<td>Baltimore</td>
<td>59</td>
<td>76</td>
<td>7.53</td>
</tr>
<tr>
<td>New Kuroda</td>
<td>41</td>
<td>82</td>
<td>7.53</td>
</tr>
</tbody>
</table>

(18 sites)

Carrot, Long (Imperator)

Both varieties had healthy tops and long, beautiful roots. Gardeners were impressed by the high yields, uniform roots and fresh, mild flavor of ‘Imperator 58’. Some gardeners preferred the performance and taste of ‘Sugarsnax 54’.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Imperator 58</td>
<td>61</td>
<td>74</td>
<td>7.35</td>
</tr>
<tr>
<td>Sugarsnax 54</td>
<td>39</td>
<td>52</td>
<td>7.17</td>
</tr>
</tbody>
</table>

(25 sites)

Corn, Early

‘Sweetness’ ripened quicker and had higher yields at more sites. Its ears were more attractive and tasted sweeter to more gardeners. Most gardeners liked ‘Temptress’, but it did not excel in any traits.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
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<tbody>
<tr>
<td>Sweetness</td>
<td>71</td>
<td>85</td>
<td>7.71</td>
</tr>
<tr>
<td>Temptress</td>
<td>29</td>
<td>62</td>
<td>6.71</td>
</tr>
</tbody>
</table>

(17 sites)

Corn, Early Super Sweet

Both varieties grew well, but neither distinguished itself. Gardeners were split on their preferences. More gardeners recommended ‘Anthem XR’, often due to higher yields. ‘Anthem XR’ has performed well in trials of previous years.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthem XR</td>
<td>50</td>
<td>79</td>
<td>7.58</td>
</tr>
<tr>
<td>Raquel</td>
<td>50</td>
<td>58</td>
<td>7.16</td>
</tr>
</tbody>
</table>

(20 sites)
**Corn, Late Super Sweet**

‘American Dream’ ripened earlier and produced higher yields at most sites. Many gardeners noted ‘American Dream’ ears were of superior quality. ‘Obsession’ germinated better at more sites but was otherwise unremarkable.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Dream</td>
<td>67</td>
<td>69</td>
<td>7.92</td>
</tr>
<tr>
<td>Obsession</td>
<td>33</td>
<td>62</td>
<td>7.85</td>
</tr>
</tbody>
</table>

(13 sites)

**Cucumber, Burpless**

Gardeners were impressed with the quality and yields of both varieties. Their fruits were thin-skinned and never bitter. ‘Summer Dance’ produced earlier and produced more cucumbers. Its fruits were straight, uniform and attractive.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>58</td>
<td>80</td>
<td>7.85</td>
</tr>
<tr>
<td>Summer Top</td>
<td>42</td>
<td>75</td>
<td>7.23</td>
</tr>
</tbody>
</table>

(46 sites)

**Cucumber, Pickling**

Both varieties produced lots of quality cucumbers for pickling. ‘Homemade Pickles’ is a proven performer and was preferred by most gardeners again this year. Its cucumbers were crisp, small-seeded, and blocky—perfect for pickling.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calypso</td>
<td>42</td>
<td>81</td>
<td>7.88</td>
</tr>
<tr>
<td>Home. Pickles</td>
<td>58</td>
<td>81</td>
<td>8.15</td>
</tr>
</tbody>
</table>

(31 sites)

**Cucumber, Slicing**

‘Bristol’ got off to a quick start and produced the first cucumbers at more sites. ‘Talladega’ produced higher yields in more gardens; many gardeners preferred ‘Talladega’ for that reason. Fruit quality was good for both varieties.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>39</td>
<td>67</td>
<td>7.59</td>
</tr>
<tr>
<td>Talladega</td>
<td>61</td>
<td>78</td>
<td>7.65</td>
</tr>
</tbody>
</table>

(20 sites)

**Greens, Loosehead Cabbage (Fall)**

Gardeners tried loosehead cabbage for the first time, and they enjoyed both varieties. They liked the ruffled leaves and higher yields of ‘Tokyo Bekana’. Those who preferred ‘Maruba Santoh’ were especially pleased with its taste.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maruba Santoh</td>
<td>44</td>
<td>70</td>
<td>6.40</td>
</tr>
<tr>
<td>Tokyo Bekana</td>
<td>56</td>
<td>80</td>
<td>7.40</td>
</tr>
</tbody>
</table>

(16 sites)

**Greens, Purple (Fall)**

Both varieties struggled under the cold, wet conditions. ‘Red Kingdom’ germinated better, was healthier and produced higher yields. Gardeners who succeeded in harvesting a crop of ‘Red Kingdom’ enjoyed its mild, mustard flavor.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple Choi</td>
<td>33</td>
<td>50</td>
<td>5.17</td>
</tr>
<tr>
<td>Red Kingdom</td>
<td>67</td>
<td>67</td>
<td>5.00</td>
</tr>
</tbody>
</table>

(8 sites)

**Greens, Pac Choi (Fall)**

‘Win-Win Choi’ got off to a faster start and grew much better under harsh conditions. ‘Win-Win Choi’ plants were more vigorous, healthier and more productive. Gardeners enjoyed its crunchy texture and pleasant taste.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Delight</td>
<td>10</td>
<td>40</td>
<td>3.70</td>
</tr>
<tr>
<td>Win-Win Choi</td>
<td>90</td>
<td>90</td>
<td>6.20</td>
</tr>
</tbody>
</table>

(15 sites)

**Lettuce, Green Butterhead**

Gardeners loved the looks, taste and crunch of ‘Buttercrunch’. This proven winner was very dependable and resisted bolting; it was preferred by most gardeners. ‘Milagro’ resisted bolting better at more sites and produced good yields.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buttercrunch</td>
<td>59</td>
<td>89</td>
<td>7.71</td>
</tr>
<tr>
<td>Milagro</td>
<td>41</td>
<td>61</td>
<td>7.41</td>
</tr>
</tbody>
</table>

(21 sites)
**Lettuce, Red Butterhead**

‘Cervanek’ excelled in all traits: germination, health, earliness, resistance to bolting, yields, looks and taste. Gardeners enjoyed eating its dark red, flavorful heads all summer. ‘Grandpa Admire’s’ was judged acceptable at best.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervanek</td>
<td>88</td>
<td>88</td>
<td>8.38</td>
</tr>
<tr>
<td>Grandpa Admire’s</td>
<td>13</td>
<td>38</td>
<td>5.00</td>
</tr>
<tr>
<td>(8 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lettuce, Green Leaf**

Most gardeners preferred ‘Jebousek’. These gardeners felt ‘Jebousek’ was more productive, attractive and better tasting. ‘Deer Tongue’ is a rugged heirloom and it resisted bolting better at more sites.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer Tongue</td>
<td>33</td>
<td>71</td>
<td>6.57</td>
</tr>
<tr>
<td>Jebousek</td>
<td>67</td>
<td>71</td>
<td>7.43</td>
</tr>
<tr>
<td>(7 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lettuce, Red Leaf**

Both ‘Merlot’ and ‘Beleah Rose’ were healthy and very good producers of quality lettuce. Gardeners rated both varieties highly. ‘Merlot’ matched or exceeded ‘Beleah Rose’ in all traits and was rated especially high for its flavor.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beleah Rose</td>
<td>38</td>
<td>75</td>
<td>7.75</td>
</tr>
<tr>
<td>Merlot</td>
<td>63</td>
<td>88</td>
<td>8.25</td>
</tr>
<tr>
<td>(9 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lettuce, Red Lollo**

‘Dark Red Lollo Rossa’ was outstanding. It germinated better, grew faster, was healthier, produced higher yields and tasted better than ‘Revolution’. Both varieties resisted bolting well. ‘Revolution’ did not germinate well in several gardens.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dk. Red L. Rossa</td>
<td>78</td>
<td>78</td>
<td>7.89</td>
</tr>
<tr>
<td>Revolution</td>
<td>22</td>
<td>44</td>
<td>6.44</td>
</tr>
<tr>
<td>(9 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lettuce, Green Romaine**

‘Newham’ was preferred over the standard variety ‘Little Gem’. ‘Newham’ grew more vigorously and produced higher yields. More gardeners felt ‘Newham’ heads looked and tasted better. Both varieties produced crisp, delicious lettuce.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Gem</td>
<td>35</td>
<td>50</td>
<td>6.60</td>
</tr>
<tr>
<td>Newham</td>
<td>65</td>
<td>75</td>
<td>7.65</td>
</tr>
<tr>
<td>(27 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Melon, Small Cantaloupe**

‘Minnesota Midget’ was a more consistent performer during this cooler than normal growing season. It matured earlier and was more productive at more sites. Yields of both varieties were low due to pests and cool weather.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota Midget</td>
<td>57</td>
<td>88</td>
<td>6.13</td>
</tr>
<tr>
<td>Sugar Cube</td>
<td>43</td>
<td>63</td>
<td>6.25</td>
</tr>
<tr>
<td>(10 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Melon, Mid-Sized Cantaloupe**

‘Athena’ matured earlier, produced higher yields, and its fruits were more attractive compared to those of ‘Sarah’s Choice’. Gardeners loved the taste of both varieties and were split on the variety they preferred.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athena</td>
<td>50</td>
<td>70</td>
<td>7.30</td>
</tr>
<tr>
<td>Sarah's Choice</td>
<td>50</td>
<td>70</td>
<td>7.10</td>
</tr>
<tr>
<td>(14 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Melon, Large Cantaloupe**

‘Solstice’ was a more reliable performer across sites. ‘Solstice’ had healthier vines, matured earlier and produced higher yields. Gardeners especially liked the looks of ‘Carousel’ melons and enjoyed the flavor of both varieties.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carousel</td>
<td>33</td>
<td>50</td>
<td>7.00</td>
</tr>
<tr>
<td>Solstice</td>
<td>67</td>
<td>67</td>
<td>7.83</td>
</tr>
<tr>
<td>(9 sites)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Melon, Green Honeydew**

‘Earli-Dew’ has been the standard honeydew grown in the north for many years. Although testing is limited, it is exciting to see a new variety outperform it. ‘Honeycomb’ matched ‘Earli-Dew’ for earliness and exceeded it for taste qualities.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earli-Dew</td>
<td>25</td>
<td>100</td>
<td>7.75</td>
</tr>
<tr>
<td>Honeycomb</td>
<td>75</td>
<td>100</td>
<td>8.50</td>
</tr>
</tbody>
</table>

(5 sites)

**Melon, Orange Honeydew**

Testing was limited, but ‘Honey Orange’ looked very promising. Its fruits were delicious, and every gardener recommended the variety. Gardeners did not like the taste of ‘Honey Blonde’. Yields suffered due to cool weather.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honey Blonde</td>
<td>33</td>
<td>50</td>
<td>5.50</td>
</tr>
<tr>
<td>Honey Orange</td>
<td>67</td>
<td>100</td>
<td>7.50</td>
</tr>
</tbody>
</table>

(6 sites)

**Melon, Korean**

‘Sun Jewel’ has performed well in the past and it performed well in 2019. It produced good yields at all sites. Gardeners had mixed feelings about the taste of its distinctive white flesh. All gardeners were disappointed with ‘Torpedo’.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Jewel</td>
<td>100</td>
<td>67</td>
<td>6.33</td>
</tr>
<tr>
<td>Torpedo</td>
<td>0</td>
<td>0</td>
<td>1.00</td>
</tr>
</tbody>
</table>

(6 sites)

**Pea, Shell**

‘Lincoln’ has proven again it is the finest garden pea for ND. It germinated better and produced higher yields. Its pods were attractive and easy to shell. ‘Maestro’ produced the first harvest at more sites; otherwise it performed poorly.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln</td>
<td>92</td>
<td>92</td>
<td>8.79</td>
</tr>
<tr>
<td>Maestro</td>
<td>8</td>
<td>38</td>
<td>6.28</td>
</tr>
</tbody>
</table>

(33 sites)

**Pea, Short-Vine Snap**

‘Sugar Ann’ has proven again it is the best snap pea for ND. Gardeners were impressed with its earliness, healthy vines, high yields and delicious taste. ‘Cascadia’ was recommended by most gardeners, but it did not excel in any trait.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascadia</td>
<td>33</td>
<td>67</td>
<td>6.79</td>
</tr>
<tr>
<td>Sugar Ann</td>
<td>67</td>
<td>88</td>
<td>8.04</td>
</tr>
</tbody>
</table>

(28 sites)

**Pea, Tall-Vine Snap**

‘Super Sugar Snap’ vines grew more vigorously and produced earlier and higher yields. Gardeners liked the look and taste of its pods. Most gardeners did not recommend ‘PL141’. It was not special in any way.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL141</td>
<td>29</td>
<td>36</td>
<td>6.64</td>
</tr>
<tr>
<td>Super Sugar Snap</td>
<td>71</td>
<td>86</td>
<td>7.64</td>
</tr>
</tbody>
</table>

(15 sites)

**Pumpkin, Early**

‘Orange Sunrise’ matured earlier and produced higher yields at more sites. Its pumpkins were bright orange. ‘Racer Plus’ had darker orange fruits. The vines of ‘Racer Plus’ were compact and well suited for small gardens.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange Sunrise</td>
<td>55</td>
<td>82</td>
<td>7.36</td>
</tr>
<tr>
<td>Racer Plus</td>
<td>45</td>
<td>73</td>
<td>6.82</td>
</tr>
</tbody>
</table>

(11 sites)

**Pumpkin, Large**

‘Early King’ produced larger pumpkins (19 pounds compared to 15 pounds for ‘Kratos’) and a higher yield at more sites. Gardeners liked the size, shape and sturdy stems on the fruits of both varieties.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early King</td>
<td>67</td>
<td>68</td>
<td>7.16</td>
</tr>
<tr>
<td>Kratos</td>
<td>33</td>
<td>68</td>
<td>7.11</td>
</tr>
</tbody>
</table>

(23 sites)
**Pumpkin, Cooking**

‘Cinderella’s Carriage’ pumpkins ripened earlier at more sites, and its pumpkins were more attractive. ‘Rouge Vif D’Etampes’ posted higher yields at more sites. Vines of both varieties were vigorous. No taste differences were mentioned.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cinderella’s Carr.</td>
<td>56</td>
<td>89</td>
<td>7.89</td>
</tr>
<tr>
<td>Rouge Vif D’Et.</td>
<td>44</td>
<td>78</td>
<td>6.78</td>
</tr>
</tbody>
</table>

(13 sites)

**Pumpkin, Giant White**

‘Polar Bear’ pumpkins were whiter and stayed white. ‘New Moon’ pumpkins developed tinges of blue, green and peach. ‘New Moon’ produced more pumpkins at more gardens. Median pumpkin weight of both varieties was 25 pounds.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Moon</td>
<td>30</td>
<td>65</td>
<td>6.75</td>
</tr>
<tr>
<td>Polar Bear</td>
<td>70</td>
<td>70</td>
<td>7.10</td>
</tr>
</tbody>
</table>

(21 sites)

**Radish, Bicolor (Fall)**

Every gardener recommended ‘French Breakfast’. It had higher yields, more attractive roots and tasted awesome. Most gardeners liked ‘Nelson’, but it could not match the performance of ‘French Breakfast’.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>French Breakfast</td>
<td>75</td>
<td>100</td>
<td>8.25</td>
</tr>
<tr>
<td>Nelson</td>
<td>25</td>
<td>80</td>
<td>6.25</td>
</tr>
</tbody>
</table>

(11 sites)

**Radish, Purple (Fall)**

Most gardeners preferred ‘Plum Purple’, often citing its taste. ‘Bacchus’ has performed well in our previous trials and it performed well this year. It germinated better, grew more vigorously and produced higher yields at more gardens.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacchus</td>
<td>40</td>
<td>50</td>
<td>7.40</td>
</tr>
<tr>
<td>Plum Purple</td>
<td>60</td>
<td>100</td>
<td>6.80</td>
</tr>
</tbody>
</table>

(6 sites)

**Radish, Red (Fall)**

Both ‘Champion’ and ‘Roxanne’ germinated well, had healthy plants, and produced good yields. The roots of both varieties had a nice round shape and bright red color. Gardeners were split on which variety tasted better.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champion</td>
<td>44</td>
<td>70</td>
<td>6.80</td>
</tr>
<tr>
<td>Roxanne</td>
<td>56</td>
<td>70</td>
<td>6.50</td>
</tr>
</tbody>
</table>

(11 sites)

**Radish, Red Long (Fall)**

Testing was limited, but every gardener preferred ‘Dragon’. It germinated better and grew faster. Its roots were smoother, more attractive and better tasting. ‘Cincinnati Market’ received low ratings at several sites.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati Market</td>
<td>0</td>
<td>50</td>
<td>4.40</td>
</tr>
<tr>
<td>Dragon</td>
<td>100</td>
<td>83</td>
<td>6.20</td>
</tr>
</tbody>
</table>

(7 sites)

**Radish, Watermelon (Fall)**

Cold autumn weather played havoc with this trial. These radishes require a longer season than most radishes, and they did not receive enough warmth to grow and mature. Neither variety developed a full-sized root. We’ll try again next year.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Meat</td>
<td>0</td>
<td>100</td>
<td>2.50</td>
</tr>
<tr>
<td>Starburst</td>
<td>100</td>
<td>100</td>
<td>3.50</td>
</tr>
</tbody>
</table>

(3 sites)

**Radish, White (Fall)**

The hybrid ‘Pearl’ showed greater vigor and produced higher yields. Every gardener recommended it. ‘Hailstone’ was a disappointment. This trial was not popular; data are limited; and flea beetles were a major problem as well.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hailstone</td>
<td>0</td>
<td>0</td>
<td>2.50</td>
</tr>
<tr>
<td>Pearl</td>
<td>100</td>
<td>100</td>
<td>7.00</td>
</tr>
</tbody>
</table>

(4 sites)
### Spinach, Heat Tolerant (Fall)

'Escalade' grew more vigorously in the cold, wet weather. Its plants were healthier and produced higher yields at more gardens. Gardeners with a taste preference selected 'Space'. 'Space' has been a strong performer in our trials for years.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalade</td>
<td>56</td>
<td>78</td>
<td>7.00</td>
</tr>
<tr>
<td>Space</td>
<td>44</td>
<td>67</td>
<td>6.89</td>
</tr>
</tbody>
</table>

(13 sites)

### Spinach, Savoy Leaf (Fall)

The rounded leaves of 'Avon' were more attractive than the pointed leaves of 'Regiment'. More gardeners preferred the taste of 'Avon'. 'Avon' germinated better. The varieties were healthy and produced similar yields.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avon</td>
<td>57</td>
<td>88</td>
<td>6.50</td>
</tr>
<tr>
<td>Regiment</td>
<td>43</td>
<td>88</td>
<td>6.25</td>
</tr>
</tbody>
</table>

(12 sites)

### Spinach, Smooth Leaf (Fall)

'Olympia' germinated better and had healthier plants. Its yields were earlier and higher. Gardeners liked the taste of both varieties. Nearly all gardeners recommended 'Olympia', while most gardeners did not recommend 'Lakeside'.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lakeside</td>
<td>20</td>
<td>40</td>
<td>4.80</td>
</tr>
<tr>
<td>Olympia</td>
<td>80</td>
<td>90</td>
<td>6.70</td>
</tr>
</tbody>
</table>

(18 sites)

### Spinach, Smooth Leaf (Spring)

'Space' produced higher yields and resisted bolting better at more sites. Gardeners liked the rounded leaf shape of 'Space' more than the pointed leaf shape of 'Seaside'. 'Seaside' grew well; many gardeners enjoyed its taste.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seaside</td>
<td>33</td>
<td>61</td>
<td>7.29</td>
</tr>
<tr>
<td>Space</td>
<td>67</td>
<td>83</td>
<td>8.00</td>
</tr>
</tbody>
</table>

(22 sites)

### Squash, Semi-Crookneck

'Gentry' and 'Gold Star' were very similar varieties, and gardeners were pleased with both of them. Both varieties had healthy plants that produced lots of fruits. 'Gentry' produced earlier and higher yields at more sites.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentry</td>
<td>50</td>
<td>83</td>
<td>9.17</td>
</tr>
<tr>
<td>Gold Star</td>
<td>50</td>
<td>67</td>
<td>8.83</td>
</tr>
</tbody>
</table>

(6 sites)

### Squash, Dark Green Zucchini

Both varieties were recommended by nearly all gardeners. 'Raven' produced earlier crops at more sites, and numerous gardeners felt its fruits were more attractive and tasted better. Both varieties have done well in our trials for years.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert</td>
<td>40</td>
<td>90</td>
<td>7.80</td>
</tr>
<tr>
<td>Raven</td>
<td>60</td>
<td>90</td>
<td>8.70</td>
</tr>
</tbody>
</table>

(10 sites)

### Squash, Green Zucchini

Both varieties produced attractive, delicious fruits. Most gardeners preferred 'Cashflow'; its vines were healthier. Yields were comparable. Several gardeners noted the earliness of 'Spineless Beauty', a proven performer in ND.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cashflow</td>
<td>64</td>
<td>73</td>
<td>7.64</td>
</tr>
<tr>
<td>Spineless Beauty</td>
<td>36</td>
<td>55</td>
<td>6.91</td>
</tr>
</tbody>
</table>

(15 sites)

### Squash, Winter Multicolor Acorn

'Carnival' was preferred and recommended by all gardeners. 'Carnival' was easy to grow, healthy, and produced higher yields. Gardeners loved the green, gold and yellow flecks on its rind; it was pretty enough to use as a decoration.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnival</td>
<td>100</td>
<td>100</td>
<td>7.50</td>
</tr>
<tr>
<td>Celebration</td>
<td>0</td>
<td>50</td>
<td>5.50</td>
</tr>
</tbody>
</table>

(7 sites)
Squash, Winter Tan Acorn

The hybrid ‘Baked Potatoes’ germinated better, grew vigorously and produced larger fruits. The heirloom ‘Thelma Sanders’ had more flavorful flesh. Gardeners were pleased with the yields of both varieties.

Squash, Winter Buttercup

‘Bonbon’ ripened earlier and was more productive in most gardens. ‘Autumn Cup’ was satisfactory to most gardeners, but it did not excel in any traits. Both varieties had healthy vines, and their fruits had sweet, delicious flesh.

Squash, Winter Baby Butternut

‘Butter Baby’ vines were bushier, more vigorous and more productive. Its fruits were slightly smaller, which many gardeners preferred. Gardeners liked the taste of both. This trial was more popular than the standard butternut trial.

Squash, Winter Butternut

‘Early Butternut’ has done well in our trials for years, and it grew well this year. Most gardeners preferred it over ‘Atlas’, and more gardeners recommended it. These varieties were rated very similarly for all traits.

Squash, Winter Orange Hubbard

‘Red Kuri’ germinated better and its vines were healthier and more productive. ‘Red Kuri’ was a more consistent performer across sites. Fruits of both varieties were beautiful and delicious. Their vines were notably vigorous.

Swiss Chard, Multicolor

Gardeners liked both varieties. ‘Bright Lights’ and ‘Northern Lights’ were rated similarly for most traits including yields and taste. The colors of ‘Bright Lights’ were more vibrant; this led to a vast majority of gardeners preferring it.

Turnip, Purple Top (Fall)

Both varieties struggled in the cold, wet autumn to develop full-sized roots. The limited data available showed a strong preference for ‘Purple Prince’ over ‘Purple Top White Globe’. It grew quicker and produced higher yields.

Turnip, Red (Fall)

Data are limited in this trial. Neither variety produced full-sized roots under the cold, wet conditions. ‘Tsugaru Scarlet’ showed more vigor, leading to higher yields. All gardeners preferred it over ‘Scarlet Queen’.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baked Potatoes</td>
<td>50</td>
<td>100</td>
<td>8.00</td>
</tr>
<tr>
<td>Thelma Sanders</td>
<td>50</td>
<td>100</td>
<td>8.00</td>
</tr>
<tr>
<td>Bonbon</td>
<td>59</td>
<td>71</td>
<td>7.41</td>
</tr>
<tr>
<td>Autumn Cup</td>
<td>41</td>
<td>53</td>
<td>6.71</td>
</tr>
<tr>
<td>'Lakota'</td>
<td>33</td>
<td>67</td>
<td>6.00</td>
</tr>
<tr>
<td>Red Kuri</td>
<td>67</td>
<td>92</td>
<td>7.58</td>
</tr>
<tr>
<td>'Bright Lights'</td>
<td>77</td>
<td>86</td>
<td>8.54</td>
</tr>
<tr>
<td>'Northern Lights'</td>
<td>23</td>
<td>86</td>
<td>7.92</td>
</tr>
<tr>
<td>'Purple Prince'</td>
<td>100</td>
<td>100</td>
<td>9.50</td>
</tr>
<tr>
<td>Purp. Top W. G.</td>
<td>0</td>
<td>100</td>
<td>7.50</td>
</tr>
<tr>
<td>Scarlet Queen</td>
<td>0</td>
<td>0</td>
<td>4.00</td>
</tr>
<tr>
<td>'Tsugaru Scarlet'</td>
<td>100</td>
<td>100</td>
<td>7.00</td>
</tr>
</tbody>
</table>
**Turnip, White (Fall)**

The very cold, wet autumn prevented both varieties from developing full-sized roots. ‘Hakurei’ germinated better, had healthier plants and produced higher yields at more sites. Data are very limited in this trial.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hakurei</td>
<td>75</td>
<td>75</td>
<td>6.00</td>
</tr>
<tr>
<td>Tokyo Cross</td>
<td>25</td>
<td>75</td>
<td>5.00</td>
</tr>
</tbody>
</table>

(4 sites)

**Watermelon, Red Allsweet**

‘Sangria’ and ‘Stargazer’ yields were low. ‘Stargazer’ produced more ripe melons at more sites. More gardeners liked the looks and taste of ‘Stargazer’ melons as well. Gardeners were evenly split on which variety they preferred.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sangria</td>
<td>50</td>
<td>63</td>
<td>6.38</td>
</tr>
<tr>
<td>Stargazer</td>
<td>50</td>
<td>75</td>
<td>7.13</td>
</tr>
</tbody>
</table>

(9 sites)

**Watermelon, Red Early**

‘Sweet Dakota Rose’ was developed in ND and it showed its superiority here this summer. Gardeners were pleased with the taste and appearance of its melons. Yields of both varieties were low, but ‘Sweet Dakota Rose’ produced more.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shiny Boy</td>
<td>35</td>
<td>59</td>
<td>5.88</td>
</tr>
<tr>
<td>Sweet Dak. Rose</td>
<td>65</td>
<td>71</td>
<td>8.35</td>
</tr>
</tbody>
</table>

(23 sites)

**Watermelon, Yellow**

‘Petite Yellow’ produced earlier and produced more ripe melons. It was a more reliable performer. Gardeners were split on which variety tasted better, and they recommended both varieties at an equal percentage.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petite Yellow</td>
<td>75</td>
<td>63</td>
<td>6.38</td>
</tr>
<tr>
<td>Yellow Doll</td>
<td>25</td>
<td>63</td>
<td>6.13</td>
</tr>
</tbody>
</table>

(11 sites)

**Basil, Compact**

Gardeners liked both varieties and no clear and consistent differences were detected. Most gardeners preferred ‘Emma’. These gardeners commented that ‘Emma’ had sturdy plants that grew robustly, producing higher yields.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolce Fresca</td>
<td>38</td>
<td>69</td>
<td>7.62</td>
</tr>
<tr>
<td>Emma</td>
<td>62</td>
<td>77</td>
<td>7.69</td>
</tr>
</tbody>
</table>

(14 sites)

**Basil, Large Leaf**

‘Italian Large Leaf’ and ‘Newton’ were rated similarly for all traits. Neither variety showed a particular strength or weakness. Gardeners were pleased with the health, productivity and taste of both varieties.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian Large Leaf</td>
<td>67</td>
<td>75</td>
<td>7.33</td>
</tr>
<tr>
<td>Newton</td>
<td>33</td>
<td>83</td>
<td>6.67</td>
</tr>
</tbody>
</table>

(13 sites)

**Parsley, Flat Leaf**

‘Giant of Italy’ germinated better, was healthier, grew faster and produced higher yields. Its long stems made it easy to harvest. It was very reliable and was liked by all gardeners. Those who preferred ‘Peione’ often felt it tasted better.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giant of Italy</td>
<td>50</td>
<td>100</td>
<td>8.33</td>
</tr>
<tr>
<td>Peione</td>
<td>50</td>
<td>67</td>
<td>7.83</td>
</tr>
</tbody>
</table>

(6 sites)

**Cosmos, Rose**

Gardeners loved ‘Rubenza’. Its cranberry-red flowers were vibrant when opening, fading to a soft rose. ‘Xsenia’ had a more compact and uniform habit, but gardeners were less fond of its earthy-pink color. Both were prolific bloomers.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubenza</td>
<td>81</td>
<td>86</td>
<td>8.33</td>
</tr>
<tr>
<td>Xsenia</td>
<td>19</td>
<td>57</td>
<td>6.24</td>
</tr>
</tbody>
</table>

(25 sites)
**Cosmos, Striped**

Gardeners enjoyed the beauty of both varieties. Gardeners liked ‘Capriola’ for its earliness to bloom and more compact habit. ‘Picotee’ had taller plants with more foliage, plus lots of flowers. Both varieties were good for cutting.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capriola</td>
<td>53</td>
<td>87</td>
<td>7.86</td>
</tr>
<tr>
<td>Picotee</td>
<td>47</td>
<td>80</td>
<td>7.86</td>
</tr>
</tbody>
</table>

(16 sites)

**Cosmos, White**

Gardeners liked both varieties and most preferred ‘Afternoon White’. It had larger flowers and bloomed earlier at more gardens. Both varieties were healthy and bloomed prolifically all summer and fall. ‘Purity’ grew a little taller.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afternoon White</td>
<td>60</td>
<td>60</td>
<td>7.80</td>
</tr>
<tr>
<td>Purity</td>
<td>40</td>
<td>60</td>
<td>6.60</td>
</tr>
</tbody>
</table>

(11 sites)

**Sunflower, Confectionary**

Gardeners were generally disappointed. Diseases, deer, squirrels, cold weather and winds prevented most gardeners from harvesting any quality seeds. ‘Titan’ produced more seeds, but most gardeners did not recommend the variety.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolian Giant</td>
<td>40</td>
<td>55</td>
<td>5.27</td>
</tr>
<tr>
<td>Titan</td>
<td>60</td>
<td>27</td>
<td>5.18</td>
</tr>
</tbody>
</table>

(16 sites)

**Sunflower, Orange**

Both ‘Country Roads’ and ‘Gold Rush’ bloomed early and produced lots of flowers. Most gardeners preferred ‘Gold Rush’; this classic golden sunflower bloomed more abundantly in more gardens. Both did well as cut flowers.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Roads</td>
<td>43</td>
<td>71</td>
<td>7.57</td>
</tr>
<tr>
<td>Gold Rush</td>
<td>57</td>
<td>71</td>
<td>8.14</td>
</tr>
</tbody>
</table>

(7 sites)

**Sunflower, Red**

The stalks of ‘Moulin Rouge’ were healthier, more vigorous and bloomed earlier than those of ‘Chianti’. ‘Moulin Rouge’ flowers were large and stunning. Most gardeners liked ‘Chianti’ but loved ‘Moulin Rouge’, an extraordinary variety.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chianti</td>
<td>9</td>
<td>64</td>
<td>6.55</td>
</tr>
<tr>
<td>Moulin Rouge</td>
<td>91</td>
<td>100</td>
<td>7.91</td>
</tr>
</tbody>
</table>

(14 sites)

**Zinnia, Candystripe**

‘Peppermint Stick’ germinated better and bloomed earlier. Its plants were taller, bushier and full of flowers. ‘Pop Art’ did not excel in any traits. Gardeners preferred white flowers with red streaking over any yellow or non-streaked blooms.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peppermint Stick</td>
<td>58</td>
<td>75</td>
<td>7.04</td>
</tr>
<tr>
<td>Pop Art</td>
<td>42</td>
<td>71</td>
<td>6.79</td>
</tr>
</tbody>
</table>

(29 sites)

**Zinnia, Giant Dahlia**

‘Benary’s Giant’ flowers were large and showy. Its plants were loaded with flowers. Most gardeners felt ‘Benary’s Giant’ looked prettier than ‘State Fair’ in their garden. ‘State Fair’ bloomed earlier. Both varieties were good for cutting.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benary’s Giant</td>
<td>67</td>
<td>85</td>
<td>8.41</td>
</tr>
<tr>
<td>State Fair</td>
<td>33</td>
<td>81</td>
<td>7.63</td>
</tr>
</tbody>
</table>

(30 sites)

**Zinnia, Mexican**

‘Persian Carpet’ flowers were larger, coming in shades of gold and red. Gardeners liked the compact habit of ‘Jazzy’. Its blooms had a wider variety of colors. More gardeners felt ‘Jazzy’ was prettier than ‘Persian Carpet’ in their garden.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pref (%)</th>
<th>Rec (%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazzy</td>
<td>38</td>
<td>76</td>
<td>7.57</td>
</tr>
<tr>
<td>Persian Carpet</td>
<td>62</td>
<td>81</td>
<td>8.00</td>
</tr>
</tbody>
</table>

(28 sites)
Bean, Green Snap

Varieties

‘Bush Blue Lake 274’
56 days. The standard for quality. Pods are medium green and stringless. Dependable yields.

‘Lewis’
53 days. Attractive, dark green pods on upright plants. Heavy yielding and easy to pick.

Data
Gardeners at 29 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>B.B. Lake</th>
<th>Lewis</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>31%</td>
<td>23%</td>
<td>46%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>41</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>30</td>
<td>52</td>
<td>17</td>
</tr>
<tr>
<td>Higher yields</td>
<td>29</td>
<td>50</td>
<td>21</td>
</tr>
<tr>
<td>More attractive pods</td>
<td>26</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>Tasted better</td>
<td>17</td>
<td>35</td>
<td>48</td>
</tr>
<tr>
<td>Preference</td>
<td>38</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>67</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>7.42</td>
<td>8.29</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>9.00</td>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Bush Blue Lake 274’

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC

‘Bush Blue Lake 274’ plants were healthy, bushier and produced a good crop of beans all summer long.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC

The rabbits ate the plants down to nubs—but both varieties came back and produced. Awesome! Both produced until October 1.

The pods of ‘Bush Blue Lake 274’ were long, straight and tasted great.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SC

The vines of ‘Bush Blue Lake 274’ were healthier, bushier and more productive. I loved the long, lean look of ‘Lewis’ pods.

Best green bush bean varieties

Top choice
Jade II

Strong performers
Bush Blue Lake 274
Derby
Espada
Greenfield
Inspiration
Lewis
Pike
Provider
Strike

Both varieties are very good. ‘Bush Blue Lake 274’ yielded longer.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 MN
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 MN

‘Bush Blue Lake 274’ pods were not as tough when eating.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 MN
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 MN

‘Bush Blue Lake 274’ had great plants and pods. Both varieties produced a great bean crop.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 NC
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 NC

‘Bush Blue Lake 274’ was a better producer.

Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 NW
Bush Blue Lake 274 🌟🌟🌟🌟🌟😊 🟠 SW

‘Bush Blue Lake 274’ had much better yield and lasted into July and August.
Prefer ‘Lewis’

Bush Blue Lake 274 Lewis
Strong winds damaged the seedlings of both varieties. I replanted the trial on June 14 and both varieties produced very well. ‘Bush Blue Lake 274’ produced larger pods, leading to higher yields. I prefer the smaller pod of ‘Lewis’; it looked daintier. I prefer its delicate taste, too.

Bush Blue Lake 274 Lewis
The germination rate of ‘Lewis’ was twice that of ‘Bush Blue Lake 274’. ‘Lewis’ plants looked stronger and produced 2 weeks earlier. Its young beans were very flavorful, meaty, straight, dark green—great for canning whole. The initial picking was especially good. Funny thing—I have always grown ‘Bush Blue Lake 274’ in the past.

Bush Blue Lake 274 Lewis
I liked that ‘Lewis’ was more like a French bean. The pods were thin, a little sweeter and more tender. I was very happy with both varieties, as ‘Bush Blue Lake 274’ produced longer and ‘Lewis’ earlier, so I had lots of beans most of the summer.

Bush Blue Lake 274 Lewis
Both varieties are really good; both were delicious. ‘Lewis’ produced more and was healthier. ‘Bush Blue Lake 274’ pods were larger and had some black spots on them.

Bush Blue Lake 274 Lewis
Both varieties kept producing through the summer. The crop was good. Both varieties tasted good. ‘Lewis’ produced more yield and its pods were nice and straight. ‘Bush Blue Lake 274’ germinated earlier.

Bush Blue Lake 274 Lewis
‘Lewis’ was earlier. Its pods were more attractive and tasted better.

Bush Blue Lake 274
For a cooler, wetter year both did well; ‘Lewis’ a little better. Both tasted great. ‘Lewis’ produced 3 pint cases of canned beans before ‘Bush Blue Lake 274’ was ready to be picked. ‘Lewis’ pods were smoother, darker green in color, and easier to prepare. I have been planting ‘Blue Lake 274’ beans for many years. Never did I ever think a bean could beat ‘Bush Blue Lake 274’ but ‘Lewis’ did.

Bush Blue Lake 274 Lewis
‘Lewis’ ripened earlier and produced more pods. Its pods were more attractive.

Bush Blue Lake 274 Lewis
We had a bumper crop of beans. The plants were very healthy, and both grew well. ‘Lewis’ had nice, straight pods. Its plants were more manageable. At the first picking, ‘Lewis’ yielded 3 gallons, compared to 1 gallon for ‘Bush Blue Lake 274’. The vines of ‘Bush Blue Lake 274’ were fuller with bigger leaves. It was hard to find these beans. The beans of ‘Bush Blue Lake 274’ were slightly better in taste.

Bush Blue Lake 274 Lewis
I would love to grow ‘Lewis’ again. Only about 25% of my plants germinated, but those that did produced very well, and tasted excellent, even though they didn't bush out like the others. I even got a second harvest after 6 inches of rain revived them in September.

‘Lewis’ ripened earlier and produced higher yields.
### Prefer ‘Lewis’ (continued)

**Bush Blue Lake 274** ★★★★★ ☺ ☠

‘Lewis’ germinated and sprouted later and slower—here and there. Eventually all came up very well. ‘Lewis’ plants were small, but they produced a good quantity of beans—not the best I’ve ever had—but it was an unusual year. ‘Bush Blue Lake 274’ had healthy-looking plants and blossoms, it had very few beans! This was unbelievable and the worst bean crop I’ve ever had—and I usually plant ‘Bush Blue Lake 274’.

**Bush Blue Lake 274** ★★★★★ ☺ ☠

‘Lewis’ had excellent germination; had a more upright and less dense habit, making it much easier to harvest (it was easier to see the beans); first harvested on July 22; produced a lovely “second wind” crop in September, causing me to get the canner back out and putting it far ahead of ‘Bush Blue Lake 274’ in terms of yield; these beans were beautiful! Long, slender and uniform — the nicest beans I’ve ever picked! ‘Bush Blue Lake 274’ was floppier (the plants kind of laid on the ground) and was more fragile — both the vines and the beans broke more easily during watering, wind and harvesting. Its first harvest was July 26. These were a very nice, tasty bean that I would have been happy with any other year, but they paled in comparison to ‘Lewis’.

**Bush Blue Lake 274** ★★★★★ ☺ ☠

‘Lewis’ plants held up better. ‘Lewis’ pods looked nicer and were of more uniform size.

**Bush Blue Lake 274** ★★★★★ ☺ ☠

I was not at all impressed with ‘Bush Blue Lake 274’. The vines were very large and had few beans. They were hard to pick, and vines were fragile. ‘Lewis’ performed much better overall.

### No Preference

**Bush Blue Lake 274** ★★★★★ J ☠

I was not at all impressed with ‘Bush Blue Lake 274’. The vines were very large and had few beans. They were hard to pick, and vines were fragile. ‘Lewis’ performed much better overall.

### Conclusions

Most gardeners preferred ‘Lewis’. It ripened earlier and produced higher yields. Gardeners were especially impressed by the quality of its pods: dark green, straight and slender. ‘Bush Blue Lake 274’ plants were healthy, bushier, and produced a good crop of medium green, meaty pods all summer long.

Gardeners were especially impressed by the quality of ‘Lewis’ pods. They were dark green, straight and slender.
Bean, Green Filet

Varieties

‘Crockett’
60 days. Pods are slender and deep green. Yields are heavy and continuous. Proven performer in North Dakota.

‘Serengeti’
55 days. Pods are medium green, slim, straight and tender. Sturdy plants support high yields.

Data

Gardeners at 43 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Crock’t</th>
<th>Sereng’i</th>
<th>Same</th>
</tr>
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<tbody>
<tr>
<td>Germinated best</td>
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<td>Healthier plants</td>
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</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Crockett’

Crockett 🌟🌟🌟🌟🌟 😊 MN
Serengeti 🌟🌟🌟🌟😊 SE

‘Crockett’ was more flavorful and had richer color.

Crockett 🌟🌟🌟🌟🌟 😊 MN
Serengeti 🌟🌟🌟🌟😊 SE

‘Crockett’ had a much faster and higher germination rate. We like the looks of its long, slender, dark green pods—they never got big and seedy like those of other varieties. We did a blind taste test and ‘Crockett’ was the winner.

‘Crockett’ is an exceptional variety. This year it was recommended by more gardeners than any other variety in our entire program.

Best green filet bean varieties

Top choice
‘Crockett’

Strong performers
‘Calima’
‘Maxibel’
‘Serengeti’
Prefer ‘Crockett’ (continued)

‘Crockett’ was exceptional in every way! Beautiful, sturdy plants that produced dark green, perfectly long, slender beans in abundance and kept on producing well late; in fact, still had a few nice beans on the plants until I pulled them on October 1. ‘Serengeti’ plants were slightly less sturdy and less prolific, and its beans were not as deep green compared to those of ‘Crockett’. I gave a few seeds of each variety to my sister who lives in Langdon. She was super impressed with ‘Crockett’ as well!

Both varieties germinated well; both grew into very healthy, bushy plants. ‘Crockett’ bloomed first, also producing the first pods. Outstanding yields from both varieties—wow! Loved, loved, loved the deep green color of ‘Crockett’ pods plus the straightness of this awesome variety. Tender and delicious, a great green bean to use at mealtime and just can't be beat when used for canning ‘dilly beans’. I’m totally amazed with ‘Crockett’! It’s a Grand Champion among green filet beans.

Both varieties are very good producers with great pods. The pods of ‘Crockett’ are nicer looking, dark green color.

Plants of both varieties were very weak and broke off easily. Very few plants were alive at harvest time.

‘Crockett’ showed better germination. Both varieties produced a lot of pods.

‘Crockett’ pods are dark green, glossy and delicious. Very high yields.

Both varieties were great! The best tasting beans I’ve tried. Heavy producers! I liked the color of ‘Crockett’ pods.

I enjoyed the dark, bright green color of ‘Crockett’ pods. They were straighter too. Both varieties made a comeback once we finally got rain in August.

These varieties are very similar. I had lots of slugs in my garden that really ate the bean plants, so I didn't have the best yield.

‘Crockett’ pods were tender, darker green, and straighter. The taste of ‘Serengeti’ was a bit tougher.

Gardeners raved over the long, slender, straight, dark green pods of ‘Crockett’—the ultimate in quality.
**Prefer ‘Crockett’ (continued)**

<table>
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<th>Variety</th>
<th>Recommendation to other gardeners (yes or no)</th>
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I liked the flavor, tenderness and vibrant green color of ‘Crockett’ pods. ‘Crockett’ produced an abundance of beans. I picked every other day and usually had a large colander full. Both varieties were very good.

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‘Crockett’ pods were straighter and brighter green. They were easier to put into pint jars for making spiced dilly beans. Both varieties were very tasty.

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Better germination; way more beans per plant. Pods were darker green and better tasting. ‘Serengeti’ germination was about 50%.

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‘Crockett’ pods were straighter. I love these long, skinny pods; tender and crisp.

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‘Crockett’ had healthier plants and earlier yields.

**‘Crockett’ produced heavy, early crops.**

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Both varieties have nice and straight pods. I liked the size and shape of ‘Crockett’ pods.

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‘Crockett’ is an excellent green bean! Pretty deep green color, very productive, great taste. Both varieties produced well, but ‘Crockett’ pods looked and tasted better.

**Prefer ‘Serengeti’**

<table>
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Both varieties produced pods of very good quality. Their plants were upright and short, and produced good yields into late September. The pods remained edible even when they were maturing.

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</table>

‘Serengeti’ came up better and faster, but ‘Crockett’ germinated very well too. The plants of both varieties looked good. They both produced good yields. I am still getting beans off the plants and they are blossoming for the third time now. I loved both varieties. Both were wonderful. They had nice green color and they had nice straight pods. Great for pickling and canning.

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**Key to Site Reports**

(Reports are presented from east to west)

<table>
<thead>
<tr>
<th>Ratings (1 to 10)</th>
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<tr>
<td>Variety B</td>
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</tbody>
</table>

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**Locations**

MN = Minnesota  
NE = Northeast  
SE = Southeast  
NC = North Central  
SC = South Central  
NW = Northwest  
SW = Southwest  
MB = Manitoba  
SK = Saskatchewan  
SD = South Dakota  
MT = Montana
Prefer ‘Serengeti’ (continued)

Both varieties were very good eating and good producers. I liked the taste and deep green color of ‘Serengeti’.

Crockett ★★★★★ ☺ ☻ NC
Serengeti ★★★★★ ☺ ☻

The beans were cropped once by an animal. ‘Serengeti’ produced 8 pounds; ‘Crockett’ produced 6.25 pounds. I found ‘Crockett’ was easier to pick—they grew in clusters that enabled me to pick a handful at once. ‘Serengeti’ beans grew farther apart which I picked more on a bean by bean basis.

Crockett ★★★★★ ☺ ☻ SC
Serengeti ★★★★★ ☺ ☻ NW

‘Serengeti’ germinated much better. I wish ‘Crockett’ had germinated better—don’t know if it was because we have clay soil or the seeds themselves. I prefer ‘Serengeti’ because of its abundance of produce, and the pods grow really long and straight. I like the presentation they make grilled. Easy to can into jars too. ‘Serengeti’ tasted more like a green pea pod than a green bean! ‘Crockett’ tastes like a green bean.

Crockett ★★★★★ ☺ ☻ SW
Serengeti ★★★★★ ☺ ☻ NW

Both of these varieties started producing 2 weeks after my standard variety. They were nice, long, green beans. They made it through 3 weeks without water.

Crockett ★★★★★ ☺ ☻ NC
Serengeti ★★★★★ ☺ ☻

‘Serengeti’ started producing two weeks earlier. ‘Crockett’ pods are such an attractive deep green color and hence, may be more nutritious. I like filet beans very much because they can be cooked whole—no cutting!

Crockett ★★★★★ ☺ ☻ SW
Serengeti ★★★★★ ☺ ☻ NW

‘Crockett’ germinated almost 1 week earlier. It grew faster and produced better looking beans.

Conclusions

‘Crockett’ is an exceptional variety. It has performed well in our trials every year, and this year was recommended by more gardeners than any other variety in our entire program. Gardeners raved over its long, slender, straight, dark green pods—the ultimate in quality. ‘Crockett’ produced heavy, early crops. The plants of both ‘Crockett’ and ‘Serengeti’ were healthy and produced tasty pods.
Bean, Green Pole

Varieties

‘Kentucky Blue’
58 days. Award-winner known for its ‘Kentucky Wonder’ flavor and ‘Blue Lake’ sweetness.

‘Monte Cristo’
71 days. Big yields of bright green, stringless, 10-inch pods. Vigorous vines produce from July to frost.

Data

Gardeners at 8 sites submitted information.

<table>
<thead>
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<th>Trait</th>
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<td>29%</td>
<td>29%</td>
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</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Kentucky Blue’

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SE

Both varieties had vigorous plants and produced very well. ‘Kentucky Blue’ produced more beans.

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SE

‘Kentucky Blue’ performed best overall. Rabbits and deer ate most of it.

Prefer ‘Monte Cristo’

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SE

‘Monte Cristo’ produced a much higher yield.

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 NC

Neither variety was productive when it was hot and dry early in the season. After we got some good rains in August, both varieties did much better. ‘Monte Cristo’ was more productive.

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SC

‘Monte Cristo’ vines were much healthier and were very good producers. Its pods were extremely long and tasty.

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SE

‘Monte Cristo’ vines were hardy and aggressive on the trellis. They stayed healthy through the entire season and produced a lot of pods.

Kentucky Blue ⭐⭐⭐⭐⭐ 😊 🍎
Monte Cristo ⭐⭐⭐⭐⭐ 😊 SW

They were hard to grade with ‘Monte Cristo’ only winning the taste test and ‘Kentucky Blue’ winning the rest of the categories.

Conclusions

‘Monte Cristo’ was most impressive. Its vines were healthy and produced higher yields. ‘Monte Cristo’ pods were bright green, longer and very attractive. ‘Kentucky Blue’ produced earlier. The pods of both varieties were flavorful.

‘Monte Cristo’ vines were healthy and produced higher yields. Its pods were bright green, longer and very attractive.
Bean, Purple Snap

Varieties

‘Amethyst’
56 days. Pods are lustrous, thin and straight. Very good flavor. Pods turn green when cooked.

‘Purple Queen Improved’
55 days. Dark purple blooms with colorful red stems. Delicious pods turn green when cooked.

Data
Gardeners at 17 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Amethyst</th>
<th>Impr.</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>29%</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>13</td>
<td>19</td>
<td>69</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>6</td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td>Higher yields</td>
<td>19</td>
<td>56</td>
<td>25</td>
</tr>
<tr>
<td>More attractive pods</td>
<td>6</td>
<td>19</td>
<td>75</td>
</tr>
<tr>
<td>Tasted better</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Preference</td>
<td>40</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
<td>56</td>
<td>75</td>
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</tr>
<tr>
<td>Mean score¹</td>
<td>7.25</td>
<td>7.69</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Amethyst’

Amethyst ☀ ☀ ⧧ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE
Purple Queen Impr. ☀ ☀ ☀ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE

‘Amethyst’ produced three times the yield of ‘Purple Queen Improved’. The tastes of the pods were similar, but I prefer the texture of ‘Amethyst’ pods. ‘Purple Queen Improved’ pods were more dense and chewier. Bugs ate holes in the leaves of both varieties.

Amethyst ☀ ☀ ⧧ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE
Purple Queen Impr. ☀ ☀ ☀ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE

‘Amethyst’ pods tasted better to us.

Amethyst ☀ ☀ ⧧ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE
Purple Queen Impr. ☀ ☀ ☀ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE

‘Amethyst’ tasted better.

Best purple bush bean varieties

Top choice
Purple Queen Improved

Strong performer
Royal Burgundy

Gardeners enjoyed the color and taste of both varieties’ pods.
Prefer ‘Purple Queen Improved’

Amethyst Purple Queen Impr. ☀ MN
It was very dry after planting, and I irrigated evenly. Then we got too much rain at once and they all looked like a loss. They came back. ‘Purple Queen Improved’ produced earlier and produced better yields. Its pods were larger, consistently dark in color and more uniform in shape. Among raw pods, ‘Amethyst’ tasted sweeter.

Amethyst Purple Queen Impr. ☀ SE
‘Purple Queen Improved’ was everything I look for in my beans. Its yields were earlier and higher. The pods of both varieties tasted very good but ‘Purple Queen Improved’ was my favorite. Both varieties germinated at near 100%.

Amethyst Purple Queen Impr. ☀ SC
‘Purple Queen Improved’ had healthier, slightly larger plants. It produced 2.4 pounds compared to 0.9 pounds for ‘Amethyst’ on the first harvest date. ‘Purple Queen Improved’ had more beans on the second harvest date.

Amethyst Purple Queen Impr. ☀ SC
‘Purple Queen Improved’ beans were thicker, straighter and easier to cut. The pods of both varieties were similar in length. I loved how their purple color made them easy to pick and quite pretty; but was so sad when they turned green while cooking (probably better so the kids would eat them).

Conclusions

Most gardeners preferred ‘Purple Queen Improved’ because it produced earlier and higher yields. Plant health and pod qualities among the varieties were similar. Gardeners enjoyed the color and taste of both varieties’ pods.

‘Purple Queen Improved’ produced earlier and higher yields.

No Preference

Amethyst Purple Queen Impr. ☀ SE
I was disappointed in how short the plants were. Many of the beans touched the ground and spoiled. We have sandy soil and received a lot of driving rain with cool temperatures that most likely affected the plants this year.
Bean, Vegetable Soybean

Varieties

‘Chiba Green’
82 days. Compact plants produce good yields in a concentrated set. Large pods with 3 beans each.

‘Tohya’
55 days. Compact plants produce a concentrated set of pale green pods. Delicious, buttery flavor.

Data

Gardeners at 4 sites submitted information.

| Trait               | Chiba Green | Tohya | Same%
|---------------------|-------------|-------|-------
| Germinated best     | 0%          | 0%    | 100%
| Healthier plants    | 50          | 50    | 0
| Harvested earlier   | 0           | 50    | 50
| Higher yields       | 50          | 0     | 50
| More attractive pods| 50          | 0     | 50
| Tasted better       | 0           | 50    | 50
| Preference          | 50          | 50    |
| Recommend (☺)       | 50          | 50    |
| Mean score¹         | 8.00        | 7.00  |
| Median score¹       | 8.00        | 7.00  |

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Conclusions

This was not a popular trial. In limited testing, ‘Tohya’ produced earlier yields and ‘Chiba Green’ produced higher yields. ‘Tohya’ has performed well in trials conducted in previous years. It matures early and produces delicious soybeans. ‘Chiba Green’ deserves another look.

‘Tohya’ matured earlier and ‘Chiba Green’ produced higher yields.

Prefer ‘Chiba Green’

Chiba Green  ★★★★★ ☺ ☪
Tohya        ★★★★★ ☺ NE
A rabbit got into the garden early in the season and topped the new growth on all soybeans. The plants recovered. ‘Tohya’ produced earlier, and ‘Chiba Green’ produced more pods. They tasted the same.

Prefer ‘Tohya’

Chiba Green  ★★★★★ ☺ ☪
Tohya        ★★★★★ ☺ SW
‘Tohya’ tasted slightly better.

Best vegetable soybean varieties
Top choice  Tohya
Strong performer  Envy
Bean, Yellow Snap

Varieties

‘Gold Rush’
54 days. Straight, flavorful pods stay in prime condition for a long time on the vine.

‘Golden Rod’
55 days. Bright yellow pods with buttery flavor. Vines are vigorous and productive.

Data

Gardeners at 16 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Gold Rush</th>
<th>Golden Rod</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>21%</td>
<td>21%</td>
<td>57%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>43</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>57</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Higher yields</td>
<td>36</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>More attractive pods</td>
<td>29</td>
<td>0</td>
<td>71</td>
</tr>
<tr>
<td>Tasted better</td>
<td>21</td>
<td>21</td>
<td>57</td>
</tr>
<tr>
<td>Preference</td>
<td>57</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>71</td>
<td>64</td>
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</tr>
<tr>
<td>Mean score⁴</td>
<td>7.57</td>
<td>7.29</td>
<td></td>
</tr>
<tr>
<td>Median score⁴</td>
<td>7.00</td>
<td>7.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Most gardeners preferred ‘Gold Rush’. Its plants were healthy and produced earlier yields.

Prefer ‘Gold Rush’

Gold Rush 🌟🌟🌟🌟🌟 😊 😕 🍅
Golden Rod 🌟🌟🌟🌟🌟 😊 SE

Both varieties recovered from rabbit damage more than once this summer. ‘Gold Rush’ produced better yields. We were impressed with both varieties.

Prefer ‘Golden Rod’

Gold Rush 🌟🌟🌟🌟🌟 😊 😕 🍅
Golden Rod 🌟🌟🌟🌟🌟 😊 SE

‘Golden Rod’ yielded 50% more pods. Its pods tasted sweeter and had more flavor. Its plants were healthier.

I wish I had double the plants of ‘Gold Rush’—they were so good!

<table>
<thead>
<tr>
<th>Trait</th>
<th>Gold Rush</th>
<th>Golden Rod</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Gold Rush’ was more productive.</td>
<td>🌟🌟🌟🌟🌟 😊 😕 🍅</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Gold Rush’ matured earlier.</td>
<td>🌟🌟🌟🌟🌟 😊 😕 🍅</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Gold Rush’ produced well.</td>
<td>🌟🌟🌟🌟🌟 😊 😕 🍅</td>
<td>NW</td>
<td></td>
</tr>
<tr>
<td>‘Gold Rush’ produced better.</td>
<td>🌟🌟🌟🌟🌟 😊 😕 🍅</td>
<td>SW</td>
<td></td>
</tr>
<tr>
<td>‘Golden Rod’ was easier to pick as the beans were in a group while ‘Gold Rush’ beans were single ones.</td>
<td>🌟🌟🌟🌟🌟 😊 😕 🍅</td>
<td>🍅</td>
<td>NE</td>
</tr>
</tbody>
</table>

Best yellow bush bean varieties

Top choice
Carson

Strong performers
Borsalino
Gold Rush
Rocdor

North Dakota Home Garden Variety Trials – 2019
Prefer ‘Golden Rod’ (continued)

Gold Rush ★★★★★ ☻ ☂ SE
Golden Rod ★★★★★ ☻ ☂ SE

‘Golden Rod’ tasted better.

Gold Rush ★★★★★ ☻ ☂ SC
Golden Rod ★★★★★ ☻ ☂ SC

‘Gold Rush’ was preferred by my Mom because it most resembled the texture and taste of green beans. My niece and I liked ‘Golden Rod’ because it had a buttery taste.

Gold Rush ★★★★★ ☻ ☂ SE
Golden Rod ★★★★★ ☻ ☂ SE

‘Golden Rod’ germinated better. ‘Golden Rod’ plants were taller, sturdier, and even put on more blossoms after a 4-inch rainfall. It produced more beans per plant. There were no noticeable differences between the varieties in the appearance of their pods. Both were delicious in a three-bean salad!

Gold Rush ★★★★★ ☻ ☂ SC
Golden Rod ★★★★★ ☻ ☂ SC

‘Golden Rod’ had bigger plants and higher yields.

Conclusions

Gardeners were pleased with both varieties but most preferred ‘Gold Rush’. Its plants were healthy and produced earlier yields. ‘Golden Rod’ plants were vigorous and productive. Neither variety excelled over the other in pod quality traits.

‘Golden Rod’ plants were vigorous and productive.
Beet, Gold

Varieties

‘Burpee’s Golden’
55 days. Golden orange roots. Sweet flavor and non-staining juice. Light-green leaves with gold ribs.

‘Golden Detroit’
55 days. Bright golden roots have a pyramidal shape. Plants grow vigorously. Delicious greens.

Data

Gardeners at 12 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Burp. Golden</th>
<th>Golden Detroit</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>40%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>22</td>
<td>11</td>
<td>67</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>43</td>
<td>29</td>
<td>29</td>
</tr>
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<td>Higher yields</td>
<td>71</td>
<td>29</td>
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</tr>
<tr>
<td>More attractive roots</td>
<td>29</td>
<td>14</td>
<td>57</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Preference</td>
<td>60</td>
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<tr>
<td>Recommend (☺)</td>
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<tr>
<td>Mean score¹</td>
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<tr>
<td>Median score¹</td>
<td>6.50</td>
<td>4.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Burpee’s Golden’

Burpee’s Golden ★★★★★ ☺ ☁️ ☊ MN
Golden Detroit ★★★★ ☁️ ☊ SE

Both varieties germinated below 50%. ‘Burpee’s Golden’ produced twice as much yield.

Burpee’s Golden ★★★★★ ☺ ☊ MN
Golden Detroit ★★★★★ ☁️ ☊ SW

‘Burpee’s Golden’ germinated faster and was a stronger, sturdier plant. The plants of both varieties were healthy and did well. ‘Burpee’s Golden’ produced an abundant crop of medium-sized beets—it yielded more than ‘Golden Detroit’. The roots of ‘Burpee’s Golden’ were more uniform.

I never tried golden beets before, and I really enjoyed these varieties. They are easy to grow with little maintenance. ‘Burpee’s Golden’ had higher yields and I liked the size of its roots when harvested.

‘Burpee’s Golden’ germinated better, grew vigorously and produced higher yields at more sites.

Best gold beet varieties

Top choice
Boldor
Strong performers
Burpee’s Golden
Touchstone Gold
Prefer ‘Golden Detroit’

Burpee’s Golden  ★★★★★  ☀  ☥
Golden Detroit  ★★★★★  ☀  SE

‘Golden Detroit’ had better yield and more consistent growth. Its taste was great. The plants of ‘Burpee’s Golden’ were smaller.

Burpee’s Golden  ★★★★★  ☀  ☥
Golden Detroit  ★★★★★  ☀  SC

‘Golden Detroit’ had a marginally larger root.

Burpee’s Golden  ★★★★★  ☀  ☥
Golden Detroit  ★★★★★  ☀  MB

‘Golden Detroit’ had better germination and yield. Both varieties had poor germination rates (less than 35%). The roots of ‘Golden Detroit’ were monstrous. Both varieties tasted sweet.

Conclusions

‘Burpee’s Golden’ germinated better, grew vigorously and produced higher yields. The leaves of both varieties were healthy and attractive. Gardeners liked the color and flavor of both varieties’ roots. ‘Golden Detroit’ produced low yields at several sites, and most gardeners did not recommend it.

Gardeners liked the healthy plant tops and quality roots of both varieties.
Beet, Red

Varieties

‘Kestrel’
53 days. Smooth, globular, deep-red roots. Glossy green tops resist diseases and tolerate drought.

‘Merlin’
55 days. Exceptional eating quality. Its dark red roots are round and smooth. Deep green, glossy leaves.

Data

Gardeners at 19 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Kestrel</th>
<th>Merlin</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>31%</td>
<td>25%</td>
<td>44%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>13</td>
<td>19</td>
<td>69</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>21</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Higher yields</td>
<td>36</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td>More attractive roots</td>
<td>7</td>
<td>21</td>
<td>71</td>
</tr>
<tr>
<td>Tasted better</td>
<td>7</td>
<td>13</td>
<td>80</td>
</tr>
<tr>
<td>Preference</td>
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<td>54</td>
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<tr>
<td>Recommend (☺)</td>
<td>86</td>
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<tr>
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<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Kestrel’

Kestrel

Merlin

‘Kestrel’ germinated slightly better, had a slightly higher yield and was earlier.

Kestrel

Merlin

Over half of the plants of both varieties did not develop roots larger than a marble.

Kestrel

Merlin

‘Kestrel’ produced four times as many beets. ‘Merlin’ did not germinate well.

‘Kestrel’ and ‘Merlin’ were healthy and produced bountiful yields. Gardeners liked the looks and flavors of both varieties.

Best red beet varieties

Top choice

Merlin

Strong performers

Bull’s Blood

Cylindra

Detroit Dark Red

Early Wonder

Tall Top

Red Ace

‘Kestrel’

‘Merlin’

Kestrel

Merlin

Kestrel

Merlin

Both varieties germinated very well. The yields were bountiful. ‘Merlin’ roots had a sweeter taste and were larger.
Prefer ‘Merlin’ (continued)

Kestrel
Merlin

Both varieties germinated well. Their plants were healthy and hardy. They produced at the same time. Both varieties had a very good yield, but I got a few more off ‘Merlin’. I loved the deep purple color of ‘Merlin’ roots. Both varieties tasted good.

Kestrel
Merlin

These varieties were very similar in taste and appearance. ‘Merlin’ was ready to harvest earlier.

Kestrel
Merlin

Rabbits loved both varieties. ‘Merlin’ was harder. It came back twice (about 80% after the first time) and produced two beets. ‘Kestrel’ never came back after the first feeding.

Kestrel
Merlin

Both varieties germinated well and stayed healthy despite challenging weather. When I processed my beets for the freezer, I got one more bag of ‘Merlin’ so the yields were close. I prefer ‘Merlin’ for its taste; slightly better. ‘Merlin’ continues to be a favorite of mine. It was hardy and produced nice yields of symmetrical roots. Gophers adored ‘Merlin’.

No Preference

Kestrel
Merlin

I only got about seven beets big enough to eat. I think the plants had Cercospora disease.

Kestrel
Merlin

No comments.

Conclusions

Both varieties germinated well, had healthy plants, and produced bountiful yields at the same time. Gardeners liked the looks and flavors of both varieties. ‘Merlin’ had a slim edge in root appearance and taste qualities.

Key to Site Reports

(reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>Garden type</th>
<th>Variety A</th>
<th>Variety B</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>Organic</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>NC</td>
<td>Uses inorganic fertilizers</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>NE</td>
<td>Uses inorganic pesticides</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>-</td>
<td>Not specified</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Variety A germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

‘Merlin’ had a slim edge in root appearance and taste qualities.
Beet, Red Canning

Varieties

‘Cylindra’
54 days. Straight and cylindrical, 5-inch-long roots can be cut into uniform slices.

‘Forono’
55 days. Very uniform roots grow 5 inches long. Smooth and easy to prepare for pickling.

Data

Gardeners at 22 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Cylindra</th>
<th>Forono</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>50%</td>
<td>6%</td>
<td>44%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>33</td>
<td>11</td>
<td>56</td>
</tr>
<tr>
<td>Harvested earlier</td>
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<td>12</td>
<td>35</td>
</tr>
<tr>
<td>Higher yields</td>
<td>47</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>More attractive roots</td>
<td>38</td>
<td>25</td>
<td>38</td>
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<tr>
<td>Tasted better</td>
<td>40</td>
<td>13</td>
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<tr>
<td>Preference</td>
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<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Cylindra’

‘Cylindra’ germinated better. It had healthy leaves. Its roots were bigger and had a deep red color.

Cylindra

Forono

‘Cylindra’ was first to produce.

The rich color of ‘Cylindra’ held up to cooking and canning. Both varieties tasted good.

Cylindra

Forono

‘Cylindra’ was better in all traits.

‘Cylindra’ had better germination and yield. I have grown ‘Forono’ in the past and had excellent results. I think the cool spring really affected the germination of both varieties.

Cylindra

Forono

Both varieties were great. ‘Cylindra’ roots looked and tasted a little better.

‘Cylindra’ germinated much better, matured earlier and produced higher yields. More gardeners who had a taste preference chose ‘Cylindra’.

Best red beet varieties

Top choice
Merlin

Strong performers
Bull’s Blood
Cylindra
Detroit Dark Red
Early Wonder Tall Top
Red Ace
Prefer ‘Cylindra’ (continued)

Cylindra           ★★★★★ ☀ ☒ NW
Forono             ★★★★ ☀ ☒ SW
‘Cylindra’ was very sweet—best ever.

Cylindra           ★★★★★ ☀ ☒ SW
Forono             ★★★★ ☀ ☒ NE
Only about 25% of ‘Forono’ seeds germinated; it did not grow well at all. Removing the skins of both of these canning beets was not easy; they did not slip off like I was used to with round beets. These long beets, however, slice up nicely for canning.

Cylindra           ★★★★★ ☀ ☒ NC
Forono             ★★★★ ☀ ☒ SC
‘Cylindra’ had higher germination, healthier plants, earlier yields, and resisted becoming fibrous. Both varieties produced large beets.

Prefer ‘Forono’

Cylindra           ★★★★ ☀ ☒ NC
Forono             ★★★★ ☀ ☒ SC
‘Forono’ was healthier. It produced larger beets and higher yields.

Cylindra           ★★★★★ ☀ ☒ SC
Forono             ★★★★ ☀ ☒ NC
I love the shape of these beets; will buy in the future versus round beets. ‘Forono’ roots were huge, yet not woody.

Cylindra           ★★★★ ☀ ☒ SC
Forono             ★★★★ ☀ ☒ NC
‘Forono’ had healthier plants and more attractive roots.

Cylindra           ★★★★★ ☀ ☒ NW
Forono             ★★★★ ☀ ☒ N NW
‘Cylindra’ plants grew faster. Its roots grew larger, faster and were wider. ‘Forono’ roots stayed long and slim and were perfect for slicing for pickles. ‘Forono’ tasted better. Sadly, neither beet was very tasty compared to the ‘Detroit Dark Red’ I usually plant. These tasted a bit like dirt. I have heard from others that ‘Cylindra’ beets are very tasty, but I did not find either variety very sweet and tasty. The garden season was dry. I watered lots, but not until we finally got some rain did the garden really thrive.

Cylindra           ★★★★ ☀ ☒ SW
Forono             ★★★★ ☀ ☒ NW
‘Forono’ made excellent pickled beets, even though they were quite large when I picked them. ‘Cylindra’ canned well, too.

Conclusions

‘Cylindra’ was superior. It germinated much better, matured earlier and produced higher yields. More gardeners who had a taste preference chose ‘Cylindra’. ‘Forono’ had healthy plants but was not exceptional in any way.

‘Forono’ had healthy plants but was not exceptional in any way.
Carrot, Garden (Nantes)

Varieties

‘Goldfinger’
69 days. Dark orange, Nantes roots with strong tops. Roots are uniform, straight and sweet.

‘Ingot’
67 days. Known for its great taste, smooth texture and rich aroma. Rich in vitamins and easy to grow.

Data
Gardeners at 49 sites submitted information.

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<thead>
<tr>
<th>Trait</th>
<th>Goldfinger</th>
<th>Ingot</th>
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<tr>
<td>Germinated best</td>
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<td>Higher yields</td>
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<tr>
<td>Tasted better</td>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Goldfinger’

Goldfinger 🤗🤗持ち込んでもリンゴを作り出す！😋
Ingot 😞😞持ち込んでもリンゴを作り出す！ Likes
‘Goldfinger’ had more attractive roots.

Goldfinger 🤗🤗持ち込んでもリンゴを作り出す！😋
Ingot 😞😞持ち込んでもリンゴを作り出す！ Likes
‘Goldfinger’ roots were sweeter, had better flavor and a nice shape.

Goldfinger 🤗🤗持ち込んでもリンゴを作り出す！😋
Ingot 😞😞持ち込んでもリンゴを作り出す！ Likes
Both varieties looked very healthy and produced average yields. ‘Goldfinger’ roots were straighter, a bit larger and better looking.

Goldfinger 🤗🤗持ち込んでもリンゴを作り出す！😋
Ingot 😞😞持ち込んでもリンゴを作り出す！ Likes
‘Goldfinger’ roots were slightly sweeter and darker orange.

Goldfinger 🤗🤗持ち込んでもリンゴを作り出す！😋
Ingot 😞😞持ち込んでもリンゴを作り出す！ Likes
‘Goldfinger’ rated better for all traits, including taste.

This was a very popular trial, and most gardeners were pleased with the performance of both varieties.
Prefer ‘Goldfinger’ (continued)

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SE

‘Goldfinger’ tasted sweeter. Its roots were more moister and firmer. Neither variety did well. The soil was too wet and chunky for sowing carrots. Slugs were a problem too.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NC

‘Goldfinger’ roots were more uniform and straighter.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NC

The trial was slow to start but ended up doing quite well. ‘Goldfinger’ was better all around. I liked the shape and taste of its roots. It germinated better and produced a bigger harvest.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SC

‘Goldfinger’ had better roots.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SC

‘Goldfinger’ roots were longer and had a much larger diameter. It tasted good. ‘Ingot’ was noticeably sweeter with a more distinct taste.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SC

Many of my fellow gardeners in our rental garden had trouble getting carrots to germinate—cold soil, washouts due to torrential rains. I guarded what germinated and was exceptionally pleased with what I did get. Both varieties deserve “extra credit” for doing as well as they did in an exceedingly challenging year! ‘Ingot’ produced a few more roots, and its roots were more uniform in size. ‘Goldfinger’ tasted better, but it was close.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SC

‘Goldfinger’ carrots tasted wonderful. The roots were long and straight—made for easy cleaning after this super wet fall. Only half the seeds of both varieties germinated.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SC

Both varieties were excellent. ‘Goldfinger’ roots were very uniform, never grew extremely huge, and they never got a woody center. ‘Ingot’ produced a higher yield.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NC

‘Goldfinger’ germinated better and had larger roots. It was a better producer.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NW

‘Goldfinger’ roots were better looking and better tasting. Both varieties had some hairy roots. Neither of these were as sweet as the ‘Napoli’ I grew in my garden.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NW

‘Goldfinger’ produced higher yields. There was lots of rain so there were lots of tender carrots! These varieties were quite similar.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NW

‘Goldfinger’ was a little bit better yielder.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NW

‘Goldfinger’ roots were sweeter. ‘Ingot’ had a stronger flavor. I preferred the crunch of ‘Goldfinger as the ‘Ingot’ was harder.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 NW

Both varieties were great. ‘Goldfinger’ roots looked more attractive.

Goldfinger  ★★★★★ 😏 😁
Ingot       ★★★★★ 😏 SW

‘Goldfinger’ roots were shorter, stubbier and sweeter tasting.

“Goldfinger” has been a strong performer in our trials for many years.
‘Ingot’ performed well and deserves further testing.

**Prefer ‘Ingot’**

Goldfinger 

*SE* MN

‘Ingot’ started out the best. The roots of both varieties were split and rotting in the ground. I think it was too wet and the ground was saturated by the time I harvested.

Goldfinger

Ingot

*SE* MN

‘Ingot’ had very good flavor. ‘Goldfinger’ did not have any flavor. Both varieties had nice looking roots.

Goldfinger

Ingot

*NE* MN

‘Ingot’ roots tasted a bit sweeter and were enjoyed more by our family. ‘Goldfinger’ roots were larger and longer. Yields of the varieties were similar.

Goldfinger

Ingot

Both did quite well. We had a great carrot crop once the seedlings emerged. ‘Ingot’ roots were more uniform in size.

Goldfinger

Ingot

*SE* NE

Strange gardening year—they came up and were stunted—small carrots.

Goldfinger

Ingot

‘Ingot’ roots looked and tasted better.

Goldfinger

Ingot

‘Ingot’ was easy to grow. The roots of both varieties were tasty and had a nice shape and size.

Goldfinger

Ingot

‘Ingot’ roots were more consistent in size.

Goldfinger

Ingot

I liked ‘Ingot’ because its roots weren’t as big. Both varieties were good tasting.

Goldfinger

Ingot

We harvested nice looking, straight carrots from both varieties. ‘Ingot’ roots were more consistent in size and sweeter. ‘Goldfinger’ had very poor germination, but we did not have much rain from May to July.

Goldfinger

Ingot

‘Ingot’ roots tasted better and were longer. Yields were about equal.

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**Key to Site Reports**

* (reports are presented from east to west)

**Recommendation to other gardeners (yes or no)**

**Garden types**

= Organic

= Uses inorganic fertilizers

= Uses inorganic pesticides

= Not specified

**Garden type**

**Location**

*Locations*

MN = Minnesota

NE = Northeast

SE = Southeast

NC = North Central

SC = South Central

NW = Northwest

SW = Southwest

MB = Manitoba

SK = Saskatchewan

SD = South Dakota

MT = Montana
Prefer ‘Ingot’ (continued)

Goldfinger ☺ Ingot ☺
‘Ingot’ had larger roots and was sweeter.

Goldfinger ☺ Ingot ☺ SC
Both varieties had very sweet and nice roots. ‘Ingot’ roots were generally bigger.

Goldfinger ☺ Ingot ☺ SC
‘Ingot’ germinated better. Both varieties really started to grow with the rains we finally got even though I tried to water.

Goldfinger ☺ Ingot ☺
The varieties were similar, but ‘Ingot’ tasted better.

Goldfinger ☺ Ingot ☺ SC
‘Ingot’ was definitely sweeter.

Goldfinger ☺ Ingot ☺ NW
‘Ingot’ produced well with same size carrots throughout the patch. They were very tasty and held up well to sautéing and roasting for freezing.

Goldfinger ☺ Ingot ☺ SW
‘Ingot’ was sweeter. Carrots of both varieties were nice and long.

Goldfinger ☺ Ingot ☺ SC
Both varieties were good, but ‘Ingot’ was better in all traits.

Goldfinger ☺ Ingot ☺ SW
‘Ingot’ seemed hardier.

Goldfinger ☺ Ingot ☺ MT
‘Ingot’ had better germination and healthier plants. Its roots were nice looking, deep orange and very tasty.

No Preference

Goldfinger ☺ Ingot ☺ NC
The roots of both varieties were stringy and very small. I would not grow either variety again.

Conclusions

This was a very popular trial, and most gardeners were pleased with the performance of both varieties. No consistent and significant differences were detected between the varieties. ‘Goldfinger’ has been a strong performer in our trials for many years. We are excited to find ‘Ingot’, a comparable variety that deserves further testing.

No consistent and significant differences were detected between the varieties.
Carrot, Large

Varieties

’Baltimore’
65 days. Dark orange roots grow over 12 inches long and 2 inches wide. Great for stews and juicing.

’New Kuroda’
73 days. Roots are deep-orange, smooth and tapered. Very sweet and flavorful. Tolerates heat.

Data

Gardeners at 18 sites submitted information.

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<th>New Kuroda</th>
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<td></td>
</tr>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ’Baltimore’

Both varieties were good. ’New Kuroda’ roots were compact and thick, more attractive, but harder to pull out of the soil; its stems were more likely to break off.

Both did quite well. We just dug all the carrots on October 20 and the quality of the very large carrots was excellent for both varieties. Even the 3-inch-diameter carrots were not woody, and we had tons to freeze and can. ’Baltimore’ roots were more uniform in size.

Both varieties produced large and flavorful, dark orange roots.

Both varieties were similar. Yields were good and very similar, but the roots tended to split due to rain. ’Baltimore’ had larger tops.

’Baltimore’ roots were longer and one inch in diameter. They had a beautiful color and appearance. It was sweet when raw, but not “sweet” when cooked; I do not care for sweetness in stews and soups. ’New Kuroda’ has beautiful, deep-orange color. It was very good cooked, but I did not care for their short, fat structure with lots of hairs. Both varieties cooked quickly and held their shape when cooked a long time in stews.
Most gardeners preferred ‘Baltimore’, primarily for its looks. ‘New Kuroda’ produced higher yields, and more gardeners preferred its taste.

Prefer ‘Baltimore’ (continued)

Baltimore ☭✭✭✭✭ ☭ ☄️ NW
New Kuroda ☭✭✭✭✭ ☭ ☄️ NW
‘Baltimore’ germinated better (100% compared to 75% for ‘New Kuroda’). Its carrots were bigger and had better taste.

Baltimore ☭✭✭✭✭ ☭ ☄️ SW
New Kuroda ☭✭✭✭✭ ☭ ☄️ SW
A hard pounding rain reduced the germination of both varieties. ‘Baltimore’ germinated better and had very large roots. I really did not like how large the roots of both varieties were.

Prefer ‘New Kuroda’

Baltimore ☭✭✭✭✭ ☭ ☄️ MN
New Kuroda ☭✭✭✭✭ ☭ ☄️ MN
These are the best carrots I’ve ever grown. I highly recommend both varieties. ‘New Kuroda’ roots were a little bigger.

Baltimore ☭✭✭✭✭ ☭ ☄️ SE
New Kuroda ☭✭✭✭✭ ☭ ☄️ SE
‘New Kuroda’ roots were more attractive and tasted better. It had higher yields.

Baltimore ☭✭✭✭✭ ☭ ☄️ NC
New Kuroda ☭✭✭✭✭ ☭ ☄️ NC
‘New Kuroda’ had healthier plants, higher yields and better taste.

Baltimore ☭✭✭✭✭ ☭ ☄️ SC
New Kuroda ☭✭✭✭✭ ☭ ☄️ SC
‘New Kuroda’ roots tasted better and were thinner around.

Baltimore ☭✭✭✭✭ ☭ ☄️
New Kuroda ☭✭✭✭✭ ☭
‘New Kuroda’ had a wonderful sweet taste! All other traits were similar.

Baltimore ☭✭✭✭✭ ☭ ☄️
New Kuroda ☭✭✭✭✭ ☭
These varieties were very similar and grew well in my compacted soil. ‘New Kuroda’ roots were more attractive.

Baltimore ☭✭✭✭✭ ☭ ☄️ SW
New Kuroda ☭✭✭✭✭ ☭ ☄️ SW
These varieties were very similar. Both had beautiful, slender roots and were quite long. ‘New Kuroda’ roots tasted better.

Conclusions

Carrot, Long (Imperator)

Varieties

‘Imperator 58’
73 days. Long, 8-inch roots are deep orange, fine-grained and tapered. Excellent flavor.

‘Sugarsnax 54’
68 days. Slim, 10-inch roots are bright orange and very sweet. Keeps its flavor after cooking.

Data

Gardeners at 25 sites submitted information.

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<th>S’snax 54</th>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Both varieties had healthy tops and produced beautiful roots that grew 10–12 inches long.

Prefer ‘Imperator 58’

Imperator 58
Sugarsnax 54

Both had 80% germination. We harvested both varieties on the same day. We harvested 13.2 pounds of ‘Imperator 58’ and 8.8 pounds of ‘Sugarsnax 54’. ‘Imperator 58’ carrots were smaller, mostly straight and easy to pull. ‘Sugarsnax 54’ roots had many split roots and a few color variations. My family was split on which variety tasted better.

‘Imperator 58’ had a nice even carrot taste. ‘Sugarsnax 54’ tasted stronger and sweeter.

Imperator 58
Sugarsnax 54

Both varieties produced beautiful carrots and carrot tops. ‘Imperator 58’ roots were longer, tasted better and were less woody (fibrous).
Prefer ‘Imperator 58’ (continued)

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ NW
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ NW

‘Imperator 58’ roots did not split. If you were able to dig out the whole carrot, they were very long. ‘Sugarsnax 54’ roots were quite wide and split. Maybe that was because of the excessive rain and wetness of the ground.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ NW
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ SW

‘Imperator 58’ had way better germination.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ NW
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ SW

‘Imperator 58’ tasted better. ‘Sugarsnax 54’ was slightly better in germination rate and plant health.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ SW
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ SW

The roots of both varieties were nice and long. ‘Imperator 58’ roots were sweeter and moister.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ SW
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ SW

‘Imperator 58’ roots were much sweeter; better flavor; would be good for cooking. The roots of both varieties were nice and long.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ MN
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ SD

‘Imperator 58’ tasted sweeter than ‘Sugarsnax 54’ when cooked. ‘Sugarsnax 54’ tasted better than ‘Imperator 58’ when eaten raw. This was not a good year for carrots. It was too wet and there was not enough sunshine. I usually like to leave carrots in the ground until a light frost to make them sweeter, but this year I had to harvest at the end of August due to roots rotting in the ground.

Gardeners were impressed by the high yields, uniform roots and fresh, mild flavor of ‘Imperator 58’.

Prefer ‘Sugarsnax 54’

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ MN
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ NE

‘Sugarsnax 54’ had better flavor; sweeter.

Imperator 58  ⭐⭐⭐⭐⭐ ☺ ☺ NE
Sugarsnax 54  ⭐⭐⭐⭐⭐ ☺ ☺ NE

‘Sugarsnax 54’ roots were long and uniform. Some of ‘Imperator 58’ roots were very thick and squat.

Key to Site Reports

(reports are presented from east to west)

Garden types
- = Organic
- = Uses inorganic fertilizers
- = Uses inorganic pesticides
- = Not specified

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Locations
NW = Northwest
NC = North Central
NE = Northeast
SC = South Central
NC = North Central
SW = Southwest
MN = Minnesota
MT = Montana

Comments

Recommendation to other gardeners (yes or no)
Variety A
Variety B

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
Prefer ‘Sugarsnax 54’ (continued)

Imperator 58  ☺ ☆ ☃  ☆ ☁  NE
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  NC

‘Sugarsnax 54’ tasted better. Its roots were larger, some 2–3 inches in diameter. ‘Imperator 58’ germinated better but neither variety germinated well. ‘Imperator 58’ produced a slightly higher yield and the roots were less likely to be misshaped.

Imperator 58  ☺ ☆ ☃  ☆ ☁  NC
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SC

‘Sugarsnax 54’ roots were smoother, firmer and less knotty. Its seeds came up quicker. ‘Imperator 58’ germinated at a higher rate, had taller plants and produced a third more yield.

Imperator 58  ☺ ☆ ☃  ☆ ☁  SC
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SW

Both varieties produced very nice carrots. ‘Imperator 58’ had larger roots, but ‘Sugarsnax 54’ had a better taste. A lot of carrots were very long and broke off when digging them up.

Imperator 58  ☺ ☆ ☃  ☆ ☁  SW
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SW

‘Sugarsnax 54’ produced higher yields and tasted better.

Imperator 58  ☺ ☆ ☃  ☆ ☁  SW
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SW

‘Sugarsnax 54’ roots were larger and had better taste. ‘Imperator 58’ roots had a taste we did not care for. Its roots were significantly less hardy and smaller.

Imperator 58  ☺ ☆ ☃  ☆ ☁  SW
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SW

‘Sugarsnax 54’ roots looked more attractive and tasted better.

Imperator 58  ☺ ☆ ☃  ☆ ☁  SW
Sugarsnax 54 ☺ ☆ ☃  ☆ ☁  SC

‘Sugarsnax 54’ produced a higher yield. The taste was not that great for either variety. I will be leaving them in the ground through the fall to see if they sweeten up.

Conclusions

Both varieties had healthy tops and produced beautiful roots that grew 10–12 inches long. ‘Imperator 58’ was preferred by most gardeners. These gardeners were impressed by the high yields, uniform roots and fresh, mild flavor of ‘Imperator 58’. A minority of gardeners preferred the performance and taste of ‘Sugarsnax 54’.

A minority of gardeners preferred the performance and taste of ‘Sugarsnax 54’.
Corn, Early

Varieties

‘Sweetness’ (syn)
68 days. An early corn of premium quality. The sturdy stalks produce well-filled ears of plump kernels.

‘Temptress’ (syn)
70 days. Combines great quality with reliable performance. Strong seedling vigor.

Data

Gardeners at 17 sites submitted information.

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<thead>
<tr>
<th>Trait</th>
<th>Sweetness</th>
<th>Temptress</th>
<th>Same</th>
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<tbody>
<tr>
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<td>29%</td>
<td>7%</td>
<td>64%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>20</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>77</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Higher yields</td>
<td>42</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>More attractive ears</td>
<td>33</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>62</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Preference</td>
<td>71</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>85</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>7.71</td>
<td>6.71</td>
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<tr>
<td>Median score¹</td>
<td>8.50</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

‘Sweetness’ ripened quicker and had higher yields at more sites. Its ears were more attractive and tasted sweeter to more gardeners.

‘Sweetness’ dominated the trial with healthier looking plants and many nice cobs. This variety was taller, fuller with leaves and sometimes produced two cobs on a plant. ‘Temptress’ did not germinate as well.

‘Sweetness’ ripened 5 days earlier. Its cobs were larger and fuller. Its kernels were much more flavorful. I’ll grow ‘Sweetness’ next year. Both varieties were productive, and their ears were filled with kernels to their tips. ‘Temptress’ stalks were taller; stalks of both varieties were sturdy.

‘Sweetness’ ripened a few days earlier. Both varieties had good yields. Both had good flavor, but ‘Temptress’ got grainy first.

The seedlings of both varieties were vigorous, and the stalks were healthy. ‘Sweetness’ ripened a few days earlier. Both varieties had good yields. Both had good flavor, but ‘Temptress’ got grainy first.

‘Sweetness’ ripened quicker and had higher yields at more sites. Its ears were more attractive and tasted sweeter to more gardeners.

Prefer ‘Sweetness’

Sweetness 🌟🌟🌟🌟🌟 😊 😦 MN
‘Sweetness’ tasted better.

Sweetness 🌟🌟🌟🌟🌟 😊 😦 MN
‘Sweetness’ matured quicker.

Best bicolor se and syn corn varieties

Top choice
Peaches & Cream

Strong performers
Allure
Ambrosia
Cuppa Joe
Delectable
Luscious
Sweetness
Temptation
Prefer ‘Sweetness’ (continued)

Sweetness ★★★★★ ☀ ☀ ☀
Temptress ★★★★★ ☀ ☀ ☀
‘Sweetness’ ears were too close to the ground. It was too easy for raccoons to get them.

Sweetness ★★★★★ ☀ ☀ ☀
Temptress ★★★★★ ☀ ☀ ☀
‘Sweetness’ went into tassel a week earlier than ‘Temptress’. Hail subsequently harmed the trial, but a few plants recovered enough to produce a few ears, so we were able to taste both varieties. Both varieties were very sweet, but ‘Temptress’ had deeper kernels which I think is important.

Conclusions

‘Sweetness’ ripened quicker and had higher yields at more sites. Its ears were more attractive and tasted sweeter to more gardeners. Most gardeners liked ‘Temptress’, but it did not excel in any traits.

Most gardeners liked ‘Temptress’, but it did not excel in any traits.

Prefer ‘Temptress’

Sweetness ★★★★★ ☀ ☀ ☀
Temptress ★★★★★ ☀ ☀ ☀
The flavor of ‘Temptress’ was really good, and its ears were filled out.

Sweetness ★★★★★ ☀ ☀ ☀
Temptress ★★★★★ ☀ ☀ ☀
‘Temptress’ cobs were short and stocky but tasted amazing. Its kernels were fat and juicy. ‘Sweetness’ plants had bugs and mold in spots. Both varieties tasted good!

Key to Site Reports

Garden types

- = Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

Locations

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Variety A
Variety B
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
Corn, Early Super Sweet

Varieties

‘Anthem XR’ (shA)
73 days. Very tender and sweet. Straight rows of kernels fill ears. Proven performer in North Dakota.

‘Raquel’ (shA)
72 days. High quality. Bright kernels and large ears. Ears maintain quality in the field. Very productive.

Data

Gardeners at 20 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Anthem XR</th>
<th>Raquel</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>33%</td>
<td>10%</td>
<td>57%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>29%</td>
<td>19%</td>
<td>52%</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>32%</td>
<td>26%</td>
<td>42%</td>
</tr>
<tr>
<td>Higher yields</td>
<td>32%</td>
<td>21%</td>
<td>47%</td>
</tr>
<tr>
<td>More attractive ears</td>
<td>26%</td>
<td>16%</td>
<td>58%</td>
</tr>
<tr>
<td>Tasted better</td>
<td>21%</td>
<td>26%</td>
<td>53%</td>
</tr>
<tr>
<td>Preference</td>
<td>50</td>
<td>50</td>
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</tr>
<tr>
<td>Recommend (😊)</td>
<td>79</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>7.58</td>
<td>7.16</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

More gardeners recommended ‘Anthem XR’, often due to higher yields.

Prefer ‘Anthem XR’

‘Anthem XR’ germination was greater by 50%, which led to its higher yield. Its stalks were healthy. The ears of ‘Anthem XR’ tasted sweeter but both varieties had a crisp texture and were very tasty. Both varieties exhibited straight rows of bicolored kernels on 8-inch ears.

‘Anthem XR’ was much sweeter. Its ears were much larger.

Best bicolor super sweet corn varieties

Top choice
American Dream

Strong performers
Anthem XR SS2742
Xtra-Tender 274A
Xtra-Tender 277A
Prefer ‘Anthem XR’ (continued)

Anthem XR ★★★★★ ☺ -
Raquel ★★★☆☆ ☺  SC
‘Anthem XR’ grew better. Its ears looked and tasted better.

Anthem XR ★★★☆☆ ☺  SD
Raquel ★★★☆☆ ☺  SC
‘Anthem XR’ germinated better. Neither variety produced double-ear stalks.

Prefer ‘Raquel’

Anthem XR ★★★☆☆ ☺  MN
Raquel ★★★★★ ☺  MN
It was hard to tell the difference between the two varieties.

Anthem XR ★★★★★ ☺  SE
Raquel ★★★★★ ☺  SE
Both varieties were healthy. ‘Raquel’ produced higher yields. ‘Raquel’ was ideal for off-the-cob freezing, with large, uniform kernels. It tasted sweeter than ‘Anthem XR’, but I would have preferred a sweeter taste—however—it was very good!

Anthem XR ★★★★★ ☺  SW
Raquel ★★★★★ ☺  SW
‘Raquel’ ear tips filled better.

No Preference

Anthem XR ★★★☆☆ ☺  NC
Raquel ★★★☆☆ ☺  NC
Both varieties were good, but I have had sweeter corn. These varieties were so similar that I couldn’t tell them apart.

Conclusions

Both varieties performed well, but neither distinguished itself from the other. Gardeners were evenly split on their preferences. More gardeners recommended ‘Anthem XR’, often due to higher yields. ‘Anthem XR’ has performed well in our trials of previous years.

Both varieties performed well, but neither distinguished itself from the other.
Corn, Late Super Sweet

Varieties

‘American Dream’ (shA)
77 days. Award winner. Sweet, tender kernels of amazing quality. Easy to grow. Sturdy stalks.

‘Obsession’ (shA)
79 days. Very tender, sweet and creamy kernels. Ears are long and filled to the tip.

Data

Gardeners at 13 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>American Dream</th>
<th>Obsession</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>8%</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>23</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>58</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Higher yields</td>
<td>62</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>More attractive ears</td>
<td>46</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Tasted better</td>
<td>23</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Preference</td>
<td>67</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
<td>69</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Mean score1</td>
<td>7.92</td>
<td>7.85</td>
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<tr>
<td>Median score1</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Preferred ‘American Dream’

American Dream ☀️☀️☀️ ☁ ☁
Obsession ☁ ☁ MN

‘American Dream’ produced earlier and more yield. ‘Obsession’ was a taller and stronger plant, with bigger ears.

American Dream ☀️☀️☀️ ☁ ☁ MN
Obsession ☁ ☁ MN

‘American Dream’ tasted much better.

American Dream ☀️☀️☀️ ☁ ☁ NE
Obsession ☁ ☁ NE

‘American Dream’ produced more and slightly earlier. Its stalks often had two ears.

American Dream ☀️☀️☀️ ☁ ☁ MN
Obsession ☁ ☁ SC

‘American Dream’ had better quality cobs. It ripened earlier and produced higher yields.

American Dream ☀️☀️☀️ ☁ ☁ SW
Obsession ☁ ☁ SW

‘American Dream’ had better yield and taste. I would grow both varieties in the future; both were great tasting.

Most gardeners preferred ‘American Dream’. It ripened earlier and produced higher yields at most sites.

Best bicolor super sweet corn varieties

Top choice
American Dream

Strong performers
Anthem XR
Xtra-Tender 274A
Xtra-Tender 277A
Prefer ‘Obsession’

American Dream ★★★★★ ☀ ☀ ☀
Obsession ★★★★★ ☀ SE

‘Obsession’ ears were more tender and flavorful. ‘American Dream’ germinated quicker and grew taller. It produced two cobs per plant and its cobs were bigger.

American Dream ★★★★★ ☀ ☀ ☀
Obsession ★★★★★ ☀ SE

‘Obsession’ had higher yields and its ears were more attractive. ‘American Dream’ seemed about 3 days faster with germination, tasseling and harvest. Lodging was a problem for both varieties. Both varieties produced mostly small ears, but I may have spaced my plants too close together.

American Dream ★★★★★ ☀ ☀ ☀
Obsession ★★★★★ ☀ NC

‘Obsession’ seedlings showed more vigor. ‘Obsession’ produced higher yields and was ready a couple of days earlier. Some ‘American Dream’ stalks did not have any ears. The stalks of both varieties were healthy.

American Dream ★★★★★ ☀ ☀ ☀
Obsession ★★★★★ ☀ SC

Both varieties germinated well and were super healthy. They both produced corn around the same time. They both produced a lot of corn! Their ears were equally attractive. ‘Obsession’ had more rounded tips, whereas ‘American Dream’ had more pointed tips. The taste of ‘Obsession’ was very good. The texture of its kernels was definitely better. ‘American Dream’ tasted okay but its kernels were a little tougher.

No Preference

American Dream ★★★★★ ☀ ☀
Obsession ★★★★★ ☀ SW

Both germinated fantastically, but ‘Obsession’ slightly more fantastically. Super healthy plants, so yummy, great yields. If I didn’t know better, I’d think these were the same variety. Absolutely delighted with both of these!

Conclusions

Gardeners liked both varieties, but most preferred ‘American Dream’. ‘American Dream’ ripened earlier and produced higher yields at most sites. Many gardeners noted ‘American Dream’ ears were of superior quality. ‘Obsession’ germinated better at more sites but was otherwise unremarkable.

‘Obsession’ germinated better at more sites, but was otherwise unremarkable.
Cucumber, Burpless

Varieties

‘Summer Dance’
60 days. Straight, glossy cukes of exceptional quality. Productive vines tolerate heat and diseases.

‘Summer Top’
60 days. Easy to grow. Heavy yields of 9-inch, dark green, high quality cucumbers. Vines resist diseases.

Data

Gardeners at 46 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Summ. Dance</th>
<th>Summ. Top</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>29%</td>
<td>27%</td>
<td>44%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>34</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>53</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>Higher yields</td>
<td>49</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>More attractive cukes</td>
<td>46</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>Tasted better</td>
<td>31</td>
<td>21</td>
<td>49</td>
</tr>
<tr>
<td>Preference</td>
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<td>42</td>
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<tr>
<td>Recommend (😊)</td>
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<tr>
<td>Mean score¹</td>
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<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Summer Dance’

Summer Dance 🍅🍅🍅🍅🍅😊😊 MN
Summer Top 🍅🍅🍅🍅🍅😊😊 SE
I got a few more cucumbers from ‘Summer Dance’. I would try both varieties again.

Summer Dance 🍅🍅🍅🍅🍅😊😊 NE
Summer Top 🍅🍅🍅🍅🍅😊😊 SE
‘Summer Dance’ vines were more vigorous and healthier. They produced at least 50% more yield. Its cucumbers were straighter and more uniform. ‘Summer Dance’ vines reached the top of its 7-foot trellis before ‘Summer Top’ reached the halfway point. Both varieties produced their first fruits at the same time; however, ‘Summer Dance’ had several cucumbers during the first harvest while ‘Summer Top’ had only one.

Summer Dance 🍅🍅🍅🍅🍅😊😊 NC
Summer Top 🍅🍅🍅🍅🍅😊😊 SE
‘Summer Dance’ produced larger yields.

Both varieties produced lots of cucumbers. The fruits were long, thin-skinned, small-seeded and never bitter.

Best burpless cucumber varieties

Top choice
Summer Dance

Strong performers
Orient
Express II
Sweet Slice
Sweet Success
Tasty Green
Prefer ‘Summer Dance’ (continued)

Summer Dance ★★★★★ ☺ ☁ NC
Summer Top ★★★★★ ☺ ☁ NC
‘Summer Dance’ seedlings showed more vigor. Its vines were healthier and produced cukes a few days earlier. ‘Summer Dance’ produced more cukes per plant. The cukes of ‘Summer Dance’ were bigger and had a somewhat smoother surface.

Summer Dance ★★★★★ ☺ ☁ NC
Summer Top ★★★★★ ☺ ☁ NC
‘Summer’ Top’ had better looking plants and cucumbers.

Summer Dance ★★★★★ ☺ ☁ NW
Summer Top ★★★★★ ☺ ☁ NW
‘Summer Dance’ had better yield, fruit shape and tenderness.

Summer Dance ★★★★★ ☺ ☁ NW
Summer Top ★★★★★ ☺ ☁ NW
‘Summer Dance’ had better yield, fruit shape and tenderness.

Summer Dance ★★★★★ ☺ ☁ NW
Summer Top ★★★★★ ☺ ☁ NW
‘Summer Dance’ produced more.

Summer Dance ★★★★★ ☺ ☁ NW
Summer Top ★★★★★ ☺ ☁ NW
‘Summer Dance’ cucumbers were tasty and sweet. It produced longer. ‘Summer Top’ cucumbers ripened quicker and tasted good. Both varieties kept well in the refrigerator after harvest. I made some pickle spears with some of the first harvest; they did not get soggy. Overall, I am not a big pickler and prefer cucumbers for slicing and making creamed cucumbers—mayo, cream, sugar and vinegar.

Summer Dance ★★★★★ ☺ ☁ NW
Summer Top ★★★★★ ☺ ☁ NW
‘Summer Dance’ plants seemed nicer and the cucumbers were tasty.

Summer Dance ★★★★★ ☺ ☁ SW
Summer Top ★★★★★ ☺ ☁ SW
‘Summer Top’ did not produce any yield.

Summer Dance ★★★★★ ☺ ☁ MT
Summer Top ★★★★★ ☺ ☁ MT
‘Summer Dance’ cucumbers were straighter. Both varieties were very good.

Summer Dance ★★★★★ ☺ ☁ MT
Summer Top ★★★★★ ☺ ☁ MT
‘Summer Dance’ germinated better, had good flavor, and its cucumbers looked nice. I did not have good germination with either variety. This was my first year of planting in this garden and do not know if any pesticides were used on that soil in the past.

Summer Dance ★★★★★ ☺ ☁ MT
Summer Top ★★★★★ ☺ ☁ MT
‘Summer Dance’ produced earlier and produced more cucumbers. Its fruits were straight, uniform and more attractive.
**Prefer ‘Summer Top’**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NE</td>
</tr>
</tbody>
</table>

‘Summer Top’ cucumbers were darker green, crisper and had better taste/flavor. ‘Summer Dance’ germinated faster. As of August 1, ‘Summer Dance’ had two times the cucumbers; these cucumbers were light green and had very plain taste.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NE</td>
</tr>
</tbody>
</table>

Both varieties were very tender and edible right off the vine for young (grandkids) and old (86-year-old great grandparents). The fruits didn’t seem to get seedy even when over a foot long and 2 inches in diameter. It was the most popular vegetable in our garden for grandkids.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NE</td>
</tr>
</tbody>
</table>

‘Summer Top’ produced twice as many cucumbers. Only half of the seeds for both varieties germinated.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NC</td>
</tr>
</tbody>
</table>

‘Summer Top’ germinated better and produced more. Drip irrigation was used on both varieties; we received less than 3 inches of rain from May 14 through Labor Day.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NC</td>
</tr>
</tbody>
</table>

‘Summer Top’ produced earlier than ‘Summer Dance’. It had nicer looking cucumbers; ‘Summer Dance’ cucumbers had a tendency to curl. Both varieties were heavy producers and really started producing after period of frequent rains in late August and September.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>-</td>
</tr>
</tbody>
</table>

‘Summer Top’ had more attractive produce.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Dance</td>
<td>★★★★★</td>
<td>SC</td>
</tr>
<tr>
<td>Summer Top</td>
<td>★★★★★</td>
<td>NE</td>
</tr>
</tbody>
</table>

These varieties were very similar. I would definitely grow both again.

**Conclusions**

Gardeners were impressed with the quality and yields of both varieties. Their fruits were long, thin-skinned, small-seeded and never bitter. The vines were healthy and produced lots of cucumbers until frost. ‘Summer Dance’ was preferred because it produced earlier and produced more cucumbers. Its fruits were straight, uniform and more attractive.
Cucumber, Pickling

Varieties

‘Calypso’
52 days. Heavy and reliable yields of medium-dark green, slightly tapered fruits. Vines resist diseases.

‘Homemade Pickles’
55 days. Vigorous, disease-resistant vines produce loads of crisp cucumbers ideally shaped for pickling.

Data

Gardeners at 31 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Calypso</th>
<th>Pickles</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>41%</td>
<td>44%</td>
<td>15%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>11</td>
<td>41</td>
<td>48</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>27</td>
<td>46</td>
<td>27</td>
</tr>
<tr>
<td>Higher yields</td>
<td>35</td>
<td>38</td>
<td>27</td>
</tr>
<tr>
<td>More attractive cucumbers</td>
<td>27</td>
<td>38</td>
<td>35</td>
</tr>
<tr>
<td>Tasted better</td>
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<td>27</td>
<td>58</td>
</tr>
<tr>
<td>Preference</td>
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<td>58</td>
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</tr>
<tr>
<td>Recommend (😊)</td>
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<td>81</td>
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</tr>
<tr>
<td>Mean score¹</td>
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<tr>
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<td>8.00</td>
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</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Calypso’

Calypso
Homemade Pickles
‘Calypso’ produced higher yields.

Calypso
Homemade Pickles
‘Calypso’ had better yield and more attractive fruit.

Calypso
Homemade Pickles
‘Calypso’ cucumbers were straighter—easier to make pickles—and tasted better.

Calypso
Homemade Pickles
‘Calypso’ had more uniform cucumbers.

Both varieties produced lots of quality cucumbers for pickling.

Calypso
Homemade Pickles
‘Calypso’ produced the first yield, and both varieties produced very well. We used drip irrigation in this trial since we had less than 3 inches of rain from May 15 through Labor Day.

Calypso
Homemade Pickles
As our spring was cool and dry, it took about 2 weeks for seedlings to emerge from the soil. ‘Calypso’ produced the first cucumbers of the season.

Calypso
Homemade Pickles
‘Calypso’ cucumbers were a little tastier and we could eat them as slicers. ‘Homemade Pickles’ did make excellent pickling cucumbers. Some fruits, especially those of ‘Calypso’, were misshaped due to poor pollination.

Calypso
Homemade Pickles
‘Calypso’ cucumbers were crisper and there were more of them. They stayed firm in the refrigerator whereas the ‘Homemade Pickles’ cucumbers seemed to wilt quite fast. Both varieties made good pickles.

Best pickling cucumber varieties

Top choice
Homemade Pickles

Strong performers
Alibi
Calypso
Eureka
H-19 Little Leaf
Prefer ‘Calypso’ (continued)

Calypso Homemade Pickles ★★★★★ ☺ ☀ MN
‘Calypso’ had a little higher yield.

Calypso Homemade Pickles ★★★★★ ☺ ☀ NC
‘Calypso’ cucumbers had a better size and taste.

Calypso Homemade Pickles ★★★★★ ☺ ☀ NW
‘Calypso’ had longer vines and higher yields. I prefer the taste of its cucumbers.

Prefer ‘Homemade Pickles’

Calypso Homemade Pickles ★★★★★ ☺ ☀ SC
Both varieties are good for pickling and have a good yield.

Calypso Homemade Pickles ★★★★★ ☺ ☀ SE
‘Homemade Pickles’ was easier to pick. ‘Calypso’ seedlings showed more vigor.

Calypso Homemade Pickles ★★★★★ ☺ ☀ NC
No question ‘Homemade Pickles’ produced more and had better tasting fruits. Each vine produced at least ten cukes compared to an average of three cukes per plant for ‘Calypso’. ‘Calypso’ had leaf blight.

Calypso Homemade Pickles ★★★★★ ☺ ☀ NC
The vines of ‘Homemade Pickles’ had less powdery mildew and were more productive.

Calypso Homemade Pickles ★★★★★ ☺ ☀ SC
‘Homemade Pickles’ tasted great and its yields were amazing. Both varieties are still producing as of September 27.

Calypso Homemade Pickles ★★★★★ ☺ ☀ SC
‘Homemade Pickles’ looked and tasted a little better. I planted this trial in containers and trellised the vines on a chain-link fence. I didn’t have enough room for them to grow.

Calypso Homemade Pickles ★★★★★ ☺ ☀ SC
‘Homemade Pickles’ was overall better. It produced way more cucumbers, and its cucumbers were more attractive. ‘Calypso’ produced the first cucumbers.

‘Homemade Pickles’ always performs well in our trials. Gardeners this year were impressed with its earliness, good yields and outstanding fruit quality.

Key to Site Reports

(reports are presented from east to west)

Garden types
- = Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Variety A
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
Prefer ‘Homemade Pickles’ (cont.)

‘Homemade Pickles’ was the best pickler I have ever grown.

‘Homemade Pickles’ had a higher yield and I liked how its fruits looked.

The cucumbers of ‘Homemade Pickles’ stayed a better size, although the cucumbers of both varieties were very tasty and stayed crisp. It was so dry this spring and we were not able to do much in the way of gardening, so did not get the water to the cukes. Once they got water, they did fine, although a little slower than in previous years.

‘Calypso’ struggled. I actually had to replant with some seeds I had left over. The cucumbers from ‘Calypso’ didn’t form well; like balls instead of nice cucumbers.

Conclusions

Both varieties produced lots of quality cucumbers for pickling. ‘Homemade Pickles’ always performs well in our pickling cucumber trials. Gardeners this year were impressed with its earliness, good yields and outstanding fruit quality. These cucumbers were crisp, small-seeded, and blocky—perfect for pickling.
Cucumber, Slicing

Varieties

‘Bristol’
54 days. High percentage of slim, straight, high quality fruits. Early yields. Vines resist diseases.

‘Talladega’
60 days. Smooth, 8-inch fruits are dark green. Disease-resistant vines produce heavy yields.

Data

Gardeners at 20 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Bristol</th>
<th>Talladega</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>35%</td>
<td>18%</td>
<td>47%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>24</td>
<td>24</td>
<td>53</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>47</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Higher yields</td>
<td>41</td>
<td>47</td>
<td>12</td>
</tr>
<tr>
<td>More attractive cucumbers</td>
<td>29</td>
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<tr>
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<td>25</td>
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</tr>
<tr>
<td>Preference</td>
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<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Bristol’

‘Bristol’ had a “sweeter” cucumber taste. ‘Talladega’ germinated poorly. ‘Talladega’ leaves had brown spots and brown edges, and its cucumbers had damage marks.

‘Bristol’ produced an abundant crop.

‘Bristol’ produced higher yields, and its cucumbers were more attractive.

‘Bristol’ got off to a quick start and produced the first cucumbers at more sites.

Both varieties germinated poorly due to very wet, cold (snow) weather after I planted. I have grown ‘Talladega’ with success before, unfortunately this year I had only four seedlings germinate, then they wilted off at the 3–5-leaf stage. ‘Bristol’ was an excellent performer in a wet and cold summer; it produced fruit late into September.

Best slicing cucumber varieties

Top choice
General Lee

Strong performers
Dasher II
Raider
Stonewall
Straight Eight
Talladega
**Prefer ‘Talladega’**

Bristol [★★★★☆] ☺ ☑ SE
Talladega [★★★★★] ☀ ☑ SE

‘Talladega’ was later but produced higher yields. Its cucumbers looked more attractive and tasted better.

Bristol [★★★★☆] ☺ ☑ NC
Talladega [★★★★★] ☀ ☑ NC

Both were excellent varieties. ‘Talladega’ produced cucumbers early and often. When ‘Bristol’ started maturing, it produced lots of cucumbers. Both varieties had heavy production right until freezing.

Bristol [★★★★☆] ☺ ☑ SW
Talladega [★★★★★] ☀ ☑ SW

‘Talladega’ germinated quicker and grew more vigorously. ‘Bristol’ tended to have more misshaped cucumbers. The cucumbers of both varieties tasted good.

Bristol [★★★★☆] ☺ ☑ SC
Talladega [★★★★★] ☀ ☑ SC

Both varieties were very good. ‘Talladega’ was earlier. I have never had much luck with cucumbers, but the yields of these varieties were amazing—they produced into October.

Bristol [★★★★☆] ☺ ☑ SC
Talladega [★★★★★] ☀ ☑ SC

‘Talladega’ produced higher yields. Its cucumbers had a consistent shape; many ‘Bristol’ cucumbers were shaped like a “C.”

Bristol [★★★★☆] ☺ ☑ SC
Talladega [★★★★★] ☀ ☑ SC

‘Talladega’ produced more fruits. The cucumbers of both varieties had a similar taste and appearance. Neither variety was very productive. We had a dry summer and wet fall. Watering should have been adequate but did not seem like it.

**Conclusions**

Both varieties performed well. ‘Bristol’ got off to a quick start and produced the first cucumbers at more sites. ‘Talladega’ produced higher yields in more gardens; many gardeners preferred ‘Talladega’ for that reason. Fruit quality was good for both varieties.
Greens, Loosehead Cabbage (Fall)

Varieties

‘Maruba Santoh’
30–40 days. Grows fast and easily. Mild flavor. Tender, light green, round leaves for stir fries and salads.

‘Tokyo Bekana’
21–45 days. Popular and easy to grow. Light green leaves with wavy edges and slim, white stems.

Data

Gardeners at 16 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Maruba Santoh</th>
<th>Tokyo Bekana</th>
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</tr>
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<tbody>
<tr>
<td>Germinated best</td>
<td>9%</td>
<td>64%</td>
<td>27%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>30</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>20</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Higher yields</td>
<td>20</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>More attractive</td>
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<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Tasted better</td>
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<td>20</td>
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</tr>
<tr>
<td>Preference</td>
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<tr>
<td>Median score</td>
<td>7.50</td>
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</table>

I liked the flatter, less rippy leaves of ‘Maruba Santoh’. The two varieties were close in taste, but I thought ‘Maruba Santoh’ was milder eaten raw. ‘Tokyo Bekana’ was much faster germinating; it was more established and better withstood the attack of flea beetles. ‘Maruba Santoh’ was significantly delayed and only about one-third of its plants survived.

Prefer ‘Tokyo Bekana’

Maruba Santoh ★★★★★😊є ☒ MN
Tokyo Bekana ★★★★★★😊є MN

Neither variety grew very big due to the cold weather. ‘Tokyo Bekana’ did better in all categories: less buggy, higher yields and better taste. It looked more like a lettuce than cabbage. It had an interesting flavor—kind of peppery.

Prefer ‘Maruba Santoh’

Maruba Santoh ★★★★★😊є NE
Tokyo Bekana ★★★★★★😊є SE

‘Maruba Santoh’ had more leaves, bigger yield.

Maruba Santoh ★★★★★😊є NC
Tokyo Bekana ★★★★★★😊є MN

‘Maruba Santoh’ was better in all traits including yield and taste.

Preferred Asian green varieties

Top choice
Win-Win Choi

Strong performers
Koji
Komatsuna
Mei Qing
Choi
Miz America
Mizuna
Osaka Purple
Red Giant
Red Kingdom
Tatsoi
Tokyo Bekana
**Prefer ‘Tokyo Bekana’ (continued)**

Maruba Santoh  ☺ ☺ ☺ ☺ ☺ ☻ NC
Tokyo Bekana  ☺ ☺ ☺ ☺ ☺ ☻ NC

Flea beetles moved in even before the seedlings came up. Most of the ‘Maruba Santoh’ did not survive.

Maruba Santoh  ☺ ☺ ☺ ☺ ☺ ☻ SK
Tokyo Bekana  ☺ ☺ ☺ ☺ ☺ ☻ SK

‘Tokyo Bekana’ germinated slightly better but both varieties germinated at over 90%. Both varieties performed well and tasted great. I have never planted loosehead cabbage before. I will definitely plant it in the future.

**No Preference**

Maruba Santoh  ☺ ☺ ☺ ☺ ☺ ☻ MN
Tokyo Bekana  ☺ ☺ ☺ ☺ ☺ ☻ MN

I liked both. ‘Tokyo Bekana’ has ruffled leaves. ‘Maruba Santoh’ has a little spice. Both were very healthy and produced well.

**Conclusions**

Gardeners tried loosehead cabbage for the first time, and they enjoyed both varieties. ‘Tokyo Bekana’ germinated very quickly and grew vigorously. ‘Tokyo Bekana’ was ready to harvest earlier and produced higher yields. Gardeners liked its ruffled leaves. Gardeners who preferred ‘Maruba Santoh’ were especially pleased with its taste.
Greens, Purple (Fall)

Varieties

‘Purple Choi’

‘Red Kingdom’
21–40 days. Deep red, lobed leaves with very mild mustard flavor. Stunning in a salad mix.

Data

Gardeners at 8 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Purple Choi</th>
<th>Red Kingdom</th>
<th>Same</th>
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<tbody>
<tr>
<td>Germinated best</td>
<td>33%</td>
<td>50%</td>
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</tr>
<tr>
<td>Healthier plants</td>
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<tr>
<td>Harvested earlier</td>
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<td>67</td>
<td>33</td>
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<tr>
<td>Higher yields</td>
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<tr>
<td>More attractive</td>
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<td>50</td>
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</tr>
<tr>
<td>Tasted better</td>
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<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Preference</td>
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<tr>
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<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Red Kingdom’

‘Red Kingdom’ germinated better, was healthier and produced higher yields.

‘Red Kingdom’ was healthier and had higher production. Its leaves were larger.

Neither did well. ‘Purple Choi’ germinated quickly but never took off at all. ‘Red Kingdom’ was not much better. May have been the poor growing conditions at the end of the season. It would be worth trying under different growing conditions.

‘Red Kingdom’ germinated faster and grew faster.

Conclusions

Both varieties struggled under the very cold, wet conditions this fall. ‘Red Kingdom’ germinated better, was healthier and produced higher yields. Gardeners who succeeded in harvesting a crop of ‘Red Kingdom’ enjoyed its mild, mustard flavor.

Best Asian green varieties

Top choice
Win-Win Choi

Strong performers
Koji
Komatsuna
Mei Qing
Choi
Miz America
Mizuna
Osaka Purple
Red Giant
Red Kingdom
Tatsoi
Tokyo Bekana
Greens, Pac Choi (Fall)

Varieties
‘Asian Delight’
37 days. New, award-winning variety. Densely packed mini-heads do not bolt and are easy to grow.

‘Win-Win Choi’
52 days. Vase-shaped heads are compact, heavy and uniform. The mini heads grow up to 12 inches.

Data
Gardeners at 15 sites submitted information.

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<thead>
<tr>
<th>Trait</th>
<th>Asian Delight</th>
<th>Win-Win Choi</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15%</td>
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<tr>
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<td>45</td>
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<tr>
<td>Harvested earlier</td>
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<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Higher yields</td>
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<td>More attractive</td>
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<tr>
<td>Tasted better</td>
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<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Asian Delight’
Asian Delight     ★★★★★ ☻ ☒ NC
Win-Win Choi      ★★★★★ ☻ ☒ MN
‘Asian Delight’ was healthier, looked more attractive and tasted better. ‘Win-Win Choi’ produced a higher yield.

Prefer ‘Win-Win Choi’
Asian Delight     ★★★★★ ☻ ☒ MN
Win-Win Choi      ★★★★★ ☻ ☒ NC
‘Win-Win Choi’ had larger heads and higher yields. I liked the look of ‘Win-Win Choi’ but was not a fan of its taste. ‘Asian Delight’ was milder. Bugs loved both varieties.

‘Win-Win Choi’ was clearly superior to ‘Asian Delight’ under the harsh conditions.

Best Asian green varieties
Top choice         Win-Win Choi
Strong performers  Koji
                   Komatsuna
                   Mei Qing
                   Choi
                   Miz America
                   Mizuna
                   Osaka Purple
                   Red Giant
                   Red Kingdom
                   Tatsoi
                   Tokyo Bekana

Neither did outstanding. It may have been the growing conditions. ‘Asian Delight’ grew more spread out and close to the ground.
‘Win-Win Choi’ was upright, which was what I expected with pac choi. ‘Win-Win Choi’ tasted better. Both varieties were bothered by flea beetles. I sprayed with neem oil but maybe needed to do more frequently.

Both varieties were healthy. ‘Win-Win Choi’ heads were larger and fuller—between 12–15 inches. ‘Win-Win Choi’ was ready to cut earlier and produced higher yields. Both varieties had a nice appearance and I enjoyed eating them. I loved the crunchiness of the white stems. I liked the taste of ‘Win-Win Choi’ better, but both had a pleasant taste. You could use them in a variety of recipes.

Both varieties started out very well, but cold/freezing temps killed them off before they matured. I would try them again—just to see how they would taste. I love the full-grown variety you can buy in the store.
Prefer ‘Win-Win Choi’ (continued)

Asian Delight ★★★★★ ☻ ☼
Win-Win Choi ★★★★★ ☻ ☼ SE

Both varieties got hit by flea beetles. ‘Asian Delight’ got hit to the point that the plants never recovered enough to be harvestable and put through a taste test. ‘Win-Win Choi’ seemed to have some resistance to the pests.

Asian Delight ★★★★★ ☻ ☼
Win-Win Choi ★★★★★ ☻ ☼ SE

‘Win-Win Choi’ germinated better. It was healthier and looked more attractive. Neither variety produced enough to fully judge.

Asian Delight ★★★★★ ☻ ☼
Win-Win Choi ★★★★★ ☻ ☼ NC

‘Win-Win Choi’ had the most promise early in the planting. The weather was unusually moist right after planting. Neither variety grew big enough to harvest.

Asian Delight ★★★★★ ☻ ☼
Win-Win Choi ★★★★★ ☻ ☼ SE

‘Win-Win Choi’ was delicious and hardy. ‘Asian Delight’ did not germinate.

Asian Delight ★★★★★ ☻ ☼
Win-Win Choi ★★★★★ ☻ ☼ SK

‘Win-Win Choi’ germinated slightly better, but both varieties germinated at over 90%. ‘Win-Win Choi’ produced the first yield, which is an advantage in the north. I have never planted mini pac choi before; I will definitely plant it in the future. Both varieties were very tasty.

Conclusions

This trial was a bit of a surprise. We had great hopes for the new All-America Award Selections Winner ‘Asian Delight’; however, ‘Win-Win Choi’ was clearly superior. ‘Win-Win Choi’ got off to a faster start and grew much better under harsh conditions that included unusually cold temperatures, hard rains, and flea beetles. ‘Win-Win Choi’ plants were more vigorous, healthier and more productive. Gardeners enjoyed its crunchy texture and pleasant taste.
Lettuce, Green Butterhead

Varieties

‘Buttercrunch’
50 days. Very popular and reliable. Dark green outer leaves with creamy heart. Slow to bolt. A proven performer in North Dakota.

‘Milagro’
65 days. Big, heavy, uniform heads. Medium-green leaves. Heads resist diseases and hold well in the garden.

Data

Gardeners at 21 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Buttercrunch</th>
<th>Milagro</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>21%</td>
<td>16%</td>
<td>63%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>37</td>
<td>11</td>
<td>53</td>
</tr>
<tr>
<td>Harvested earlier</td>
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<td>24</td>
<td>47</td>
</tr>
<tr>
<td>Resisted bolting better</td>
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<td>18</td>
</tr>
<tr>
<td>Higher yields</td>
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<td>22</td>
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</tr>
<tr>
<td>More attractive</td>
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</tr>
<tr>
<td>Tasted better</td>
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<tr>
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<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup>Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Buttercrunch’

Buttercrunch ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑
Milagro ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ NE

‘Buttercrunch’ tasted much better—mild, good flavor. ‘Milagro’ had a stronger flavor. The plants of both varieties were very healthy and were ready to harvest at the end of June.

Buttercrunch ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑
Milagro ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ SE

‘Buttercrunch’ tasted good and produced well. It looked better and resisted bolting better.

Gardeners loved the looks, taste and crunch of ‘Buttercrunch’. This proven winner was very dependable and resisted bolting.

Best green butterhead lettuce varieties

Top choice Buttercrunch
Strong performer Nancy
Prefer ‘Buttercrunch’ (continued)

Buttercrunch ☺ -
Milagro ☺ SW
‘Buttercrunch’ had a better look and taste. It stayed well after being refrigerated.

Buttercrunch - ☺
Milagro - ☺ SD
Plants of both varieties were healthy, very uniform and attractive. ‘Buttercrunch’ had darker leaves. It matured earlier and tasted very good. A hailstorm destroyed the trial before ‘Milagro’ was ready to harvest.

Prefer ‘Milagro’

Buttercrunch ☺ -
Milagro ☺ MN
‘Milagro’ formed nice heads and had great flavor. It was very slow to bolt.

Buttercrunch - ☺
Milagro - ☺ SE
Both were excellent performers. Both were late to bolt and continued production until early August. ‘Milagro’ was outstanding—couldn’t ask for more. The ‘Buttercrunch’ plot had an animal dig into the row, which required reseeding and thus got off to a week later start. After it matured, it had excellent production.

Buttercrunch - ☺
Milagro - ☺ SE
Both varieties were up by May 30 (after a week of rain), but half of the ‘Buttercrunch’ seedlings were killed by cutworms. ‘Milagro’ rotted in place when the heat and humidity increased at the end of June. Over half of its plants were lost to rot, which led to ‘Buttercrunch’ having higher yields. ‘Buttercrunch’ made beautiful heads with firm, crisp leaves. My whole family preferred the taste of ‘Milagro’ and its delicate leaves. ‘Milagro’ may be superior when grown for early (cool) season harvest, but ‘Buttercrunch’ is more reliable for a longer time.

‘Milagro’ resisted bolting better at more sites and produced good yields.

Conclusions

Gardeners loved the looks, taste and crunch of ‘Buttercrunch’. This proven winner was very dependable and resisted bolting. Most gardeners preferred ‘Buttercrunch’ over ‘Mila’. ‘Milagro’ resisted bolting better at more sites and produced good yields.

Buttercrunch ☺
Milagro ☺ SC
‘Milagro’ didn’t bolt and tasted sweeter. ‘Buttercrunch’ tasted a bit bitter to me.

Buttercrunch ☺
Milagro ☺ SC
‘Milagro’ was healthier, resisted bolting better, produced higher yields and looked more attractive.

Buttercrunch ☺
Milagro ☺ NW
Both varieties produced very well. ‘Buttercrunch’ looked more like romaine where ‘Milagro’ stayed tight and really held its shape. I loved the taste of ‘Milagro’ and the full tight leaves. Great for “wraps.”

Buttercrunch ☺
Milagro ☺ SW
‘Milagro’ was great! Absolutely no bolting. ‘Buttercrunch’ also did well in a late planting. I love both varieties.
Lettuce, Red Butterhead

Varieties

‘Cervanek’
53 days. Heads are attractive, firm and heavy. Leaves are tender and slightly blistered. Tolerates bolting and keeps its red color in the heat.

‘Grandpa Admire’s’

Data

Gardeners at 8 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Cervanek</th>
<th>Grandpa Admire’s</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>75%</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>75</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>75</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Resisted bolting better</td>
<td>50</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td>Higher yields</td>
<td>75</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>More attractive</td>
<td>88</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Tasted better</td>
<td>50</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td>Preference</td>
<td>88</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>88</td>
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<tr>
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<td>8.38</td>
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</tr>
<tr>
<td>Median score¹</td>
<td>9.50</td>
<td>4.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Cervanek’

Cervanek ★★★★★ 😊 🍅
Grandpa Admire’s ★★★★★ 😊 MN

The germination of ‘Cervanek’ was even and consistent, compared to spotty germination with ‘Grandpa Admire’s’. ‘Cervanek’ plants were wider and had more leaves. It was ready to harvest about 5 days sooner. It bolted later. ‘Cervanek’ produced big, beautiful plants that fed us all summer. Its leaves were the dark red color I expected; ‘Grandpa Admire’s’ leaves were very green in color. ‘Cervanek’ tasted slightly sweeter. In general, there was no comparison! I will plant ‘Cervanek’ again!

‘Cervanek’ excelled in all traits. Gardeners enjoyed eating the dark red, flavorful heads all summer.

Best red butterhead lettuce varieties

Top choice
Red Cross

Strong performers
Cervanek Skyphos
Prefer ‘Grandpa Admire’s’

Cervanek ☀️☀️☀️ ☕️ ☕️
Grandpa Admire’s ☀️☀️☀️ ☕️ SC

Both germinated late and did not produce well at all. ‘Grandpa Admire’s’ at least had a few plants that were usable.

Conclusions

‘Cervanek’ was extremely impressive. It excelled in all traits: germination, health, earliness, resistance to bolting, yields, looks and taste. Gardeners enjoyed eating the dark red, flavorful heads all summer. ‘Grandpa Admire’s’ was inferior in all traits and was judged acceptable at best.
Lettuce, Green Leaf

Varieties

‘Deer Tongue’
50 days. Heirloom valued for its ruggedness. Compact plants with triangular leaves. Good texture and delightfully sharp flavor.

‘Jebousek’
45 days. Deer-tongue type from Czechoslovakia. Compact plants with dark-green, triangular leaves. Great flavor.

Data
Gardeners at 7 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Deer Tongue</th>
<th>Jebousek</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>29%</td>
<td>29%</td>
<td>43%</td>
</tr>
<tr>
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<td>Harvested earlier</td>
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<td>57</td>
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<tr>
<td>Resisted bolting better</td>
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<tr>
<td>Higher yields</td>
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<td>43</td>
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</tr>
<tr>
<td>More attractive</td>
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<td>Tasted better</td>
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<td>7.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Jebousek’
‘Jebousek’ was more productive, attractive and better tasting. ‘Deer Tongue’ was earlier and resisted bolting better. Both varieties were short—and quit growing.

No Preference
Planted some in the garden and some in pots. Both varieties grew well and had good flavor. I would grow both varieties again.

Conclusions
Most gardeners preferred ‘Jebousek’. These gardeners felt ‘Jebousek’ was more productive, attractive and better tasting. ‘Deer Tongue’ is a rugged heirloom and it resisted bolting better at more sites.
Lettuce, Red Leaf

Varieties

‘Beleah Rose’
52 days. Ruby-red color goes deep into the heart of the leaf. Tender and wavy leaves. shows moderate resistance to bolting.

‘Merlot’
60 days. Adds intense, burgundy color to salads. Crisp texture and mild flavor. Grows slowly, tolerates heat and resists bolting.

Data

<table>
<thead>
<tr>
<th>Trait</th>
<th>Beleah Rose</th>
<th>Merlot</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Healthier plants</td>
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<td>50</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>13</td>
<td>38</td>
<td>50</td>
</tr>
<tr>
<td>Resisted bolting better</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>More attractive</td>
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<td>38</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>13</td>
<td>50</td>
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</tr>
<tr>
<td>Preference</td>
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<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>8.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Merlot’

Beleah Rose 🌟🌟🌟🌟🌟😊😊 MN
Merlot 🌟🌟🌟🌟🌟😊😊 SE

The row of ‘Merlot’ was thicker. The plants had a more dark burgundy appearance and better flavor. Plants of both varieties were healthy and very good producers. ‘Beleah Rose’ was slower to bolt.

Beleah Rose 🌟🌟🌟🌟😊 MN
Merlot 🌟🌟🌟🌟🌟😊 SE

‘Merlot’ was crisper.

Both ‘Merlot’ and ‘Beleah Rose’ were healthy and very good producers of quality lettuce.

Prefer ‘Beleah Rose’

Beleah Rose 🌟🌟🌟🌟🌟😊😊 SC
Merlot 🌟🌟🌟🌟🌟😊😊 SE

There was very little difference between the varieties. Both were good. ‘Beleah Rose’ showed slightly better vigor.

Beleah Rose 🌟🌟🌟🌟🌟😊😊 MN
Merlot 🌟🌟🌟🌟🌟😊😊 SC

I liked the appearance of ‘Beleah Rose’, which made it more attractive to want to eat the lettuce.

Beleah Rose 🌟🌟🌟🌟🌟😊😊 SC
Merlot 🌟🌟🌟🌟🌟😊😊 SE

This was my first time planting red lettuce, and I was very happy with ‘Merlot’—it was exceptional in abundance and in taste. Both varieties had good germination, but ‘Merlot’ produced earlier (June 30) and produced for about 3 weeks. ‘Beleah Rose’ was later and did not produce nearly as well.

Best red leaf lettuce varieties

Top choice New Red Fire
Strong performers Merlot Red Sails Red Salad Bowl Red Velvet
Conclusions

Both ‘Merlot’ and ‘Beleah Rose’ were healthy and very good producers of quality lettuce. Gardeners rated both varieties highly with most gardeners expressing a preference for ‘Merlot’. ‘Merlot’ matched or exceeded ‘Beleah Rose’ in all traits and was rated especially high for its flavor.

Key to Site Reports

(reports are presented from east to west)

Ratings (1 to 10)
Variety A
Variety B
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Recommendation to other gardeners (yes or no)

Garden types
=G = Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

Garden type
NC

Location

Comments

‘Merlot’ matched or exceeded ‘Beleah Rose’ in all traits and was rated especially high for its flavor.

No Preference

Beleah Rose
Merlot

These are very similar varieties. Both got bitter in hot weather.

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana
Lettuce, Red Lollo

Varieties

‘Dark Red Lollo Rossa’
53 days. Frilly green leaves with dark red edges. Adds color, volume and texture to salads. Harvest when young. Mild flavor.

‘Revolution’
48 days. Frilly, densely packed, crunchy leaves adds loft to salads. Grows vigorously and can hold in the garden a long time.

Data

Gardeners at 9 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Dk. Red Lollo Rossa</th>
<th>Revolution</th>
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</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
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<td>75</td>
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<tr>
<td>Harvested earlier</td>
<td>75</td>
<td>13</td>
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<tr>
<td>Resisted bolting better</td>
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<td>29</td>
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<tr>
<td>Higher yields</td>
<td>78</td>
<td>11</td>
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<tr>
<td>More attractive</td>
<td>38</td>
<td>13</td>
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<tr>
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</tr>
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</tr>
<tr>
<td>Median score2</td>
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</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Dark Red Lollo Rossa’

‘Dark Red Lollo Rossa’ produced a higher yield. It held out longer before becoming bitter.

‘Dark Red Lollo Rossa’ germinated better and its leaves weren’t as frilly. Both varieties resisted bolting and we ate lettuce from these varieties all the way into August. ‘Revolution’ was frillier; the leaves were very attractive to add in mixed salads. However, for eating just one variety by itself, I preferred ‘Dark Red Lollo Rossa’. Both were good.

‘Dark Red Lollo Rossa’ was outstanding. It displayed superior germination, yield and flavor.

Best red lollo lettuce variety

Top choice

Dark Red Lollo Rossa
Prefer ‘Revolution’

Dark Red Lollo Rossa ★★★★★ ☀ ☾
Revolution ★★★★ ☾ MN

The taste of ‘Revolution’ stayed milder longer into harvest. I liked its smaller leaves and plants. It was very slow to bolt. The row of ‘Dark Red Lollo Rossa’ got off to a stronger start, but the rows looked similar during mid-harvest. Its larger, thicker plants appeared to produce more but ‘Revolution’ produced nicely too.

Dark Red Lollo Rossa ★★★★★ ☀ ☾ NW
Revolution ★★★★ ☾ NC

‘Revolution’ germinated very well. It had very high yields and is still producing in August with no bolting. Looks beautiful in the garden and could be in a flower garden. These plants are full and add a wonderful flavor to salads. ‘Dark Red Lollo Rossa’ had mushroom problems.

Conclusions

‘Dark Red Lollo Rossa’ was a very strong performer. It germinated better, grew faster, was healthier, produced higher yields and tasted better than ‘Revolution’. Both varieties resisted bolting well. ‘Revolution’ did not germinate well in several gardens, and most gardeners did not recommend it.

‘Revolution’ did not germinate well in several gardens, and most gardeners did not recommend it.

---

Key to Site Reports

(reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>Garden type</th>
</tr>
</thead>
</table>
| NW | = Organic
| = Uses inorganic fertilizers
| = Uses inorganic pesticides
| - = Not specified

<table>
<thead>
<tr>
<th>Ratings (1 to 10)</th>
<th>Recommendation to other gardeners (yes or no)</th>
<th>Garden type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety A</td>
<td>★★★★ ☾ NC</td>
<td></td>
</tr>
<tr>
<td>Variety B</td>
<td>★★★★★ ☀</td>
<td></td>
</tr>
</tbody>
</table>

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana
**Lettuce, Green Romaine**

**Varieties**

‘Little Gem’
40 days. Heirloom prized for its sweet flavor and crunchy texture. Bright green leaves with creamy hearts. Harvest at 4–6 inches.

‘Newham’
52 days. Modern variety with uniform, upright heads and great flavor. Dark green leaves with blanched hearts. Slow to bolt.

**Data**

Gardeners at 27 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Little Gem</th>
<th>Newham</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>15%</td>
<td>55%</td>
<td>30%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>15</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>20</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Resisted bolting better</td>
<td>30</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
<td>10</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>More attractive</td>
<td>15</td>
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<tr>
<td>Tasted better</td>
<td>16</td>
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<tr>
<td>Preference</td>
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<tr>
<td>Recommend (☺)</td>
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<td>75</td>
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</tr>
</tbody>
</table>

Mean score¹: 6.60 7.65 8.00

Median score: 6.00 7.00 8.00

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

**Prefer ‘Little Gem’**

Little Gem

Newham

‘Little Gem’ produced smaller but very dense, crisp heads. ’Newham’ was larger but with looser heads.

Little Gem

Newham

My Mom and I preferred ‘Little Gem’ for its crisp, romaine flavor and texture. ‘Newham’ had no flavor and had the texture of spinach. My daughter thought the flavor of ‘Little Gem’ was too strong and preferred ‘Newham’.

Both varieties were healthy and produced crisp, delicious lettuce.

| Little Gem | ★★★★★ | ☺ | ☝ |
| Newham     | ★★★★★ | ☺ | ☝ |

I preferred the look of ‘Little Gem’ with its glossy leaves. I felt this variety had an edge on the flavor (a bit sweeter) plus crispier. Its texture and taste won me over! Both varieties produced nice, compact looking, romaine lettuce heads.

| Little Gem | ★★★★★ | ☺ | ☝ |
| Newham     | ★★★★★ | ☺ | ☝ |

‘Little Gem’ germinated better. Only three plants of ‘Newham’ came up.

| Little Gem | ★★★★★ | ☺ | ☝ |
| Newham     | ★★★★★ | ☺ | ☝ |

Very disappointed in both of these due to poor germination. I got about 5–6 plants from the seeding. Did I plant too late (May 28)? I waited as I had planted an earlier crop of a variety of lettuce. ‘Little Gem’ did just a little bit better. I’m still waiting for some good romaine . . . it’s in the snow right now.

| Little Gem | ★★★★★ | ☺ | ☝ |
| Newham     | ★★★★★ | ☺ | ☝ |

Both of these varieties were excellent producers and provided tasty and healthy product. ‘Little Gem’ produced earlier and a bit more.

| Little Gem | ★★★★★ | ☺ | ☝ |
| Newham     | ★★★★★ | ☺ | ☝ |

**Best green romaine lettuce varieties**

**Top choice**
- Fusion

**Strong performers**
- Crisp Mint
- Green Forest
- Newham
- Starhawk
Prefer ‘Newham’

‘Newham’ had bigger leaves and produced better.

‘Newham’ produced a much higher yield and nice lettuce heads.

I will definitely grow both of these varieties again. ‘Newham’ is almost like a butter lettuce. I was able to use it for lettuce wraps and it was super sweet. ‘Little Gem’ was crispier and delicious and also sweeter than other romaines that I grow. I started harvesting heads of ‘Newham’ by July 1. It lasted longer in the garden and I was able to share lots of lettuce with friends.

‘Newham’ was easy to grow and had high yields. The plant was taller and the layers of leaves in the middle were very pretty. Plants of both varieties were very healthy, ready to harvest at the same time, and were very delicious.

‘Newham’ tasted better. It seemed by the time these varieties made a small head they were already starting to bolt. I would like to test them under shade cloth.

‘Newham’ produced more. Although the tastes of the varieties were similar, ‘Newham’ was preferred. ‘Newham’ plants returned nicely after being cut too.

Both varieties germinated poorly, even after sowing twice. Plants were not healthy and yields were poor. ‘Newham’ at least had enough to taste—it was bitter by July 14.

‘Newham’ grew more vigorously and produced more lettuce. More gardeners felt ‘Newham’ heads looked and tasted better.

Conclusions

‘Newham’ was preferred over the standard variety ‘Little Gem’. ‘Newham’ grew more vigorously and produced higher yields. More gardeners felt ‘Newham’ heads looked and tasted better. Its heads were slightly larger. Both varieties were healthy and produced crisp, delicious lettuce.
Melon, Early Cantaloupe

Varieties

‘Minnesota Midget’
70 days. Heirloom. Compact vines produce 3.5-inch-wide melons. Unique flavor.

‘Sugar Cube’
80 days. New hybrid noted for its personalized, 2-pound fruits. Sweet, deep-orange, aromatic flesh. Vines resist diseases.

Data

Gardeners at 10 sites submitted information.

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<thead>
<tr>
<th>Trait</th>
<th>Minn. Midget</th>
<th>Sugar Cube</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
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<td>38%</td>
</tr>
<tr>
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<tr>
<td>More attractive fruits</td>
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<td>25</td>
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<tr>
<td>Preference</td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Sugar Cube’

Minnesota Midget ⭐⭐⭐⭐⭐ ☺ ☻
Sugar Cube ⭐⭐⭐⭐⭐ ☻ SC
‘Sugar Cube’ cantaloupes looked more attractive.

Prefer ‘Minnesota Midget’

Minnesota Midget ⭐⭐⭐⭐⭐ ☻ ☻
Sugar Cube ⭐⭐⭐⭐⭐ ☻ SE
‘Minnesota Midget’ grew faster and ripened faster. I should have sowed earlier (sowed June 1) or started them indoors. A pest ate the ‘Sugar Cube’ plants so they did not produce. I had a total of one ripe ‘Minnesota Midget’ melon. It was amazing, so I’ll definitely try it again.

Minnesota Midget ⭐⭐⭐⭐⭐ ☻ ☻
Sugar Cube ⭐⭐⭐⭐⭐ ☻ NC
‘Sugar Cube’ plants were bigger, healthier and had more blossoms. We got so much rain that all the melons rotted on the vine.

Cutworms damaged both varieties; only one ‘Minnesota Midget’ and two ‘Sugar Cube’ plants survived. ‘Sugar Cube’ ripened 1 week earlier. This first cantaloupe was delicious! The rest of the melons in the trial ripened much later. It became very rainy; the cantaloupes did not ripen well; their flesh was not crisp. ‘Sugar Cube’ produced more melons per plant.

Best cantaloupe varieties

Top choice
Aphrodite

Strong performers
Athena
Goddess
Solstice
Superstar
No Preference

Minnesota Midget ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☻
Melon, Mid-Size Cantaloupe

Varieties

‘Athena’
75 days. Melons are 5–6 pounds with thick, orange flesh. Most popular cantaloupe in the north.

‘Sarah’s Choice’
76 days. Widely known as one of the most flavorful cantaloupes. Oval, 3-pound fruits. Easy to grow. From New Hampshire.

Data

Gardeners at 14 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Athena</th>
<th>Sarah’s Choice</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>42%</td>
<td>0%</td>
<td>58%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>42</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>60</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Higher yields</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>60</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Tasted better</td>
<td>10</td>
<td>20</td>
<td>70</td>
</tr>
<tr>
<td>Preference</td>
<td>50</td>
<td>50</td>
<td></td>
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<tr>
<td>Recommend (☺)</td>
<td>70</td>
<td>70</td>
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</tr>
<tr>
<td>Mean score¹</td>
<td>7.30</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

‘Athena’ matured earlier, produced higher yields, and its fruits were more attractive compared to those of ‘Sarah’s Choice’.

‘Athena’ had more vigorous growth and was more disease resistant. ‘Athena’ produced higher yields with larger melons. ‘Sarah’s Choice’ only produced two melons that were able to ripen within this growing season.

‘Sarah’s Choice’ had very poor germination.

‘Athena’ germinated quicker. Its leaves were healthier. ‘Athena’ produced a very abundant crop, and its melons were large and had a nice shape. ‘Sarah’s Choice’ vines seemed to have more issues with powdery mildew. It produced a sparse crop and its melons were smaller. I was disappointed with the taste of both varieties—not much flavor.

Prefer ‘Athena’

Athena       ☀️     ☀️     ☀️  ☀️  ☀️  ☀️
Sarah’s Choice ☀️     ☀️     ☀️  ☀️  ☀️

‘Athena’ melons were larger and ripened better.

Prefer ‘Sarah’s Choice’

Athena       ☀️     ☀️     ☀️  ☀️  ☀️  ☀️
Sarah’s Choice ☀️     ☀️     ☀️  ☀️  ☀️

‘Sarah’s Choice’ performed better. It produced earlier melons and more melons.

Best cantaloupe varieties

Top choice
Aphrodite

Strong performers
Athena
Goddess
Solstice
Superstar
Prefer ‘Sarah’s Choice’ (cont.)

Athena
Sarah’s Choice

‘Sarah’s Choice’ melons were slightly larger. The melons of both varieties were very sweet. Drip irrigation was used in this trial. We received less than 3 inches of rain from May 15 through Labor Day.

Athena
Sarah’s Choice

We had planted cantaloupe before with poor results and hadn’t planted any for a few years. We had a great crop this year with very tasty fruit! These varieties showed no significant differences.

Athena
Sarah’s Choice

‘Sarah’s Choice’ had 28 melons compared with 18 for ‘Athena’. They ripened earlier and tasted better.

Athena
Sarah’s Choice

My family thought ‘Sarah’s Choice’ was sweeter and better tasting by far over ‘Athena’. We will plant ‘Sarah’s Choice’ again next year. Germination for this trial and my entire garden was poor. My single ‘Sarah’s Choice’ plant yielded four fruits and my six plants of ‘Athena’ yielded a total of six fruits.

Conclusions

‘Athena’ is the most popular cantaloupe in the Midwest. It matured earlier, produced higher yields, and its fruits were more attractive compared to those of ‘Sarah’s Choice’. ‘Athena’ germinated better and its vines were healthier at more sites. Gardeners loved the taste of both varieties and were split on the variety they preferred.
Melon, Large Cantaloupe

Varieties

‘Carousel’
80 days. Large, ribbed fruits grow 6–9 pounds. Small seed cavity and firm, thick flesh. Good yields.

‘Solstice’
76 days. Thick, orange flesh is very sweet and flavorful. Fruits are deeply sutured and grow 6–9 pounds. Proven performer in North Dakota.

Data

Gardeners at 9 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Carousel</th>
<th>Solstice</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>17%</td>
<td>50%</td>
<td>33%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>33</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>17</td>
<td>83</td>
<td>0</td>
</tr>
<tr>
<td>Higher yields</td>
<td>33</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>17</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Preference</td>
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</tr>
<tr>
<td>Median score¹</td>
<td>7.00</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Carousel’

Carousel ⭐⭐⭐⭐⭐ ☺ ☟
Solstice ☺ NC

‘Carousel’ produced almost double the yield. Yellowjackets ate every melon that became ripe.

Conclusions

‘Solstice’ was a more reliable performer across sites. It matured earlier and produced higher yields.

‘Solstice’ was a more reliable performer across sites. It matured earlier and produced higher yields.

‘Solstice’ produced almost double the yield; ‘Solstice’ had only 15% germination; ‘Solstice’ 55%. ‘Carousel’ was slow to ripen.

‘Solstice’ produced a lot earlier than ‘Carousel’. ‘Carousel’ fruits were larger. This was not a hot summer so it took a little longer to produce ripened fruit.

‘Solstice’ ripened later but had higher yields and better flavored fruit.

Best cantaloupe varieties

Top choice
Aphrodite

Strong performers
Athena
Goddess
Solstice
Superstar
Melon, Green Honeydew

Varieties

‘Earli-Dew’
80 days. A reliable, early ripening honeydew. Lime-green flesh has excellent flavor and texture. Melon slips off the vine when ripe.

‘Honeycomb’
78 days. Early maturing, large-sized honeydew. Icy green, sweet flesh with outstanding flavor and aroma. Vines resist diseases.

Data

Gardeners at 5 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Earli-Dew</th>
<th>Honeycomb</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>40% 40%  20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthier plants</td>
<td>25 50 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matured earlier</td>
<td>50 50 0  75</td>
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</tr>
<tr>
<td>Higher yields</td>
<td>25 0 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>25 50 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tasted better</td>
<td>25 75 0</td>
<td></td>
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</tr>
<tr>
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</tr>
<tr>
<td>Median score¹</td>
<td>8.00 8.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Earli-Dew’

’Earli-Dew’ has been the standard honeydew grown in the north for many years. Although testing is limited, it is exciting to see a new variety outperform it. ‘Honeycomb’ matched ‘Earli-Dew’ for earliness and exceeded it for taste qualities.

Prefer ‘Honeycomb’

‘Honeycomb’ tasted better. The vines of both varieties were healthy—we had plenty of rain this year. ‘Earli-Dew’ had the first ripe melons. Both varieties produced nice melons. It was hard for me to tell when the fruits were ripe, so may not have caught some fruits at their prime.

Conclusions

‘Earli-Dew’ has been the standard honeydew grown in the north for many years. Although testing is limited, it is exciting to see a new variety outperform it. ‘Honeycomb’ matched ‘Earli-Dew’ for earliness and exceeded it for taste qualities. Gardeners had a hard time determining when to harvest these melons, especially those of ‘Honeycomb’.

Best honeydew varieties

Top choice
‘Earli-Dew’
Strong performers
Honey Orange Honeycomb

‘Honeycomb’ matched ‘Earli-Dew’ for earliness and exceeded it for taste qualities.
Melon, Orange Honeydew

Varieties

‘Honey Blonde’
71 days. Orange flesh is sweet and flavorful. Vigorous vines resist diseases and tolerate cool weather. Early ripening.

‘Honey Orange’
74 days. Flesh is pale salmon orange, thick, crisp and delicious. Oval fruits with ivory rind. Matures early and tolerates cool conditions.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Honey Blonde</th>
<th>Honey Orange</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>17%</td>
<td>67%</td>
<td>17%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>50</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Higher yields</td>
<td>50</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>17</td>
<td>50</td>
<td>33</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>83</td>
<td>17</td>
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</tr>
<tr>
<td>Median score</td>
<td>5.50</td>
<td>8.50</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Honey Orange’

Honey Blonde

Honey Orange

I planted late—poor growing season—neither variety produced many ripe melons. ‘Honey Blonde’ set more melons but many didn’t become ripe before frost. I liked the taste of ‘Honey Orange’ best. I liked both varieties and would plant both again.

Honey Blonde

Honey Orange

‘Honey Orange’ was better tasting and produced more fruit.

Honey Blonde

Honey Orange

‘Honey Orange’ had 16 melons and they were very tasty. ‘Honey Blonde’ had very few melons.

Honey Blonde

Honey Orange

‘Honey Orange’ ripened earlier. Its fruits were more attractive and tasted better. ‘Honey Blonde’ had thicker skin and produced fewer fruits.

Conclusions

Testing was limited, but ‘Honey Orange’ looked very promising. Its fruits were delicious, and every gardener recommended the variety. Gardeners did not like the taste of ‘Honey Blonde’. Yields of both varieties suffered due to cool weather.

Honey Blonde

Honey Orange

‘Honey Blonde’ ripened first but was not very sweet. It seemed that when they got ripe, I did not get to eat them—an animal was eating them, and I had trouble with spots and rotting.
Melon, Korean

Varieties

‘Sun Jewel’
68 days. Oblong fruits are lemon yellow with shallow white sutures. White, crisp flesh. High yields. Grows well in cool climates.

‘Torpedo’
65 days. Crisp, sweet, white flesh. Very early and easy to grow. Vines are productive. Fruits slip off the vine when ripe.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Sun Jewel</th>
<th>Torpedo</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>33% 0% 67%</td>
<td>0% 0%</td>
<td></td>
</tr>
<tr>
<td>Healthier plants</td>
<td>50 0 50</td>
<td>0 0</td>
<td></td>
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<tr>
<td>Higher yields</td>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Sun Jewel’

Sun Jewel ★★★★★ 😊 🍼 MN
Torpedo ★★★★ 😊 SC

These melons ripened early but had poor taste even when picked ripe. We threw most of the melons away. They were not sweet; tasted like cucumbers. We will not plant this again. It was wasted garden space to grow these.

Sun Jewel ★★★★★ 😊 🍼 SC
Torpedo ★★★★★ 😊 SC

‘Sun Jewel’ ripened early and was very productive. The flavor of ‘Sun Jewel’ is distinctive and refreshing. ‘Torpedo’ was a big disappointment. Its yields were poor and its melons were small.

‘Sun Jewel’ produced good yields.
Gardeners had mixed feelings about the taste of its white flesh.

‘Sun Jewel’ has performed well in the past, and it performed well in 2019. It produced good yields at all sites. The flesh of ‘Sun Jewel’ was white and distinctive. One gardener felt its taste was pleasant and refreshing, while another gardener thought it tasted like cucumbers. All gardeners were disappointed with ‘Torpedo’. Its yields were very poor. ‘Torpedo’ was the lowest rated vegetable variety in the history of our trials.

Best Korean melon variety
Top choice
Sun Jewel
Pea, Shell

Varieties

‘Lincoln’
65 days. Good for freezing. Pods are filled with 8–10 tender peas. Excellent flavor. Grows 28 inches.

‘Maestro’
61 days. Early yields of dark green, sweet peas. Strong, disease-resistant vines grow 24 inches tall.

Data

Gardeners at 33 sites submitted information.

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<thead>
<tr>
<th>Trait</th>
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<th>Maestro</th>
<th>Same</th>
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</thead>
<tbody>
<tr>
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<td>23%</td>
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<td>Healthier plants</td>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Lincoln’

Lincoln ☺☺☺☺☻ ☏ MN
Maestro ☼☻☻☻☻ ☏ SE

Both varieties were good.

‘Lincoln’ germinated better. ‘Maestro’ had poor germination; in a 10-foot row we had only four plants.

Lincoln ☺☺☺☺☻ ☏ MN
Maestro ☼☻☻☻☻ ☏ SE

‘Lincoln’ was sweeter.

Lincoln ☺☺☺☺☻ ☏ MN
Maestro ☼☻☻☻☻ ☏ SE

Both varieties produced fairly well. ‘Lincoln’ had long pods; blight was on ‘Maestro’ vines.

‘Lincoln’ has proven again it is the finest all-purpose garden pea for North Dakota. Nearly every gardener recommended it.

Best shell pea varieties

Top choice
Lincoln

Strong performers
Early Frosty
Green Arrow
Knight
Little Marvel
Maestro
Improved Wando
**Prefer ‘Lincoln’ (continued)**

Lincoln ☀️☀️☀️ SE
Maestro ☀️☀️☀️ NW
‘Lincoln’ had higher yields and tasted better.

Lincoln ☀️☀️☀️ SE
Maestro ☀️☀️☀️ NC
Both varieties had low yields; ‘Lincoln’ yields were slightly higher.

Lincoln ☀️☀️☀️ SE
Maestro ☀️☀️☀️ NC
The germination rate of ‘Lincoln’ was two times higher. Deer ate the crop.

Lincoln ☀️☀️☀️ NC
Maestro ☀️☀️☀️ SC
Both varieties grew a good crop.

Lincoln ☀️☀️☀️ NC
Maestro ☀️☀️☀️ SC
Both are good varieties and had good yields. Pods had an average of nine peas per pod. ‘Lincoln’ had a longer, straight pod. ‘Maestro’ ripened about a week earlier and some of its pods were curled.

Lincoln ☀️☀️☀️ SC
Maestro ☀️☀️☀️ NE
I would love to see ‘Maestro’ again as the germination was only about 25%. ‘Lincoln’ produced really well and tasted really good.

Lincoln ☀️☀️☀️ SC
Maestro ☀️☀️☀️ SE
‘Lincoln’ had at least double the amount of plants, and its peas were of better quality. ‘Maestro’ didn’t do well. Its plants were slim, and the pods were few.

Lincoln ☀️☀️☀️ SC
Maestro ☀️☀️☀️ NE
This is the first year we had a great crop of peas! ‘Lincoln’ was better in everything overall. It had good germination, flavor and yields.

Lincoln ☀️☀️☀️ NW
Maestro ☀️☀️☀️ NE
‘Lincoln’ had superior yield, shape of pods, and flavor of peas.

Lincoln ☀️☀️☀️ ☀️ NW
Maestro ☀️☀️☀️ ☀️ SE
We prefer ‘Lincoln’. It produces an abundance of peas, delicious flavor. ‘Lincoln’ is the best of any trial of peas I have done.

Lincoln ☀️☀️☀️ ☀️ SW
Maestro ☀️☀️☀️ ☀️ SC
‘Lincoln’ produced higher yields. Its pods looked more attractive and tasted better.

Lincoln ☀️☀️☀️ ☀️ SW
Maestro ☀️☀️☀️ ☀️ SD
‘Lincoln’ tasted better, both raw and cooked. ‘Maestro’ peas were hard and flavorless. ‘Maestro’ pods were large but had few peas in them; hard to shell. It was wet this year, and the plants of both varieties turned moldy before they were done producing.

**Prefer ‘Maestro’**

Lincoln ☀️☀️☀️ ☀️ NE
Maestro ☀️☀️☀️ ☀️ SC
‘Maestro’ had a better yield.

Lincoln ☀️☀️☀️ ☀️ SC
Maestro ☀️☀️☀️ ☀️ NW
‘Maestro’ had bigger peas, nicer looking pods and more flavor.

**Conclusions**

‘Lincoln’ has proven again it is the finest all-purpose garden pea for North Dakota. It received very high ratings and was recommended by an overwhelming percentage of gardeners. It germinated better and produced much higher yields over a longer season. Its pods were attractive and easy to shell. ‘Maestro’ germinated poorly at several sites, indicating seed quality and not the cultivar itself may have been a factor. However, ‘Maestro’ productivity and pod quality were inferior even in sites where good stands were established. ‘Maestro’ produced the first harvest at more sites; otherwise it was a poor performer.
Pea, Short-Vine Snap

Varieties

‘Cascadia’
62 days. Crisp, sugary, stringless pods. The 32-inch vines produce good yields. Trellising is optional.

‘Sugar Ann’
52 days. Very early and reliable. The 27-inch vines produce sweet, crisp pods. Trellising is optional.

Data

Gardeners at 28 sites submitted information.

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<tr>
<th>Trait</th>
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<th>Same</th>
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<tr>
<td>Matured earlier</td>
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<td>Higher yields</td>
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<td>More attractive pods</td>
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</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

‘Cascadia’ was recommended by most gardeners, but the variety did not excel in any trait.

Prefer ‘Cascadia’

Cascadia 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NE
Sugar Ann 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NC

These varieties didn’t impress us, particularly ‘Sugar Ann’. ‘Cascadia’ had tender pods and less powdery mildew in August.

Cascadia 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NE
Sugar Ann 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NW

‘Sugar Ann’ was slow to start. ‘Cascadia’ was more vigorous and produced more yield.

Cascadia 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ SE
Sugar Ann 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ SE

‘Cascadia’ vines looked healthier and had more attractive pods. ‘Sugar Ann’ produced higher yields. They both tasted really good.

Cascadia 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NW
Sugar Ann 🌱 🌱 🌱 🌱 ☁️ ☁️ ☁️ ☁️ NW

Some of the vines were munched off and I replanted some of each variety. Both caught up fairly well with the first planting. ‘Cascadia’ had larger pods, but ‘Sugar Ann’ was sweeter. ‘Cascadia’ had taller vines. I think both varieties would have benefited with some staking.

Best snap pea varieties

Top choice
Sugar Ann

Strong performers
Sugar Sprint
Super Sugar Snap
Prefer ‘Sugar Ann’

‘Sugar Ann’ had better germination and produced more pods. I will grow ‘Sugar Ann’ again.

I was very happy with both varieties. ‘Sugar Ann’ pods were crunchy, thinner and sweeter. ‘Cascadia’ pods sometimes became thick, so I took the peas out of them. ‘Cascadia’ pods sometimes got bumpy on the outside, so I threw them. Both varieties produced throughout the summer; maybe because it was such a wet summer.

‘Sugar Ann’ tasted better and matured earlier. Its downside was its plants were only half the size of ‘Cascadia’ plants. Only half the seeds of both varieties germinated.

‘Sugar Ann’ had better yield and taste.

‘Sugar Ann’ excelled in all traits. Our garden was poor and flooded out.

I grew both varieties in raised planters with trellises. ‘Sugar Ann’ performed better by far. It produced more pods, and its pods did not get scorched by the sun. ‘Cascadia’ pods got scorched.

‘Sugar Ann’ had a longer production time. Both varieties had good flavor and nice pods.

Both varieties grew well. ‘Sugar Ann’ produced the first pods, but ‘Cascadia’ produced a lot of pods a couple of weeks later; the overall yields were similar. Both varieties produced great peas and lots of them!

‘Cascadia’ vines produced more peas. My family thought ‘Sugar Ann’ tasted better.

Gardeners were very impressed with the earliness, healthy vines, high yields and delicious taste of ‘Sugar Ann’.

Key to Site Reports

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<th>Garden type</th>
<th>Variety A</th>
<th>Variety B</th>
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Locations
- MN = Minnesota
- NE = Northeast
- NC = North Central
- SE = Southeast
- SC = South Central
- NW = Northwest
- SW = Southwest
- MB = Manitoba
- SK = Saskatchewan
- SD = South Dakota
- MT = Montana

Ratings (1 to 10)

Recommendation to other gardeners (yes or no)
- Variety A: ✨✨✨✨✨ (yes)
- Variety B: ✨✨✨✨ (no)

Comments
- ‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
Prefer ‘Sugar Ann’ (continued)

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SC
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

‘Sugar Ann’ tasted a little better. The rabbits in my neighborhood loved both varieties. They ate my plants down to stubs, but both varieties came back and produced wonderfully!

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

I enjoyed the taste of ‘Sugar Ann’ more.

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

Both varieties had sweet pods, but ‘Sugar Ann’ had a better yield.

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

‘Sugar Ann’ performed very well. Sugar Ann was a clear winner on health and taste—extremely tasty.

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

Both had excellent germination; I did not trellis either variety but wished I had (the plants really laid in the dirt). Neither had great yields but the area in the garden they were planted never produces terribly well. I suspect the difficult location contributed to their lackluster performance. The pods really were good, just poor yields. ‘Cascadia’ had larger, less lumpy pods, while ‘Sugar Ann’ pods were decidedly sweeter and juicier.

Cascadia ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW
Sugar Ann ☝️ ☒️ ☒️ ☒️ ☒️ ☒️ SW

‘Sugar Ann’ vines were 4–6 inches taller. They produced slightly more pods. The pods had a sweeter flavor.

Conclusions

‘Sugar Ann’ has proven again it is the best snap pea for North Dakota. It received very high ratings and was preferred by most gardeners. Gardeners were very impressed with its earliness, healthy vines, high yields and delicious taste. ‘Cascadia’ was recommended by most gardeners, but it did not excel in any trait.

‘Sugar Ann’ has proven again it is the best snap pea for North Dakota.
Pea, Tall-Vine Snap

Varieties

‘PL141’
60 days. Huge, 4-inch pods are sweet and curved. Vigorous 3–4-foot vines require trellising.

‘Super Sugar Snap’
66 days. Earlier and more resistant to diseases than ‘Sugar Snap’. Vines grow 4–6 feet and require trellising.

Data

Gardeners at 15 sites submitted information.

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<th>Trait</th>
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</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘PL141’

PL141 Super Sugar Snap
‘PL141’ was generally inferior. Most gardeners did not recommend it.

PL141 Super Sugar Snap
Top choice Sugar Ann
Strong performers Sugar Sprint Super Sugar Snap

‘PL141’ had a higher germination rate. Its vines were healthier and produced better. The pods of both varieties tasted very good.

‘PL141’ vines grew higher and were easier to pick. ‘PL141’ had narrower pods, which made them more attractive and their ratio of peas to pods more enjoyable.

‘PL141’ germinated better, had healthier vines, produced earlier and produced more.

Best snap pea varieties

‘PL141’ had a higher germination rate. Its vines were taller, had more pods per plant and produced 2 weeks longer. The pods of both varieties were delicious! Kids ate them straight off the vine; the pods had a nice size.

I would plant ‘Super Sugar Snap’ again. It germinated first and more of its seeds germinated. Its vines were taller, had more pods per plant and produced 2 weeks longer. The pods of both varieties were delicious! Kids ate them straight off the vine; the pods had a nice size.

I liked the flavor of ‘Super Sugar Snap’.

I had a poor crop—rabbits, powdery mildew and cool weather made for very few pods. I sprayed with Daconil but it didn’t work as well as in previous years. I have planted and was successful with ‘Super Sugar Snap’ before.
Prefer ‘Super Sugar Snap’ (cont.)

PL141
Super Sugar Snap

‘Super Sugar Snap’ was very aggressive in
growth and grew at least 1 foot higher. It
needs at least a 4-foot-tall trellis. Its vines
were fuller—produced more peas—pods
were larger and more consistent in size.

PL141
Super Sugar Snap

‘Super Sugar Snap’ germinated 50% better
and produced better yield. I liked its climbing
vines—seemed to discourage the rabbits.

PL141
Super Sugar Snap

‘Super Sugar Snap’ had sweeter and fuller
pods. Its vines grew taller.

PL141
Super Sugar Snap

Both varieties germinated poorly. A few
‘Super Sugar Snap’ vines reached 3 feet; a few
‘PL141’ vines grew 2 feet tall. Both varieties
produced large pods and tasted good. ‘Super
Sugar Snap’ produced more pods. I have
planted a snap pea variety before and the
plants were 4-feet tall, bushy, with lots of
pods harvested. Maybe it was the year—dry
in spring, cold August, super wet/cold
September.

PL141
Super Sugar Snap

I love the flavor of ‘Super Sugar Snap’.

PL141
Super Sugar Snap

I would grow ‘Super Sugar Snap’ again. It
had better flavor and yield.

Conclusions

‘Super Sugar Snap’ was the clear winner,
excelling in all categories. It germinated
better and its vines grew more vigorously.
‘Super Sugar Snap’ vines produced earlier
crops and higher yields overall. Gardeners
liked the look and taste of its pods. A very
high percentage of gardeners recommended
‘Super Sugar Snap’; whereas, most gardeners
did not recommend ‘PL141’. ‘PL141’ was not
special in any way.

Key to Site Reports

Garden types
= Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
= Not specified

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
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SK = Saskatchewan
SD = South Dakota
MT = Montana

North Dakota Home Garden Variety Trials – 2019
Pumpkin, Early

Varieties

‘Orange Sunrise’
90 days. Round, 15-pound pumpkins show orange color early in summer. Great for cool climates.

‘Racer Plus’
85 days. Compact vines produce 12-pound fruits with deep ribs, strong handles and deep color.

Data

Gardeners at 11 sites submitted information.

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<tr>
<th>Trait</th>
<th>Orange Sunrise</th>
<th>Racer Plus</th>
<th>Same</th>
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<tr>
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\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Orange Sunrise’

Orange Sunrise [★★★★☆] 😊 🍃 NE
Racer Plus [★★★★☆] 😊 NC

‘Orange Sunrise’ matured earlier. We harvested 16 ‘Orange Sunrise’ and 6 ‘Racer’ pumpkins. The ‘Orange Sunrise’ pumpkins had a nice size and a lovely, pure-orange color. Both varieties germinated well, and their vines were healthy.

Orange Sunrise [★★★★☆] 😊 🍃 NE
Racer Plus [★★★★☆] 😊 NC

‘Orange Sunrise’ vines had bigger leaves and more blossoms. These vines produced more and bigger pumpkins.

‘Orange Sunrise’ matured earlier and produced higher yields at more sites. Its pumpkins were bright orange.

Best semi-vine jack-o’-lantern varieties

Top choice
- Neon

Strong performers
- Gladiator
- Magic Lantern

Orange Sunrise [★★★★☆] 😊 🍃 NE
Racer Plus [★★★★☆] 😊 SC

‘Orange Sunrise’ had eight pumpkins, and they looked very nice and orange with a good size. ‘Racer Plus’ did not germinate.

Orange Sunrise [★★★★☆] 😊 🍃 NE
Racer Plus [★★★★☆] 😊 SC

‘Orange Sunrise’ outperformed ‘Racer Plus’ in every category.

Orange Sunrise [★★★★☆] 😊 🍃 NW
Racer Plus [★★★★☆] 😊 NC

‘Orange Sunrise’ germinated at 100% and its vines grew in a traditional vine pattern. ‘Racer Plus’ had 88% germination. Its vines grew in more of a bush pattern, so it would work better for families with limited space. The pumpkins of ‘Orange Sunrise’ were bright orange while those of ‘Racer Plus’ were more of a traditional darker orange. My kids loved the size and color of ‘Orange Sunrise’ better and I preferred the color of ‘Racer Plus’.
Prefer ‘Racer Plus’

Orange Sunrise Ratings: Excellent (5 stars)
Racer Plus Ratings: Good (4 stars)
MN
‘Racer Plus’ did well during a difficult growing season. Its vines were dark green and larger. ‘Racer Plus’ produced 13 pumpkins; these were generally larger and had a perfect shape! ‘Orange Sunrise’ produced 10 pumpkins; all but three of these remained green throughout the growing season.

Orange Sunrise Ratings: Good (4 stars)
Racer Plus Ratings: Good (4 stars)
MN
We were excited about the amount of pumpkins we harvested in spite of the tough summer weather. ‘Orange Sunrise’ pumpkins were larger (12–15 pounds versus 10-13 pounds for ‘Racer Plus’), but we were not looking for a larger size pumpkin. They all grew in a standard shape; none were odd shaped—I’m happy with the results.

Orange Sunrise Ratings: Excellent (5 stars)
Racer Plus Ratings: Excellent (5 stars)
SE
The pumpkins of both varieties were smaller than I expected. ‘Racer Plus’ pumpkins had a maximum of 10 inches in diameter; these fruits had a nice shape and color. ‘Orange Sunrise’ pumpkins had a diameter of 7 inches; its pumpkins were tall and irregular.

Orange Sunrise Ratings: Excellent (5 stars)
Racer Plus Ratings: Excellent (5 stars)
NC
‘Racer Plus’ had more vigor. It produced more and larger pumpkins. Its pumpkins were 8–10 pounds, while ‘Orange Sunrise’ pumpkins were 6–8 pounds. ‘Orange Sunrise’ leaves had some blight.

Orange Sunrise Ratings: Excellent (5 stars)
Racer Plus Ratings: Excellent (5 stars)
MT
‘Racer Plus’ pumpkins looked very nice. They were bright orange and perfect for carving. It was fun to raise them and give them away to the kids in the neighborhood. My toddler enjoyed watching them grow. ‘Orange Sunrise’ seed did not germinate. I found wireworms in the first and second plantings (the second planting was in another location). ‘Racer Plus’ was sowed in the same general area and germinated well.

Conclusions

Both varieties produced attractive pumpkins, but most gardeners preferred ‘Orange Sunrise’. It matured earlier—always a nice trait for northern gardens. ‘Orange Sunrise’ produced higher yields at more sites. Gardeners liked its bright orange fruits. ‘Racer Plus’ had darker orange pumpkins. The compact vines of ‘Racer Plus’ were well suited for gardeners with limited space.

Key to Site Reports

(reports are presented from east to west)

Variety A
Recommendation to other gardeners: Good (4 stars)

Variety B
Recommendation to other gardeners: Excellent (5 stars)

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Garden types
- = Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
= Not specified

Location

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Comments

SW SC NE SE
Pumpkin, Large

Varieties

‘Early King’

‘Kratos’
100 days. Disease-resistant, semi-bush vines produce 20-pound pumpkins with strong handles.

Data

Gardeners at 23 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Early King</th>
<th>Kratos</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
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<td>37%</td>
<td>21%</td>
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<tr>
<td>Healthier plants</td>
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<td>24</td>
<td>59</td>
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<td>Harvested earlier</td>
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<td>29</td>
<td>35</td>
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<tr>
<td>Higher yields</td>
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<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Bigger pumpkins</td>
<td>53</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>More attractive</td>
<td>39</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>Preference</td>
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<td>33</td>
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</tr>
<tr>
<td>Recommend (😊)</td>
<td>68</td>
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<tr>
<td>Median weight (lbs)</td>
<td>19</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Early King’

Both varieties were good. I was looking for jack-o’-lantern size so ‘Early King’ was the winner with the bigger pumpkins (13–15 pounds compared to 10–13 pounds for ‘Kratos’). It was ready to harvest earlier (September 13) and produced two times the number of pumpkins.

‘Early King’ had nice, big pumpkins but not so big that I couldn’t move them. Both varieties produced nice pumpkins.

‘Early King’ produced larger pumpkins (19 pounds compared to 15 pounds for ‘Kratos’) and a higher yield at more sites.

Best jack-o’-lantern varieties

Top choice
‘Early King’

Strong performers
Autumn Gold
Cronus
Early Dakota
Howden
Gladiator
Magic Lantern

Early King

Kratos

MN

We had tough summer weather, but both varieties did well. ‘Early King’ fruits had a nice size and good form; its stem was nice and thick. ‘Early King’ fruits weighed 15–18 pounds, compared to 12–15 pounds for ‘Kratos’. We will consider planting these varieties next year.

Both varieties got powdery mildew and I sprayed the vines with fungicide. The plants finally died, but pumpkins were all ripe. ‘Early King’ produced more pumpkins and they were larger in size.

I was looking for large fruit and ‘Early King’ was the largest.

‘Early King’ pumpkins were larger (20 pounds compared to 15 pounds for ‘Kratos’) and easier to carve.

Both had good looking fruits, but I liked the ribs of ‘Early King’ a bit more. ‘Early King’ produced more pumpkins, too. Both varieties produced pumpkins that weighed 8–12 pounds.
Both varieties produced many pumpkins in the extremely dry conditions this summer without any irrigation. ‘Early King’ pumpkins were bigger.

‘Early King’ had a higher yield. The pumpkins of both varieties averaged 8 pounds in weight.

‘Early King’ had many more pumpkins. These pumpkins had a nicer color, shape and size. The germination of ‘Kratos’ was very poor.

‘Early King’ had big, very attractive fruits. Overall, it grew better than ‘Kratos’. I really enjoyed both varieties.

‘Early King’ produced one of the larger fruits. Most pumpkins of both varieties were at about 8 pounds and green at first frost.

‘Kratos’ had a better shape and higher production.

Both varieties germinated poorly. ‘Kratos’ pumpkins were larger (15 pounds compared to 10 pounds for ‘Early King’) and more attractive.

‘Kratos’ was the only variety that grew much this year.

Gardeners liked both varieties. ‘Early King’ was preferred by the majority. ‘Early King’ produced larger pumpkins (19 pounds compared to 15 pounds for ‘Kratos’) and a higher yield at more sites. Gardeners liked the size, shape and sturdy stems on the fruits of both varieties. Susceptibility to powdery mildew was mentioned by a single gardener.
Pumpkin, Cooking

Varieties

‘Cinderella’s Carriage’
100 days. New award winner. Thirty-pound fruits have sweet yellow flesh with nutty flavor.

‘Rouge Vif D’Etampes’
105 days. French heirloom known as ‘Cinderella’. Scarlet fruits prized for making yummy pies and dishes.

Data

Gardeners at 13 sites submitted information.

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<thead>
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<th>Trait</th>
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<th>D’Et</th>
<th>Same</th>
</tr>
</thead>
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<tr>
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<td>20%</td>
<td>40%</td>
<td>40%</td>
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<tr>
<td>Healthier plants</td>
<td>20%</td>
<td>10%</td>
<td>70%</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>44%</td>
<td>33%</td>
<td>22%</td>
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<tr>
<td>Higher yields</td>
<td>33%</td>
<td>44%</td>
<td>22%</td>
</tr>
<tr>
<td>More attractive</td>
<td>56%</td>
<td>11%</td>
<td>33%</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Preference</td>
<td>56%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>89%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
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<td>6.78</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Cinderella’s Carriage’

Cinderella’s Carriage 🍁🍁🍁🍁🍁😊匏匏
Rouge Vif D’Etampes 🍁🍁🍁🍁🍁匏匏
‘Cinderella’s Carriage’ set its fruits very late. ‘Rouge Vif D’Etampes’ did not even have female flowers.

‘Cinderella’s Carriage’ pumpkins were larger, ripened earlier and were more attractive. ‘Rouge Vif D’Etampes’ germinated better and produced 13 fruits compared to 11 pumpkins for ‘Cinderella’s Carriage’.

The pumpkins of ‘Cinderella’s Carriage’ were more attractive and ripened earlier at more sites.

Cinderella’s Carriage 🍁🍁🍁🍁🍁😊匏匏
Rouge Vif D’Etampes 🍁🍁🍁🍁🍁匏匏
‘Cinderella’s Carriage’ produced about three pumpkins per vine while ‘Cinderella’s Carriage’ only produced one pumpkin per vine. However, ‘Cinderella’s Carriage’ was a more attractive color inside, and its seeds toasted up more nicely. There was no noticeable difference in the flavor of the two varieties. Interesting note: Both varieties produced two distinct shapes of pumpkin: a 15-inch-plus-diameter pumpkin that was very flat with indented tops and bottoms (like a tire on a rim), and a smaller, darker pumpkin that was that slightly rounded on top rather than indented. If I didn’t know better, I’d say each seed packet contained two kinds!

Best cooking pumpkin varieties

Top choice
Cinderella’s Carriage

Strong performers
Rouge Vif D’Etampes
Small Sugar
Prefer ‘Rouge Vif D’Etampes’

Cinderella’s Carriage ★★★★★ ☺ ☠ MN
‘Rouge Vif D’Etampes’ had better color and size. Its fruits weighed 20–25 pounds compared to 10–14 pounds for ‘Cinderella’s Carriage’. The shapes and colors of both varieties were uniform, and we received a lot of comments about the pumpkins. All our friends wanted to take one home.

Cinderella’s Carriage ★★★★★ ☺ ☠ NE ‘Rouge Vif D’Etampes’ had a larger yield. ‘Cinderella’s Carriage’ fruits ripened earlier.

Cinderella’s Carriage ★★★★★ ☺ ☠ SW ‘Rouge Vif D’Etampes’ had more vigorous vines. It produced more pumpkins and matured 3 days earlier. We have not tasted either one yet—too early.

Conclusions

The new hybrid ‘Cinderella’s Carriage’ was rated higher than the famous heirloom ‘Rouge Vif D’Etampes’. More gardeners preferred and recommended ‘Cinderella’s Carriage’. Its pumpkins ripened earlier at more sites, and its pumpkins were more attractive. ‘Rouge Vif D’Etampes’ posted higher yields at more sites. Vines of both varieties were healthy and vigorous. No taste differences were mentioned.

‘Rouge Vif D’Etampes’ posted higher yields at more sites. No taste differences between the varieties were mentioned.
Pumpkin, Giant White

Varieties
‘New Moon’
90 days. White inner flesh is a breakthrough. Great for painting and carving. Rind may turn ivory.

‘Polar Bear’
Its rind retains its white color after harvest, making it ideal for fall displays. Fruits exceed 50 pounds.

Data
Gardeners at 21 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>New Moon</th>
<th>Polar Bear</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>40%</td>
<td>15%</td>
<td>45%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>35</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>21</td>
<td>26</td>
<td>53</td>
</tr>
<tr>
<td>Higher yields</td>
<td>37</td>
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<td>37</td>
</tr>
<tr>
<td>Bigger pumpkins</td>
<td>37</td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>More attractive</td>
<td>16</td>
<td>32</td>
<td>53</td>
</tr>
<tr>
<td>Preference</td>
<td>30</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
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<td>70</td>
<td></td>
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<td>Mean score¹</td>
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<td></td>
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<tr>
<td>Median score¹</td>
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<td></td>
</tr>
<tr>
<td>Median weight (lbs)</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

‘New Moon’ pumpkins developed tinges of blue, green and peach on their rinds. Its vines were healthier and produced more pumpkins at more gardens. ‘New Moon’ outperformed ‘Polar Bear’ in every category. These white pumpkins were beautiful but were not the best tasting. Our family preferred the orange varieties for taste.

Prefer ‘Polar Bear’

‘Polar Bear’ produced more pumpkins on fewer plants. ‘New Moon’ plants looked best at first but as time went on ‘Polar Bear’ took over and produced two times more pumpkins. ‘New Moon’ produced the largest pumpkin but ‘Polar Bear’ had the next three largest pumpkins. ‘New Moon’ averaged 30 pounds; ‘Polar Bear’ averaged 50 pounds.

‘New Moon’ had large, picture-perfect fruits.

‘New Moon’ preferred more than ‘Polar Bear’. ‘New Moon’ produced big, picture-perfect fruits. ‘New Moon’ had large, picture-perfect fruits.

Prefer ‘New Moon’

The pumpkins of these varieties were very similar in size, color and attractiveness. I thought they might get a bit larger—the average weight was 5 pounds—but we did have a very cool and wet summer.

Neither variety had good yields per plant.

Only two seedlings of ‘Polar Bear’ came up. Hail ruined the planting when almost mature.

Best large pumpkin varieties

Top choice
Big Moose

Strong performers
Dill’s Atlantic Giant
Early Giant
Howden Biggie

‘New Moon’ pumpkins developed tinges of blue, green and peach on their rinds. Its vines were healthier and produced more pumpkins at more gardens.
Prefer ‘Polar Bear’ (continued)

‘Polar Bear’ produced nine pumpkins, and these pumpkins stayed white. ‘New Moon’ produced five pumpkins, and these pumpkins developed a bluish tinge.

Both varieties grew very large pumpkins! ‘Polar Bear’ fruits were smaller, easier to handle and stayed white after exposure to sun. ‘New Moon’ pumpkins developed a grayish tint.

‘Polar Bear’ grew the biggest pumpkins.

‘Polar Bear’ produced more pumpkins. I was disappointed that the fruits produced were not as large (only 12–15 pounds) as it was suggested they would be.

‘Polar Bear’ fruits were rounder and more upright, more white, and they were smaller (a more manageable size). ‘New Moon’ had some interesting colors, like a peachy color and a bluish and sort of green. The fruits in this trial were bigger than I expected, and I really enjoyed that.

‘Polar Bear’ vines grew more vigorously. The ‘New Moon’ plants died in June, possibly due to disease. ‘Polar Bear’ produced one large, 40-pound pumpkin. It was very white and smooth.

‘Polar Bear’ pumpkins were whiter and stayed white.

‘Polar Bear’ pumpkins were huge (25 pounds compared to 20 pounds for ‘New Moon’) and their skin was smoother.

‘Polar Bear’ had bigger pumpkins. They got hailed out before they were ready to be picked. All pumpkins grew flat on the side laying on the ground—really flat.

‘Polar Bear’ grew the biggest pumpkins.

The vines of both varieties were very healthy and produced large pumpkins. ‘New Moon’ pumpkins were slightly heavier (40 pounds compared to 35 pounds for ‘Polar Bear’) but ‘Polar Bear’ pumpkins were more attractive.

‘Polar Bear’ produced slightly larger pumpkins (45 pounds compared to 40 pounds for ‘New Moon’).

Conclusions

Gardeners liked both varieties. Most gardeners preferred ‘Polar Bear’. Its pumpkins were whiter and stayed white. ‘New Moon’ pumpkins developed tinges of blue, green and peach on their rinds. ‘New Moon’ germinated better, had healthier vines and produced more pumpkins at more gardens. The median weight of pumpkins for both varieties was 25 pounds.
Radish, Bicolor (Fall)

Varieties

‘French Breakfast’
26 days. Popular heirloom. Scarlet skin with white tips. Cylindrical and mildly pungent.

‘Nelson’
21 days. ‘French Breakfast’ type with hybrid vigor and uniformity. Strong tops make harvesting easy.

Data

Gardeners at 11 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>French Break.</th>
<th>Nelson</th>
<th>Same</th>
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</thead>
<tbody>
<tr>
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<td>36%</td>
<td>18%</td>
<td>45%</td>
</tr>
<tr>
<td>Healthier plants</td>
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<td>40</td>
</tr>
<tr>
<td>Harvested earlier</td>
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<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
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<tr>
<td>More attractive</td>
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<td>6.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

‘French Breakast’ had higher yields, more attractive roots and tasted awesome.

‘French Breakfast’ had more mellow in flavor. ‘Nelson’ had more attractive flesh. Both varieties germinated quickly.

‘French Breakfast’ had higher yields, more attractive roots and tasted better. ‘Nelson’ was not bad. Both varieties had short tops.

‘French Breakfast’ had larger roots. I had a major problem with flea beetles.

‘French Breakfast’ outperformed ‘Nelson’ in germination, health, earliness, yield and attractiveness. Their tastes were similar.

French Breakfast had higher yields, more attractive roots and tasted awesome. Best bicolor radish variety. Top choice: French Breakfast.

Prefer ‘French Breakfast’

Both are good varieties, but I prefer the taste of ‘French Breakfast’. Fall-grown radishes are the best! No bolting or woody radishes, as happens with spring-grown radishes.

Conclusions

‘French Breakfast’ has always done well in our trials and it did well in the cold autumn of 2019. It received high ratings and every gardener recommended it. It had higher yields, more attractive roots and tasted awesome. Most gardeners liked ‘Nelson’, but it could not match the performance of ‘French Breakfast’.

Best bicolor radish variety

Top choice

French Breakfast
Radish, Purple (Fall)

Varieties

‘Bacchus’
26 days. Rich purple skin. Roots are round, uniform and mature quickly. Proven performer in North Dakota.

‘Plum Purple’
26 days. Globular roots with plum-colored skin and crisp, white flesh. Mildly pungent.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Bacchus</th>
<th>Plum Purple</th>
<th>Same</th>
</tr>
</thead>
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<tr>
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<td>50%</td>
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<td>33%</td>
</tr>
<tr>
<td>Healthier plants</td>
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<tr>
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<td>0</td>
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<td>Higher yields</td>
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<td>More attractive</td>
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<td>40</td>
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<tr>
<td>Tasted better</td>
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<tr>
<td>Preference</td>
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¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Bacchus’

Bacchus

‘Bacchus’ had more production.

Bacchus

‘Bacchus’ had larger roots. ‘Plum Purple’ roots looked slightly more attractive and were slightly milder.

Prefer ‘Plum Purple’

Plum Purple

‘Plum Purple’ had a milder taste.

Bacchus

‘Plum Purple’ roots had a prettier purple color. Both varieties came up very well and had nice, healthy plants. Both produced very well. Both tasted very good—good crunch and nice and round.

Plum Purple

‘Plum Purple’ was slightly more productive. Its roots were larger and had better flavor. Cold weather reduced the growth of both varieties.

Conclusions

Every gardener recommended ‘Plum Purple’ and most preferred it over ‘Bacchus’. Many gardeners preferred the taste of ‘Plum Purple’. ‘Bacchus’ has performed well in our previous trials and it performed well at our limited test sites this year. It germinated better, grew more vigorously and produced higher yields at more gardens.

Gardeners liked the looks and taste of ‘Plum Purple’ roots. ‘Bacchus’ grew more vigorously and produced higher yields at more gardens.

Best purple radish varieties

Top choice
Bacchus
Strong performer
Amethyst
Radish, Red (Fall)

Varieties

‘Champion’
25 days. Scarlet roots are juicy and crunchy. This award winner has been popular for decades.

‘Roxanne’
25 days. Uniform roots with cardinal-red skin and pure white flesh. A proven performer in North Dakota.

Data

Gardeners at 11 sites submitted information.

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<thead>
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<th>Trait</th>
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<th>Roxanne</th>
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<tbody>
<tr>
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<td>45%</td>
</tr>
<tr>
<td>Healthier plants</td>
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<td>10</td>
<td>60</td>
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<tr>
<td>Harvested earlier</td>
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<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Higher yields</td>
<td>50</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>More attractive</td>
<td>44</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Tasted better</td>
<td>30</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Preference</td>
<td>44</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
<td>70</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>6.80</td>
<td>6.50</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>7.50</td>
<td>7.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Champion’

Champion  ★★★★★  ☺  ☑
Roxanne    ★★★★   ☺  MN

‘Champion’ produced more.

Both ‘Champion’ and ‘Roxanne’ germinated well, had healthy plants, and produced good yields.

Best red radish varieties

Top choice
   Roxanne

Strong performers
   Champion
   Cherry Belle
   Rover

Both ‘Champion’ and ‘Roxanne’ germinated better in every category. Its plants were twice as big as those of ‘Roxanne’ on August 27, 19 days after sowing.

Champion  ★★★★★  ☺  ☑
Roxanne    ★★★★   ☺  SW

‘Champion’ plants were bushier, sturdier and a little more productive. Its roots tasted a little less bitter. The trial germinated well. I had to dust for bugs.

Prefer ‘Roxanne’

Champion  ★★★★★  ☺  ☑
Roxanne    ★★★★   ☺  MN

‘Roxanne’ germinated after 3 days; ‘Champion’ germinated 4 days later. ‘Roxanne’ tops were shorter, and its roots had a more uniform shape. ‘Champion’ tops were taller, and its roots were more subject to splitting. We had many days of repeated rain during the trial.

Champion  ★★★★★  ☺  ☑
Roxanne    ★★★★   ☺  MN

‘Roxanne’ developed faster and produced higher yields. Its roots were rounder, more attractive and more traditional looking. ‘Roxanne’ had a stronger radish flavor.

Both varieties came up within a day or two of each other. They had healthy plants and produced very good yields. They tasted very good; loved them both; nice and crunchy. ‘Champion’ produced the first radishes. ‘Champion’ had a very good crunchy and taste, and nice, bright red color.
Prefer ‘Roxanne’ (continued)

Champion ★★★★★ ☺ ☒ SC
Roxanne ★★★★★ ☺ ☒

Both varieties germinated well, and I had to do extensive thinning on both. I harvested two dozen nickel-sized radishes of ‘Roxanne’ on September 27; one dozen nickel-sized radishes of ‘Champion’ on October 7. Both varieties had a nice round shape and bright red color. ‘Roxanne’ was overall a better looking radish—also had a hotter taste to it. My wife liked the milder flavor of ‘Champion’.

Champion ★★★★★ ☺ ☒ SC
Roxanne ★★★★★ ☺ ☒

Both varieties germinated well. They were healthy but got nibbled on by beetles. ‘Champion’ had more yield; some ‘Roxanne’ roots were only the size of marbles. Both produced many roots that split in two sections down their middles. ‘Roxanne’ was milder, which I like. ‘Champion’ had a bit more spice but was still mild overall.

Champion ★★★★★ ☺ ☒ SK
Roxanne ★★★★★ ☺ ☒

Great germination (90–100%) for both; ‘Roxanne’ was slightly better. ‘Roxanne’ tasted hotter. Neither variety had issues with root maggots.

No Preference

Champion ★★★★★ ☺ ☒ NE
Roxanne ★★★★★ ☺ ☒ SC

I liked the round roots of both varieties. This was a tough trial. Dry soil reduced germination and insects later attacked the plants.

Conclusions

Both ‘Champion’ and ‘Roxanne’ germinated well, had healthy plants, and produced good yields. The roots of both varieties had a nice round shape and bright red color. ‘Champion’ tops were larger, and more gardeners preferred the look of its roots. Gardeners were split on which variety tasted better. Flea beetles were a common pest in this trial.

Key to Site Reports

(Reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>Garden types</th>
<th>Ratings (1 to 10)</th>
<th>Recommendation to other gardeners (yes or no)</th>
<th>Garden type</th>
<th>Variety A</th>
<th>Variety B</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>★★</td>
<td>☒</td>
<td>☛</td>
<td>NC</td>
<td>★★★★★★</td>
<td>★★★★★★</td>
</tr>
<tr>
<td>NC</td>
<td>★★★★★</td>
<td>☛</td>
<td>☛</td>
<td>NC</td>
<td>★★★★★★</td>
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<td>★★★★★</td>
<td>☛</td>
<td>☛</td>
<td>NC</td>
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<td>★★★★★★</td>
</tr>
<tr>
<td>SW</td>
<td>★★★★★</td>
<td>☛</td>
<td>☛</td>
<td>NC</td>
<td>★★★★★★</td>
<td>★★★★★★</td>
</tr>
<tr>
<td>SC</td>
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<td>☛</td>
<td>NC</td>
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</tr>
<tr>
<td>SE</td>
<td>★★★★★</td>
<td>☛</td>
<td>☛</td>
<td>NC</td>
<td>★★★★★★</td>
<td>★★★★★★</td>
</tr>
</tbody>
</table>

Locations

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

The roots of both varieties had a nice round shape and bright red color. Gardeners were split on which variety tasted better.
Radish, Red Long (Fall)

Varieties

‘Cincinnati Market’

‘Dragon’
40 days. Chinese radish with bright red skin and bright white flesh. Crisp and mild. Good in stir fries and salads.

Data

Gardeners at 7 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Cincinnati Market</th>
<th>Dragon</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>14%</td>
<td>57%</td>
<td>29%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>29</td>
<td>29</td>
<td>43</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>More attractive</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Preference</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>50</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>4.40</td>
<td>6.20</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>4.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Cincinnati Market’
None.

Prefer ‘Dragon’

Cincinnati Market  ★★★★★ 🌺 🌾 N
Dragon              ★★★★★ 🌺 🌾 MN
‘Dragon’ excelled in all traits. ‘Cincinnati Market’ had way fewer plants.

Cincinnati Market  ★★★★★ 🌺 🌾 NE
Dragon              ★★★★★ 🌺 🌾 SE
‘Cincinnati Market’ sprouted quicker and fuller, but neither variety produced any yield. Most of their roots were above the soil line.

No Preference

Cincinnati Market  ★★★★★ 🌺 🌾 NE
Dragon              ★★★★★ 🌺 🌾 MN
It was a frustrating trial. The soil was dry at planting time, then flea beetles invaded, and then root maggots attacked near harvest time.

Conclusions

Testing was limited, but every gardener preferred ‘Dragon’. It germinated better and grew faster. Its roots were smoother, more attractive and better tasting. ‘Cincinnati Market’ received low ratings and was a poor performer at several sites. Flea beetles were an issue in this trial.

Best red radish varieties

Top choice
Roxanne

Strong performers
Champion
Cherry Belle
Rover
Radish, Watermelon (Fall)

Varieties

‘Red Meat’
60 days. Large, 4-inch roots with deep pink flesh. Very sweet and delicious. Eat fresh or pickled.

‘Starburst’
60 days. Chinese radish hybrid. Uniformly shaped roots with vibrant red flesh. Stores well.

Data

Gardeners at 3 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Red Meat</th>
<th>Starburst</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>50%</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>More attractive</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Preference</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Mean score1</td>
<td>2.50</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Median score1</td>
<td>2.50</td>
<td>3.50</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Red Meat’
None.

Prefer ‘Starburst’

Neither variety did very well. This may have been related to the cold, wet weather. They just didn’t take off. I had about four nice ‘Starburst’ radishes. They tasted good and were very pretty when sliced. There were no ‘Red Meat’ radishes to harvest. I used neem oil once due to flea beetles. I would like to see how they might do under different conditions or in the spring.

Conclusions

Very cold autumn weather played havoc with this trial. Watermelon radishes require a longer season than most other radishes, and they did not receive enough warmth to grow and mature. Neither variety developed a full-sized root. We’ll have to try again next year.

Watermelon radishes require a longer season than most other radishes. These varieties did not receive enough warmth to grow and mature.

Best watermelon radish variety
Top choice Yet to be determined
Radish, White (Fall)

Varieties

‘Hailstone’

‘Pearl’
28 days. New variety. Pure white, globular roots with sturdy tops. Tolerates heat and is easy to grow.

Data

Gardeners at 4 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Hailstone</th>
<th>Pearl</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>More attractive</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Preference</td>
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<td>100%</td>
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<tr>
<td>Recommend (☺)</td>
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<td>100%</td>
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<tr>
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<tr>
<td>Median score¹</td>
<td>2.50</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Hailstone’

None.

Prefer ‘Pearl’

Hailstone ☺☺☺☺☺ ☺☺ Pearl ☺☺☺☺☺ ☺☺ NC

‘Pearl’ tasted good. ‘Hailstone’ was decimated by flea beetles and did not produce a yield.

Hailstone ☺☺☺☺☺ ☺☺ Pearl ☺☺☺☺☺ ☺☺ SC

‘Pearl’ had larger roots and was more productive. ‘Hailstone’ plants were larger and more vigorous.

Conclusions

The hybrid ‘Pearl’ showed greater vigor and produced higher yields. Every gardener who participated in this trial recommended it. ‘Hailstone’ was a disappointment. This trial was not popular; data are limited; and flea beetles were a major problem as well.

‘Pearl’ showed greater vigor and produced higher yields.

Best white radish variety

Top choice
White Icicle
Spinach, Heat-Tolerant (Fall)

**Varieties**

**‘Escalade’**
43 days. Medium to dark green leaves are uniform, large and round. Tolerates heat.

**‘Space’**
37 days. Thick, dark green, sweet and juicy leaves. A top performer in North Dakota.

**Data**
Gardeners at 13 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Escalade</th>
<th>Space</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>22%</td>
<td>33%</td>
<td>44%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>56</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>33</td>
<td>11</td>
<td>56</td>
</tr>
<tr>
<td>Higher yields</td>
<td>38</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>More attractive</td>
<td>22</td>
<td>11</td>
<td>67</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Preference</td>
<td>56</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
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<td>67</td>
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</tr>
<tr>
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<tr>
<td>Median score(^1)</td>
<td>6.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

**Prefer ‘Space’**

‘Space’ tasted better. ‘Escalade’ had a thicker leaf and a slightly bitter taste.

**Conclusions**

‘Escalade’ was preferred by most gardeners. These gardeners were impressed by the vigor of ‘Escalade’ plants in the cold, wet weather. Its plants were healthier and produced higher yields at more gardens. Gardeners with a taste preference selected ‘Space’. ‘Space’ has been a strong performer in our trials for years. Both varieties were recommended by a majority of gardeners.
Spinach, Savoy Leaf (Fall)

Varieties

‘Avon’
42 days. Large, slightly crinkled, dark leaves. Sprightly sweet flavor. Vigorous and holds well in field.

‘Regiment’
37 days. Vigorous plants produce early yields of slightly crinkled, broad, spade-shaped leaves.

Data

Gardeners at 12 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Avon</th>
<th>Regiment</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>45%</td>
<td>9%</td>
<td>45%</td>
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<tr>
<td>Healthier plants</td>
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<td>Harvested earlier</td>
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</tr>
<tr>
<td>Higher yields</td>
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<td>25</td>
<td>50</td>
</tr>
<tr>
<td>More attractive</td>
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<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>43</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Preference</td>
<td>57</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
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<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>7.50</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Avon’

Avon ★★★★★ ☺ ☚
Regiment ★★★★ ☺ ☚

‘Avon’ performed slightly better. It had slightly better germination and yields.

Prefer ‘Regiment’

Avon ★★★★★ ☺ ☚
Regiment ★★★★ ☺ ☚

Both varieties germinated well and were healthy. ‘Regiment’ had a higher yield. ‘Avon’ leaves were rounder, which I prefer; while ‘Regiment’ leaves were more pointed. ‘Avon’ had a slightly milder flavor.

Conclusions

Gardeners recommended both varieties. Most of them preferred ‘Avon’. Its rounded leaves were more attractive than the pointed leaves of ‘Regiment’. More gardeners preferred the taste of ‘Avon’ as well. ‘Avon’ germinated better. The two varieties were healthy and produced similar yields.

Best savoy-leaf spinach varieties for fall sowing

Top choice
Emperor

Strong performers
Avon
Bloomsdale
Long
Standing
Tyee

Gardeners preferred ‘Avon’ for its rounded leaves and superior taste. Both varieties were healthy and produced good yields.

‘Avon’ tasted better. ‘Avon’ had more crinkly leaves and a slightly bitter aftertaste.

Avon ★★★★★ ☺ ☚
Regiment ★★★★ ☺ ☚

The taste of ‘Regiment’ was awesome.

Avon ★★★★★ ☺ ☚
Regiment ★★★★ ☺ ☚

This was my first time successfully growing spinach. I preferred the taste of ‘Avon’. I will definitely be planting again next year!

Avon ★★★★★ ☺ ☚
Regiment ★★★★ ☺ ☚

‘Avon’ had a more mellow flavor; it was tasty.
## Spinach, Smooth Leaf (Fall)

### Varieties

**‘Lakeside’**
- 30 days. Healthy plants produce very flavorful leaves even under harsh conditions. Early maturing.

**‘Olympia’**
- 38 days. Grows quickly, producing high yields of smooth, mild leaves. A proven performer in North Dakota.

### Data

Gardeners at 18 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Lakeside</th>
<th>Olympia</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>23%</td>
<td>54%</td>
<td>23%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>27%</td>
<td>55%</td>
<td>18%</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>30%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Higher yields</td>
<td>30%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>More attractive</td>
<td>30%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Tasted better</td>
<td>22%</td>
<td>11%</td>
<td>67%</td>
</tr>
<tr>
<td>Preference</td>
<td>20%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>40%</td>
<td>90%</td>
<td></td>
</tr>
</tbody>
</table>

Mean score¹ 4.80 6.70
Median score¹ 5.00 7.00

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

### Prefer ‘Lakeside’

Lakeside ☻ ☻
Olympia ☻

‘Lakeside’ tasted great.

Lakeside ☻ ☻
Olympia ☻

‘Lakeside’ overall performance was better—grew faster, better germination and larger plants.

### Prefer ‘Olympia’

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ germinated better, but neither variety germinated well.

**‘Olympia’** excelled in this trial. It germinated better and had healthier plants. Its yields were earlier and higher.

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ germinated first, and its plants had a tighter, fuller form. ‘Olympia’ definitely produced the highest yield. I preferred the shape and taste of ‘Olympia’. Its leaves were thicker and more flavorful. ‘Lakeside’ leaves were lighter and milder.

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ had way more plants and better yield.

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ was the winner in this trial. It had healthier plants and a higher yield. ‘Lakeside’ was tasty, but it struggled. Growing spinach in the fall is another great way to stretch out the season. They are also good in brothy soups as a garnish.

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ was healthier and looked more attractive. The deer harvested for me.

Lakeside ☻ ☻
Olympia ☻ ☻

‘Olympia’ produced better with bigger plants.

### Best smooth-leaf spinach varieties for fall sowing

**Top choice**
- Olympia

**Strong performers**
- Escalade
- Gazelle
- Melody
- Red Kitten
- Space

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Prefer ‘Olympia’ (continued)  
Lakeside ★★★★★ ☺ ☀️ NW
Olympia ★★★★★ ☺ ☀️ SC

The taste on both these varieties was similar; both quite mild. Very nice for salads, wilting and omelets! ‘Olympia’ was a much better producer. It had nice size leaves and had high yields in September. I did my final harvesting on October 2, prior to the snow coming. Plants were up to eight inches tall.

Lakeside ★★★★★ ☺ ☀️ SW
Olympia ★★★★★ ☺ ☀️ NW

‘Olympia’ tasted better, but neither tasted great. Both varieties grew slowly and did not produce large yields.

No Preference  
Lakeside ★★★★★ ☺ ☀️ NW
Olympia ★★★★★ ☺ ☀️ SC

Very poor germination. Both varieties didn’t produce anything to evaluate. This was disappointing because previous fall spinach crops produced well.

Conclusions  
‘Olympia’ excelled in this trial. It germinated better and had healthier plants. Its yields were earlier and higher. Gardeners liked the taste of both ‘Olympia’ and ‘Lakeside’. Nearly all gardeners recommended ‘Olympia’, while most gardeners chose not to recommend ‘Lakeside’.

Key to Site Reports  
(reports are presented from east to west)

Ratings (1 to 10)  
Variety A ★★★★ ☺ ☀️ NC
Variety B ★★★★★ ☺ ☀️ SW

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Garden types  
= Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

Garden type  
NC

Location  
NW NC NE

Comments  

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana
Spinach, Smooth Leaf (Spring)

Varieties

‘Seaside’
43 days. Dark-green, thick, spade-shaped leaves. Plants grow upright and resist bolting.

‘Space’
45 days. Grows vigorously and is slow to bolt. Medium-green leaves. Upright habit keeps leaves clean.

Data

Gardeners at 22 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Seaside</th>
<th>Space</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>10%</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>20</td>
<td>35</td>
<td>45</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>18</td>
<td>29</td>
<td>53</td>
</tr>
<tr>
<td>Higher yields</td>
<td>31</td>
<td>50</td>
<td>19</td>
</tr>
<tr>
<td>Resisted bolting</td>
<td>29</td>
<td>41</td>
<td>29</td>
</tr>
<tr>
<td>More attractive</td>
<td>17</td>
<td>61</td>
<td>22</td>
</tr>
<tr>
<td>Tasted better</td>
<td>38</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>Preference</td>
<td>33</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>61</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Mean score1</td>
<td>7.29</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>Median score1</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Seaside’

Seaside 🌿 🌿 🌿 🌿 🌿 😊 😕 😊 MN
‘Seaside’ was good overall. It had tender leaves, good taste and was a good producer.

Seaside 🌿 🌿 🌿 🌿 🌿 😊 😕 😊 NE
‘Seaside’ germinated earlier, and its plants were larger. Its leaves had a stronger flavor, which we liked. We ate ‘Seaside’ from spring through fall. Even after it bolted, its leaves were not bitter. We ate it fresh in salads; did not try it cooked. ‘Space’ plants were more compact. Its taste was milder—more like the spinach sold at grocery stores.

Prefer ‘Space’

Seaside 🌿 🌿 🌿 🌿 🌿 😊 😕 😊 MN
I liked the shape of the leaf of ‘Space’.

Seaside 🌿 🌿 🌿 🌿 🌿 😊 😕 😊 SE
I personally liked ‘Seaside’, but my Mom and daughter liked ‘Space’. We decided ‘Space’ had a very strong spinach flavor and texture that spinach lovers would prefer. ‘Seaside’ tasted more like a spring mix.

‘Seaside’ grew well and was recommended by most gardeners. These gardeners often mentioned its delicious taste.

Best smooth-leaf spinach varieties for spring sowing
Top choice
Space
Strong performer
Olympia
Prefer ‘Space’ (continued)

‘Space’ was overall best. Our garden got drowned out late in the season.

‘Space’ had larger leaves that were flat and smooth. Its taste was also sweeter and more tender.

I liked both. They were similar. They both had a very short picking season—too short.

‘Space’ germinated better and grew more vigorously. It produced higher yields, and I enjoyed its flavor.

‘Space’ resisted bolting much better.

‘Space’ produced higher yields and resisted bolting better at more sites. Gardeners liked its rounded leaf shape more than the pointed leaf shape of ‘Seaside’.

Conclusions

‘Space’ produced higher yields and resisted bolting better at more sites compared to ‘Seaside’, another bolt-resistant hybrid. Most gardeners preferred ‘Space’ and it was highly recommended. Gardeners liked its rounded leaf shape more than the pointed leaf shape of ‘Seaside’. ‘Seaside’ grew well and was recommended by most gardeners. These gardeners often mentioned its delicious taste.

Key to Site Reports

(continued)
Squash, Semi-Crookneck

Varieties

‘Gentry’
43 days. Buttery yellow, smooth fruits. Productive vines have an open habit and few spines.

‘Gold Star’
44 days. Vines resist diseases and produce good yields. Easy to pick from the open vines. Strong necks.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Gentry</th>
<th>Gold</th>
<th>Star</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>17%</td>
<td>50%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Healthier plants</td>
<td>17</td>
<td>17</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>33</td>
<td>17</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Higher yields</td>
<td>40</td>
<td>20</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>33</td>
<td>17</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Tasted better</td>
<td>17</td>
<td>17</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Preference</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
<td>83</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>9.17</td>
<td>8.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>10.00</td>
<td>9.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Gentry’

Both varieties had healthy plants. ‘Gentry’ produced fruits a few days earlier. It produced more fruits per plant. The bright yellow color of its fruits makes them more attractive.

Prefer ‘Gold Star’

‘Gold Star’ produced more fruits. Its fruits were of higher quality.

Both varieties had very healthy plants that produced lots of fruits.

No Preference

I cannot tell any difference between these varieties.

Conclusions

Gardeners were very pleased with both varieties. ‘Gentry’ and ‘Gold Star’ had healthy plants that produced lots of fruits. The varieties were so similar that some gardeners struggled to find any significant differences between the two. Gardeners were split on their preferred varieties. ‘Gentry’ produced earlier and higher yields at more sites.

Best crookneck squash varieties

Top choice
Sundance

Strong performers
Gentry
Gold Star
Slick Pik YS
26
Squash, Dark Green Zucchini

Varieties

‘Desert’
50 days. High yields of straight fruits. Open plants make harvesting easy.

‘Raven’
48 days. Dark-green, smooth, glossy fruits. Vines have an open habit. Big yields.

Data

Gardeners at 10 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Desert</th>
<th>Raven</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>10%</td>
<td>20%</td>
<td>70%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>20</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>30</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>Higher yields</td>
<td>22</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>11</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Preference</td>
<td>40</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Recommend (☺)</td>
<td>90</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Mean score†</td>
<td>7.80</td>
<td>8.70</td>
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<tr>
<td>Median score†</td>
<td>8.00</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

†Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Desert’

Desert  ☺  ☹  SE
Raven   ☼  ☹  NC

‘Desert’ tasted better.

Prefer ‘Raven’

Desert  ☼  ☹  SW
Raven   ☼  ☹  MT

‘Raven’ tasted better.

‘Raven’ had earlier production.

Conclusions

Both varieties received high ratings and strong recommendations. ‘Raven’ was preferred by most gardeners. ‘Raven’ produced earlier crops at more sites, and numerous gardeners felt its fruits were more attractive and tasted better. Both varieties have performed well in our tests for years.

‘Desert’ and ‘Raven’ were both recommended by nearly all gardeners.
Squash, Green Zucchini

Varieties

‘Cashflow’
45 days. Open, vigorous plants produce heavy yields of 8-inch, high quality fruits.

‘Spineless Beauty’
50 days. Longtime favorite. Uniform fruits form on spineless, productive vines. Easy to pick.

Data

Gardeners at 15 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Cashflow</th>
<th>Spineless Beauty</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>23%</td>
<td>8%</td>
<td>69%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>58</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>31</td>
<td>46</td>
<td>23</td>
</tr>
<tr>
<td>Higher yields</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>33</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>27</td>
<td>0</td>
<td>73</td>
</tr>
<tr>
<td>Preference</td>
<td>64</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>73</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Mean score(^1)</td>
<td>7.64</td>
<td>6.91</td>
<td></td>
</tr>
<tr>
<td>Median score(^1)</td>
<td>8.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

Both varieties produced attractive, delicious fruits. Most gardeners preferred ‘Cashflow’; its vines were healthier.

Prefer ‘Cashflow’

Cashflow ★★★★★ ☺ ☠
Spineless Beauty ★★★★★ ☺ SE

Both varieties performed well. Their fruits tasted good, cooked up well and made outstanding zucchini bread. Blossom end rot was an issue with both varieties for a short period due to the irregular weather we experienced. I think ‘Cashflow’ is slightly more visually appealing.

Cashflow ★★★★★ ☺ ☠
Spineless Beauty ★★★★★ ☺ SE

‘Cashflow’ was much healthier and never got mildew, which always happens to my zucchini late in the season. For about a month, ‘Spineless Beauty’ (which is not spineless) produced fruits that rotted at the end, but the problem resolved itself.

Best green zucchini varieties

Top choice
Spineless Beauty

Strong performers
Cashflow Payload
Prefer ‘Spineless Beauty’

Cashflow ★★★★★ ☻ ☹
Spineless Beauty ★★★★★ ☻ MN
‘Spineless Beauty’ plants were twice as big; they grew faster and produced first and produced more fruits. I wasn’t super impressed with either. Only two plants from each variety germinated. Their fruits were green and pretty. All sizes of fruits tasted good. I made soup out of the large ones successfully. I did not have disease or pest issues with either variety.

Cashflow ★★★★★ ☻ ☹
Spineless Beauty ★★★★★ ☻ MN
‘Spineless Beauty’ plants were healthier and more productive. They were so bountiful that I had to pull some of the plants. I couldn’t give all of the fruits away!

Cashflow ★★★★★ ☻ ☹
Spineless Beauty ★★★★★ ☻ NE
I was not impressed with either variety. In previous years growing zucchini, I have had an overabundance of produce; this year however, I was left wanting. Each variety produced very few male flowers and it was very common that the male and female flowers were not blooming at the same time. I frequently hand pollinated in order to ensure fruit set. Both varieties were infested by squash vine borer; ‘Cashflow’ rebounded better. ‘Spineless Beauty’ had just produced its first fruits at the time of the infestation and it had a higher abundance early on compared to ‘Cashflow’.

Cashflow ★★★★★ ☻ ☹
Spineless Beauty ★★★★★ ☻ SC
‘Spineless Beauty’ produced the first and most fruits.

Conclusions

Both varieties produced attractive, delicious fruits. Most gardeners preferred ‘Cashflow’; its vines were healthier. Yields of ‘Cashflow’ and ‘Spineless Beauty’ were comparable, with more gardeners noting the earliness of ‘Spineless Beauty’. Several gardeners noted their zucchini yields were lower than normal this year. They also mentioned blossom end rot being an unexpected problem. ‘Spineless Beauty’ is a proven winner in previous trials and was again recommended by the majority of gardeners.

Yields of both varieties were comparable. Several gardeners noted the earliness of ‘Spineless Beauty’, a proven performer in North Dakota.
Squash, Winter Multicolor Acorn

Varieties

‘Carnival’
85 days. Fruits have flecks of green, gold and yellow. Each fruit is unique. High quality and stores well. Semi-bush plants.

‘Celebration’
80 days. Light yellow fruits with orange ribs and attractive flecking. Golden flesh is smooth, nutty and sweet. Semi-bush vines.

Data
Gardeners at 7 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Carnival</th>
<th>Celebration</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>20%</td>
<td>20%</td>
<td>60%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>40</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
<td>80</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>67</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Tasted better</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Preference</td>
<td>100</td>
<td>0</td>
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<tr>
<td>Recommend</td>
<td>100</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Mean score(^1)</td>
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<td>5.50</td>
<td></td>
</tr>
<tr>
<td>Median score(^1)</td>
<td>8.00</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Carnival’

Carnival ☃ ☃ ☃ ☃ NC
Celebration ☃ ☃ ☃ ☃ MN

‘Carnival’ produced first and produced more fruits. I used the fruits for decorations only.

Prefer ‘Celebration’

‘Carnival’ was the clear winner. It was easy to grow and produced higher yields. Its fruits were so beautiful they could be used as decorations.

Conclusions

‘Carnival’ was preferred and recommended by all gardeners. It matched or excelled over ‘Celebration’ in all categories. ‘Carnival’ was easy to grow, healthy, matured earlier and produced higher yields. Gardeners loved the green, gold and yellow flecks on its rind. Its fruits were pretty enough to use as decorations. Gardeners were split on which variety tasted better.


Squash, Winter Tan Acorn

Varieties

‘Baked Potatoes’

105 days. Tan fruits weigh 1.0–1.5 pounds. Flesh is off-white in color, sweet and nutty. Good for soups, roasting and pie.

‘Thelma Sanders’

A “sweet potato” heirloom squash from Missouri. Thick, orange-gold flesh has sweet, chestnut flavor. Good yields and stores well.

Data

Gardeners at 2 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Baked Potatoes</th>
<th>Thelma Sanders</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Preference</td>
<td>50</td>
<td>50</td>
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</tr>
<tr>
<td>Recommend</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Mean score(^1)</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>Median score(^1)</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

Conclusions

This was our least popular trial. The two gardeners were split on their preference and agreed to recommend both varieties. The hybrid ‘Baked Potatoes’ germinated better, grew vigorously and produced larger fruits. The heirloom ‘Thelma Sanders’ had more flavorful flesh. Gardeners were pleased with the yields of both varieties.

Gardeners liked both varieties. ‘Baked Potatoes’ grew vigorously and produced larger fruits. ‘Thelma Sanders’ had more flavorful flesh.

 Prefer ‘Baked Potatoes’

Baked Potatoes ★★★★★ ☺ ☞
Thelma Sanders ★★★★ ☻ SC

‘Baked Potatoes’ germinated better, grew vigorously and produced larger fruits. ‘Thelma Sanders’ produced the first fruits, higher yields and tasted better.

 Prefer ‘Thelma Sanders’

Baked Potatoes ★★★★★ ☺ ☞
Thelma Sanders ★★★★ ☻ NC

‘Thelma Sanders’ had a more complex flavor profile than ‘Baked Potatoes’. I would definitely plant both of these varieties again. Their fruits will store easily due to their size.
Squash, Winter Buttercup

Varieties

‘Autumn Cup’
95 days. First hybrid semi-bush buttercup. Dark green fruits have small buttons at the bottom. Sweet, fine-textured, deep-orange flesh.

‘Bonbon’
95 days. Award winner. Semi-bush vines produce reliable yields of classic, cupped fruits. Superb flavor. Proven performer in North Dakota.

Data

Gardeners at 18 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Autumn Cup</th>
<th>Bonbon</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>24%</td>
<td>29%</td>
<td>47%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>18</td>
<td>24</td>
<td>59</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>6</td>
<td>69</td>
<td>25</td>
</tr>
<tr>
<td>Higher yields</td>
<td>13</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>29</td>
<td>29</td>
<td>41</td>
</tr>
<tr>
<td>Tasted better</td>
<td>20</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Preference</td>
<td>41</td>
<td>59</td>
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<tr>
<td>Recommend</td>
<td>53</td>
<td>71</td>
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</tr>
<tr>
<td>Mean score¹</td>
<td>6.71</td>
<td>7.41</td>
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</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Autumn Cup’

Seeds were sown on May 20 and took a long time to germinate. ‘Autumn Cup’ had healthier vines. Its fruits were healthier and had a thicker flesh. The flesh of both varieties was sweet and orange.

‘Autumn Cup’ produced earlier and more fruits. Its fruits were uniform in size. Both varieties tasted so good.

Both varieties had healthy vines. Their fruits had sweet, delicious flesh.

Best buttercup winter squash varieties

Top choice
- Bonbon

Strong performer
- Burgess
Prefer ‘Bonbon’

Autumn Cup ★★★★★ ☺ ☹ MN
Bonbon ★★★★★ ☺ ☹
I liked the taste and texture of ‘Bonbon’ better. Both were really good.

Autumn Cup ★★★★★ ☺ ☹ SE
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ was better in all traits, including germination.

Autumn Cup ★★★★★ ☺ ☹ SE
Bonbon ★★★★★ ☺ ☹ These varieties were very similar.

Autumn Cup ★★★★★ ☺ ☹ SE
Bonbon ★★★★★ ☺ ☹ I preferred the shape of ‘Bonbon’ fruits. Its plants were healthier, more vigorous and more productive.

Autumn Cup ★★★★★ ☺ ☹ NC
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ tasted better. The dry growing conditions did not provide a good year for growth. Fruits were smaller this year.

Autumn Cup ★★★★★ ☺ ☹ SC
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ produced more squash and they were larger.

Autumn Cup ★★★★★ ☺ ☹ SC
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ produced more squash, but the yields of both varieties were poor and disappointing.

Autumn Cup ★★★★★ ☺ ☹ NW
Bonbon ★★★★★ ☺ ☹ I liked the more compact nature of ‘Autumn Cup’, but of three hills, one produced nothing, one hill had two nice-sized fruits, and the other had three good-sized fruits. The hills of ‘Bonbon’ were bushier, took up more space, but each of two hills planted produced four large fruits. ‘Bonbon’ fruits had a gray bump (turban) on the bottom; ‘Autumn Cup’ did not. Both varieties tasted very good.

Autumn Cup ★★★★★ ☺ ☹ SW
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ had a larger yield. Fruits of both varieties were uniform in shape; ‘Autumn Cup’ fruits were slightly larger.

Autumn Cup ★★★★★ ☺ ☹ SW
Bonbon ★★★★★ ☺ ☹ ‘Bonbon’ fruits are second to none. They are perfectly sized and absolutely delicious. ‘Autumn Cup’ did very poorly in this trial. We were able to harvest just one fruit large enough to eat.

Conclusions

‘Bonbon’ ripened earlier and was much more productive in most gardens. Most gardeners preferred it. ‘Autumn Cup’ was satisfactory to most gardeners, but it did not excel in any traits. Both varieties had healthy vines, and their fruits had sweet, delicious flesh.
Squash, Winter Baby Butternut

Varieties

‘Butter Baby’
100 days. Heavy yields of personal-sized, 0.5–1.5-pound fruits. Fruits have flavorful, dark-orange flesh. Stores well. Semi-bush plants.

‘Butterscotch’
100 days. Award winner. Small, 1–2-pound fruits. Flesh is rich and high in sugars. Short, semi-bush plants resist mildew.

Data

Gardeners at 17 sites submitted information.

| Trait                  | Butter Baby | Butter- | Same |
|------------------------|-------------| scotch   |      |
| Germinated best        | 29%         | 35%     | 35%  |
| Healthier plants       | 41          | 24      | 35   |
| Harvested earlier      | 40          | 40      | 20   |
| Higher yields          | 50          | 38      | 13   |
| More attractive fruits | 31          | 25      | 44   |
| Tasted better          | 33          | 25      | 42   |
| Preference             | 67          | 33      |      |
| Recommend              | 60          | 60      |      |
| Mean score¹            | 7.07        | 6.80    |      |
| Median score¹          | 7.00        | 7.00    |      |

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Butter Baby’

Butter Baby ★★★★★ ☁ ☀
Butterscotch ★★★★ ☁ MN

I loved the small size of this squash—perfect for two people. I will grow these again! ‘Butter Baby’ plants appeared larger and fuller. It produced three times more fruits and the fruits were more uniform—small and stocky. The fruits of both varieties tasted good, but ‘Butterscotch’ was a little sweeter tasting. ‘Butterscotch’ germinated slightly better.

Butter Baby ★★★★★ ☁ ☀
Butterscotch ★★★★ ☁ MN

‘Butter Baby’ produced more squash. We liked the size of the squash of both varieties.

‘Butter Baby’ vines were bushier, more vigorous and more productive.

Best butternut winter squash varieties

Top choice
Early
Butternut

Strong performers
Butter Baby
Waltham

Butter Baby ★★★★★ ☁ ☀
Butterscotch ★★★★ ☁ NC

‘Butter Baby’ had better yield and taste. I really liked the small size as I live alone.

Butter Baby ★★★★★ ☁ ☀
Butterscotch ★★★★ ☁ SC

I like the smaller size of the ‘Butter Baby’ fruits. I have not tasted any of the fruits yet.
Prefer ‘Butter Baby’ (continued)

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SC

‘Butter Baby’ fruits were a bit smaller, but had much bigger, healthier plants and ripened faster, with a sweet taste.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SC

Both varieties struggled to grow once they came up. They grew slowly and did not set fruit very early. Quite a few of the squash didn’t mature by time cold temps set in. ‘Butter Baby’ is the right size for two people for a meal. ‘Butterscotch’ seemed to crack a little along the neck.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 NW
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SC

‘Butter Baby’ plants were healthy but tiny. Maybe its fruits weren’t mature enough, but all of them got soft or rotten in just a week or two after picking. ‘Butterscotch’ didn’t germinate until July and did not produce a yield.

Prefer ‘Butterscotch’

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 MN

I harvested seven ‘Butterscotch’ fruits; these were uniformly sized and mature. I preferred its taste. I harvested only two of ‘Butter Baby’; these fruits were small and immature.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SE

‘Butterscotch’ fruits were ready sooner and had a larger average size. ‘Butter Baby’ produced more fruits but they were much smaller and many of the fruits did not mature.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SE

The flesh of ‘Butterscotch’ was darker, more flavorful and more tender. Good squash flavor. ‘Butter Baby’ plants were bushier and more vigorous.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣 SW
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SW

‘Butterscotch’ produced more squash.

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣 SW
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 SW

‘Butterscotch’ germinated first and had more vigorous vines. Its squash matured 5 days earlier. I have not tasted either yet; it is too early.

No Preference

Butter Baby 🌟🌟🌟🌟🌟 😊 🟢 🟣 SC
Butterscotch 🌟🌟🌟🌟🌟 😊 🟢 🟣 SC

I have no real preference; both produced similar small squash.

Conclusions

‘Butter Baby’ was the preferred choice for most gardeners. Its vines were bushier, more vigorous and more productive. ‘Butter Baby’ fruits were slightly smaller, which many gardeners preferred. Gardeners liked the taste of both varieties. ‘Butterscotch’ was recommended by the same number of gardeners. It was interesting to note this baby butternut trial was more popular than the standard butternut trial.

This baby butternut trial was more popular than the standard butternut trial.
Squash, Winter Butternut

Varieties

‘Atlas’
110 days. Cylindrical fruits with a slight bulge; easy for peeling. Cream-colored fruits have dark-orange flesh and weigh 6 pounds.

‘Early Butternut’
82 days. Award winner. Early maturing hybrid produces good yields of delicious fruits on compact vines.

Data

Gardeners at 5 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Atlas</th>
<th>Butternut</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>0</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>0</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Tasted better</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Preference</td>
<td>33</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>50</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>7.50</td>
<td>7.75</td>
<td></td>
</tr>
<tr>
<td>Median score²</td>
<td>7.50</td>
<td>7.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Atlas’

Atlas Early Butternut
The flesh of ‘Atlas’ was sweeter and had a finer texture. The fruits were easier to peel and process. ‘Atlas’ had half as many fruits, but they were twice as big compared to those of ‘Early Butternut’. ‘Atlas’ fruits were straighter while those of ‘Early Butternut’ had a more traditional shape. The skins of ‘Early Butternut’ cracked.

Prefer ‘Early Butternut’

Atlas Early Butternut
Yields were low due to the cool, rainy weather. ‘Early Butternut’ fruits were a lot larger. I will think of growing a different type of squash next year.

No Preference

Atlas Early Butternut
Both varieties performed equally so I don’t have a preference.

Conclusions

‘Early Butternut’ has done well in our trials for years, and it grew well this year. Most gardeners preferred it over ‘Atlas’, and more gardeners recommended it. This was not a popular trial and data are limited. These varieties were rated very similarly for all traits, and no consistent differences were detected.

Best butternut winter squash varieties

<table>
<thead>
<tr>
<th>Top choice</th>
<th>Strong performer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Butternut</td>
<td>Butter Baby Waltham</td>
</tr>
</tbody>
</table>
Squash, Winter Orange Hubbard

Varieties

‘Lakota’
Beautiful orange fruits with green streaks. Fine-grained, sweet orange flesh and nutty taste. Grown in North Dakota by the Lakota Tribe.

‘Red Kuri’
92 days. Early ripening, scarlet squash from Japan. Thick, yellow flesh is smooth, very sweet and nutty. Good for pies and purées.

Data

Gardeners at 15 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Lakota</th>
<th>Red Kuri</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>8</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>25</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>Higher yields</td>
<td>25</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>36</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>Tasted better</td>
<td>13</td>
<td>25</td>
<td>63</td>
</tr>
<tr>
<td>Preference</td>
<td>33</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>67</td>
<td>92</td>
<td></td>
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<tr>
<td>Mean score¹</td>
<td>6.00</td>
<td>7.58</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>7.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹ Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Lakota’

Lakota
Red Kuri

Both were very amazing varieties. I’m happy I tried this trial to find more beloved winter squash varieties to add to my collection! These two varieties are definite keepers and will now be staples in my garden. I loved the flavor of both varieties. I adored the smaller size of ‘Red Kuri’ for sheer handling and meal prep. ‘Red Kuri’ also has a nice delicate skin. However, I prefer the sweet, every so nutty flavor of ‘Lakota’. It has more of the richness I am looking for along with the most beautiful, show worthy fruit.

Lakota ☑️ ☑️ ☑️ - MN
Red Kuri ☑️ ☑️ ☑️ - SE

The wet, cold spring led to very poor yields for both. I only harvested four tiny ‘Lakota’ and three tiny ‘Red Kuri’ fruits. ‘Lakota’ tasted milder compared to ‘Red Kuri’, which was tart. ‘Red Kuri’ is very nice and colorful.

Lakota ☑️ ☑️ ☑️ ☑️ ☑️ - NW
Red Kuri ☑️ ☑️ ☑️ ☑️ ☑️ - MN

I love the multicolor look of ‘Lakota’. Both varieties produced a similar number of fruits, but ‘Lakota’ fruits were larger.

Prefer ‘Red Kuri’

Lakota
Red Kuri

‘Lakota’ vines did not produce any fruits.

Lakota ☑️ ☑️ ☑️ - MN
Red Kuri ☑️ ☑️ ☑️ - NE

‘Lakota’ did not produce at all for me. ‘Red Kuri’ only gave two small fruits. This was a difficult growing season. I would like to try them again to see how they would grow under better conditions.

Lakota ☑️ ☑️ ☑️ - SE
Red Kuri ☑️ ☑️ ☑️ - MN

None of my ‘Lakota’ seeds germinated. Most of ‘Red Kuri’ did and two plants produced small squash. Animals ate one and then the plants shriveled up. I planted pie pumpkins in the same area, and they did

The fruits of both varieties were beautiful and delicious. Their vines were notably vigorous.

Best Hubbard winter squash varieties
Top choice Red Kuri
Strong performer Blue Magic
**Prefer ‘Red Kuri’ (continued)**

well. ‘Red Kuri’ has done well in the past.

Lakota ★★★★☆ ★ ★ SE
‘Red Kuri’ produced more fruits. The flesh of its fruits was super creamy and sweet. The green stripes on ‘Lakota’ fruits were very attractive.

Lakota ★★★★☆ ★ ★ SC
The fruits of both varieties had great flavor and were beautiful—they were interesting to look at. ‘Red Kuri’ fruits were smaller and therefore easier to prepare.

Lakota ★★★★☆ ★ ★ SW
‘Lakota’ fruits were more attractive, but ‘Red Kuri’ tasted better. ‘Red Kuri’ vines were healthier and more productive. With the abundance of moisture in Western North Dakota this season, the squash plants overtook the garden even with trimming. I also had slug damage, but slugs did not harm ‘Red Kuri’.

No Preference

Lakota ★★★★☆ ★ ★ NC
I liked the size of the fruits—not too big.

‘Red Kuri’ vines were healthier and more productive. ‘Red Kuri’ was a more consistent performer across sites.

The flesh of both varieties was moist and soft but not as sweet as a buttercup squash.

Lakota ★★★★☆ ★ ★ SC
‘Lakota’ bloomed first and produced a higher yield. The vines of both varieties were healthy, and their fruits were attractive.

Lakota ★★★★☆ ★ ★ SC
These plants exploded in our garden, and nearly took over. Impress! Both varieties were unique and so yummy! We picked some early and enjoyed breading and frying them. We picked them a bit more mature and made ‘zucchini’ boats with them using ground meat and cheese. They were so good! We made French fries with them, like sweet potato fries; and honestly, these have such a sweet, wonderful flavor. Both varieties are true winners. We definitely want these in our garden next year!

**Conclusions**

Most gardeners preferred ‘Red Kuri’ and nearly every gardener recommended this Japanese variety. It germinated much better and its vines were healthier and more productive compared to ‘Lakota’ from North Dakota. ‘Red Kuri’ was a more consistent performer across sites. Fruits of both varieties were beautiful and could be used as decorations. Gardeners enjoyed the taste of both varieties. Vines were notably vigorous.

### Key to Site Reports

**Garden types**

- Organic
- Uses inorganic fertilizers
- Uses inorganic pesticides
- Not specified

**Locations**

- MN = Minnesota
- NE = Northeast
- SE = Southeast
- NC = North Central
- SC = South Central
- NW = Northwest
- SW = Southwest
- MB = Manitoba
- SK = Saskatchewan
- SD = South Dakota
- MT = Montana

**Recommendation to other gardeners (yes or no)**

**Ratings (1 to 10)**

<table>
<thead>
<tr>
<th>Variety A</th>
<th>★★★★☆</th>
<th>★</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety B</td>
<td>★★★★☆</td>
<td>★</td>
<td>SE</td>
</tr>
</tbody>
</table>

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
Swiss Chard, Multicolor

Varieties

‘Bright Lights’
60 days. Award winner. Vibrant stems in shades of red, yellow, orange, gold and white.

‘Northern Lights’
60 days. Shiny green leaves with very colorful stems. Stalks are broad, very tender and fleshy.

Data

Gardeners at 15 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Bright Lights</th>
<th>Northern Lights</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>15%</td>
<td>23%</td>
<td>62%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>23</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>33</td>
<td>8</td>
<td>58</td>
</tr>
<tr>
<td>Higher yields</td>
<td>23</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>More attractive</td>
<td>75</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Tasted better</td>
<td>31</td>
<td>15</td>
<td>54</td>
</tr>
<tr>
<td>Preference</td>
<td>77</td>
<td>23</td>
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</tr>
<tr>
<td>Recommend</td>
<td>86</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Mean score₁</td>
<td>8.54</td>
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</tr>
<tr>
<td>Median score₁</td>
<td>9.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Bright Lights’

Bright Lights ★★★★★ ☺ ☠ ☠
Northern Lights ★★★★★ ☺ ☠ SE

‘Bright Lights’ was more colorful. ‘Northern Lights’ stalks tasted smoother and sweeter.

Bright Lights ★★★★★ ☺ ☠ ☠
Northern Lights ★★★★★ ☺ ☠ SE

The color of ‘Bright Lights’ was more vivid. The stalks of both varieties were very tasty and attractive.

Bright Lights ★★★★★ ☺ ☠ ☠
Northern Lights ★★★★★ ☺ ☠ NC

‘Bright Lights’ had faster growth and larger leaves. I loved its color assortment.

Bright Lights ★★★★★ ☺ ☠ ☠
Northern Lights ★★★★★ ☺ ☠ NC

‘Bright Lights’ had a bitter taste, but larger leaves. ‘Bright Lights’ was sweet, had a better variety of colors, but smaller leaves. Both varieties produced a crop all spring, summer and into the fall.

Bright Lights ★★★★★ ☺ ☠ ☠
Northern Lights ★★★★★ ☺ ☠ SC

‘Bright Lights’ tasted a bit better. Both varieties were very pretty; loved the colors.

Gardeners liked both varieties. ‘Bright Lights’ and ‘Northern Lights’ were rated similarly for most traits including yields and taste.

Best Swiss chard varieties

Top choice
Bright Lights

Strong performers
Flamengo
Lucullus
Oriole
Peppermint
Rhubarb

North Dakota Home Garden Variety Trials – 2019
**Prefer ‘Bright Lights’**

Bright Lights  ★★★★★ ☺ ☝ -
Northern Lights ★★★★★ ☺ SC

‘Bright Lights’ germinated faster and thrived. Grew rapidly and regrew quickly after cuttings. Outstanding yield. Showed great heat tolerance and was slot to bolt. Both varieties looked great but ‘Bright Lights’ was more vibrant. Both varieties tasted yummy raw or cooked but ‘Bright Lights’ had a little richer flavor.

Bright Lights  ★★★★★ ☺ ☝ ☝ SW
Northern Lights ★★★★★ ☺ ☝ ☝ MN

‘Bright Lights’ was far superior overall. It outperformed ‘Northern Lights’ in all categories. Fun trial.

Bright Lights  ★★★★★ ☺ ☝ ☝ SW
Northern Lights ★★★★★ ☺ ☝ ☝ NC

‘Northern Lights’ had more produce and more color.

Bright Lights  ★★★★★ ☺ ☝ ☝ NC
Northern Lights ★★★★★ ☺ ☝ ☝ SC

Our grasshoppers were horrible this year and they did a number of these plants. We were able to eat some. These varieties were beautiful with their colors!

**The colors of ‘Bright Lights’ were more vibrant; this led to a vast majority of gardeners preferring it.**

**Conclusions**

Gardeners liked growing these varieties and recommended both of them. ‘Bright Lights’ and ‘Northern Lights’ were rated similarly for most traits including yields and taste. There was one notable exception: looks. The colors of ‘Bright Lights’ were more vibrant; this led to a vast majority of gardeners preferring it.

**Prefer ‘Northern Lights’**

Bright Lights  ★★★★★ ☺ ☝ ☝
Northern Lights ★★★★★ ☺ ☝ MN

They were both fantastic Swiss chard varieties. Their flavors were great and it was fun to have the bright colors when I cooked up the greens. Plants were very healthy and productive (they are still producing even this late in the season (early September).

‘Northern Lights’ was more productive.
Turnip, Purple Top (Fall)

Varieties

‘Purple Prince’
50 days. Smooth, uniform roots with bright purple tops. Pure white flesh is sweet and juicy.

‘Purple Top White Globe’
50 days. Most popular turnip in the USA. Smooth, round roots. Leaves are large and good for cooking.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Purple Prince</th>
<th>P.T.W. Globe</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>20%</td>
<td>20%</td>
<td>60%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>33</td>
<td>0</td>
<td>67</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Higher yields</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>More attractive roots</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Preference</td>
<td>100</td>
<td>0</td>
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<tr>
<td>Recommend</td>
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<tr>
<td>Mean score¹</td>
<td>9.50</td>
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</tr>
<tr>
<td>Median score¹</td>
<td>9.50</td>
<td>7.50</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Purple Top White Globe’
None.

Conclusions

Both varieties struggled in the cold, wet autumn to develop full-sized roots. The limited data available showed a strong preference for the hybrid ‘Purple Prince’ over the standard ‘Purple Top White Globe.’ ‘Purple Prince’ grew quicker and produced higher yields. It was rated very highly by participants and preferred by all of them.

‘Purple Prince’ grew quicker and produced higher yields.

Prefer ‘Purple Prince’

Purple Prince ★★★★★ ☺ ☠
Purple Top W. Globe ★★★★★ ☺ MN
Both varieties were very nice looking—good color and shape. ‘Purple Prince’ was slightly better.

Purple Prince ★★★★★ ☺ ☠
Purple Top W. Globe ★★★★★ ☺ NC
‘Purple Prince’ grew a little bigger though neither one was full grown because of the cool fall weather.

Best turnip varieties

Top choice
Hakurei

Strong performers
Purple Prince
Purple Top White Globe
Tokyo Cross
Turnip, Red (Fall)

Varieties

‘Scarlet Queen’
50 days. Beautiful red skin. White flesh shows attractive red splashes when sliced. Crunchy and juicy.

‘Tsugaru Scarlet’
55 days. Scarlet, round turnip from Japan. Flesh is pure white, tender, crisp and delicious.

Data

Gardeners at 3 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Scarlet Queen</th>
<th>Tsugaru Scarlet</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>0</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Higher yields</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>More attractive roots</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Preference</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Mean score\(^1\) 4.00 7.00
Median score\(^1\) 4.00 7.00

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

Conclusions

Data are limited in this trial. Neither variety produced full-sized roots under the cold, wet conditions. ‘Tsugaru Scarlet’ showed more vigor, leading to higher yields. All gardeners preferred it over ‘Scarlet Queen’.

‘Tsugaru Scarlet’ showed more vigor, leading to higher yields.

Prefer ‘Scarlet Queen’
None.

Prefer ‘Tsugaru Scarlet’

‘Tsugaru Scarlet’ roots had a more uniform size and better texture.

| Scarlet Queen          | ★★★★★       | ☺            | MN |
| Tsugaru Scarlet        | ★★★★★       | ☻            |    |

‘Tsugaru Scarlet’ produced enough to taste. Its roots had diameters of 1.5 inches and smaller.

Best turnip varieties

Top choice
Hakurei

Strong performers
Purple Prince
Purple Top
White Globe
Tokyo Cross
Turnip, White (Fall)

Varieties

‘Hakurei’
38 days. Popular Japanese turnip with sweet, mild flavor. Dark green, edible tops. Matures early.

‘Tokyo Cross’
50 days. Award winner known for its quality roots and ease of growing. Flavorful flesh.

Data

Gardeners at 4 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Hakurei</th>
<th>Tokyo Cross</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>75%</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>50</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>50</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Higher yields</td>
<td>50</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>More attractive roots</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Tasted better</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Preference</td>
<td>75</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>75</td>
<td>75</td>
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</tr>
<tr>
<td>Mean score</td>
<td>6.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Median score</td>
<td>6.00</td>
<td>5.50</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Tokyo Cross’

Hakurei 🌟🌟🌟🌟🌟 😊 🍁
Tokyo Cross 🌟🌟🌟🌟🌟 😊 MN
‘Tokyo Cross’ was more productive. Its roots looked and tasted better.

Conclusions

The very cold, wet autumn prevented both varieties from developing full-sized roots. ‘Hakurei’ germinated better, had healthier plants and produced higher yields at more sites. Data are very limited in this trial.

Prefer ‘Hakurei’

Hakurei 🌟🌟🌟🌟🌟 😊 🍁
Tokyo Cross 🌟🌟🌟🌟🌟 😊 MN
‘Hakurei’ roots were just a little bigger in size.

Hakurei 🌟🌟🌟🌟🌟 😊 🍁
Tokyo Cross 🌟🌟🌟🌟🌟 😊 SE
‘Hakurei’ had full flavor. Both varieties produced small yields after 60 days; neither had full-sized roots.

Hakurei 🌟🌟🌟🌟🌟 😊 🍁
Tokyo Cross 🌟🌟🌟🌟🌟 😊 SE
‘Hakurei’ germinated better and was healthier. It would have produced a good harvest, but rabbits ate the trial.

Best turnip varieties

Top choice
Hakurei

Strong performers
Purple Prince
Purple Top White
Globe
Tokyo Cross
Watermelon, Red Allsweet

Varieties

‘Sangria’
90 days. High quality. Deep red flesh is very sweet and refreshing. Melons grow 20 pounds.

‘Stargazer’
90 days. Elongated fruits weigh 25 pounds. Filled with sweet, crisp flesh.

Data

Gardeners at 9 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Sangria</th>
<th>Stargazer</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>43%</td>
<td>14%</td>
<td>43%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>14</td>
<td>29</td>
<td>57</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>43</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>Higher yields</td>
<td>29</td>
<td>57</td>
<td>14</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>29</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Tasted better</td>
<td>17</td>
<td>50</td>
<td>33</td>
</tr>
<tr>
<td>Preference</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Recommend (😊)</td>
<td>63</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>6.38</td>
<td>7.13</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>6.50</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Sangria’

Sangria ★★★★★ 😊 😖 😖
Stargazer ★★★★★ 😊 NE
‘Sangria’ melons were bigger, but I have not eaten a fully ripe melon yet.

Prefer ‘Stargazer’

Sangria ★★★★★ 😊 😖 😖
Stargazer ★★★★★ 😊 NE
We sowed on May 20. Three seedlings of ‘Stargazer’ germinated, compared to one seedling of ‘Sangria’. The vines of both varieties were healthy. ‘Stargazer’ ripened 3 weeks earlier. We harvested twelve ‘Stargazer’ melons—one was 25 pounds—compared to one melon of ‘Sangria’.

‘Stargazer’ had healthier vines and produced more and larger fruits. Its fruits were more flavorful. ‘Sangria’ fruits were sweeter.

‘Sangria’ and ‘Stargazer’ yields were low this summer. Gardeners were evenly split on which variety they preferred.

Best red watermelon varieties

Top choice
Sangria

Strong performers
Stargazer
Sugar Baby
Sweet Dakota
Rose

‘Stargazer’ had about 16 melons whereas ‘Sangria’ only had a few and they never matured before frost. ‘Stargazer’ was a very good tasting melon.
Prefer ‘Stargazer’ (continued)

There was too much rain and not enough sunshine this summer. The plants of both varieties were large, but the fruits were set too late in the season. Deer started eating them, so I picked a couple fruits that were not quite ripe in the middle of September.

Conclusions

‘Sangria’ and ‘Stargazer’ yields were low this summer. ‘Stargazer’ produced more ripe melons at more sites. More gardeners liked the looks and taste of ‘Stargazer’ melons as well. Gardeners were evenly split on which variety they preferred. ‘Sangria’ has performed well in tests conducted in previous years.

Key to Site Reports

(Reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>Garden type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>Organic</td>
</tr>
<tr>
<td>NE</td>
<td>Uses inorganic fertilizers</td>
</tr>
<tr>
<td>SE</td>
<td>Uses inorganic pesticides</td>
</tr>
<tr>
<td>NC</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Locations

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

‘Stargazer’ produced more ripe melons at more sites. More gardeners liked the looks and taste of ‘Stargazer’ melons as well.
Watermelon, Red Early

Varieties

‘Shiny Boy’
75 days. Award winner. Refreshing, sweet, tropical flavor. Twenty-pound melons ripen early.

‘Sweet Dakota Rose’
85 days. Sweet flesh with few seeds. Developed in North Dakota. Melons grow 15 pounds. Reliable.

Data

Gardeners at 23 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Shiny Boy</th>
<th>S. Dak.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>53%</td>
<td>29%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>47</td>
<td>53</td>
</tr>
<tr>
<td>Higher yields</td>
<td>44</td>
<td>50</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>25</td>
<td>56</td>
</tr>
<tr>
<td>Tasted better</td>
<td>15</td>
<td>46</td>
</tr>
<tr>
<td>Preference</td>
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<td>65</td>
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<tr>
<td>Recommend (😊)</td>
<td>59</td>
<td>71</td>
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<td>5.88</td>
<td>8.35</td>
</tr>
<tr>
<td>Median score</td>
<td>6.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

‘Shiny Boy’ seedlings showed more vigor. Its vines had melons a few days before ‘Sweet Dakota Rose’. ‘Shiny Boy’ had better yields, larger melons and tasted sweet. ‘Sweet Dakota Rose’ melons had fewer seeds and better taste.

Prefer ‘Shiny Boy’

Shiny Boy ☑️ - Green
Sweet Dakota Rose ☑️ - Green

‘Shiny Boy’ germinated better. Its vines were more vigorous and produced many more fruits. ‘Sweet Dakota Rose’ produced only two large melons; these melons were larger and had more attractive dark coloring. The vines of both varieties dried down well before the fruits were ripe.

Shiny Boy ☑️ - Green
Sweet Dakota Rose ☑️ - Green

‘Shiny Boy’ vines dried quickly, but it still produced higher yields.

‘Shiny Boy’ outproduced ‘Sweet Dakota Rose’. One ‘Shiny Boy’ melon weighed 16 pounds. ‘Sweet Dakota Rose’ never fully ripened before rotting.

Shiny Boy ☑️ - Green
Sweet Dakota Rose ☑️ - Green

Neither variety really had a great taste, but they were both okay.

Prefer ‘Sweet Dakota Rose’

Shiny Boy ☑️ - Green
Sweet Dakota Rose ☑️ - Green

‘Sweet Dakota Rose’ produced a few more melons. The vines of both varieties did better when grown with black plastic around them.

Best red watermelon varieties

Top choice
Sangria

Strong performers
Stargazer
Sugar Baby
Sweet Dakota Rose

Yields of both varieties were low, but ‘Sweet Dakota Rose’ produced slightly better.
Prefer ‘Sweet Dakota Rose’ (cont.)

Shiny Boy   
Sweet Dakota Rose   
Both varieties germinated at 100%, but all but one ‘Sangria’ seedling died from damping off. This led to a much higher yield for ‘Sweet Dakota Rose’. The melons of ‘Sweet Dakota Rose’ had a nice, uniform shape and perfect size. Its flesh was very sweet and had excellent flavor.

Shiny Boy   
Sweet Dakota Rose   
‘Sweet Dakota Rose’ produced earlier melons and higher yields. It tasted better.

Shiny Boy   
Sweet Dakota Rose   
Both varieties produced several melons per plant. ‘Sweet Dakota Rose’ melons were smaller and a little better tasting. Neither variety produced very sweet melons—I’m blaming the cool weather for this.

Shiny Boy   
Sweet Dakota Rose   
None of the melons ripened in time. The ‘Sweet Dakota Rose’ vines produced more melons, and its melons had a nice size.

Shiny Boy   
Sweet Dakota Rose   
There were lots of melons but none of them were ripe at first frost. The vines of ‘Sweet Dakota Rose’ were healthier and just went crazy. I needed one more week of growing season. I sowed late (June 17), and the seedlings were slow to germinate, which was odd as the soil was quite warm. I would like to try starting them indoors. I only ever get ripe watermelons once every 2–3 years now matter how I plant them.

Shiny Boy   
Sweet Dakota Rose   
We were not pleased. We sowed on June 8 and only one ‘Shiny Boy’ seed germinated; this seedling did not produce any melons. Seven seeds of ‘Sweet Dakota Rose’ germinated. These seedlings produced a total of two melons. Each of the melons had a big, black spot on them before ripening; these melons did not taste good.

Shiny Boy   
Sweet Dakota Rose   
Neither variety produced a fully ripe melon. Not a great year.

Shiny Boy   
Sweet Dakota Rose   
‘Sweet Dakota Rose’ melons were sweeter. The melons of both varieties did not grow very large.

Shiny Boy   
Sweet Dakota Rose   
‘Sweet Dakota Rose’ had large melons; one did split. ‘Sweet Dakota Rose’ was the best watermelon we had all summer. Very sweet and crunchy. Mom said she prefers watermelons with seed because of ‘Sweet Dakota Rose’.

Conclusions

‘Sweet Dakota Rose’ was developed in North Dakota and it showed its superiority in our region this summer. Gardeners were especially pleased with the taste and appearance of its melons.

‘Sweet Dakota Rose’ was first to ripen and produced slightly better. Most gardeners preferred and recommended ‘Sweet Dakota Rose’ over the Asian watermelon ‘Shiny Boy.’
Watermelon, Yellow

Varieties

‘Petite Yellow’
75 days. One of the sweetest, earliest ripening melons. Melons are round and weigh 6 pounds.

‘Yellow Doll’
70 days. Very early hybrid. Bright yellow flesh is crisp and very sweet. Round melons grow 8 pounds.

Data

Gardeners at 11 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Petite Yellow</th>
<th>Yellow Doll</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>36%</td>
<td>55%</td>
<td>9%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>73</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Matured earlier</td>
<td>56</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Higher yields</td>
<td>63</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>More attractive fruits</td>
<td>44</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Tasted better</td>
<td>43</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>Preference</td>
<td>75</td>
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</tr>
<tr>
<td>Recommend (😊)</td>
<td>63</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>6.38</td>
<td>6.13</td>
<td></td>
</tr>
<tr>
<td>Median score²</td>
<td>8.50</td>
<td>6.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Petite Yellow’

Petite Yellow  ★★★★★ 😊 😊
Yellow Doll  ★★★★★ 😊 SE

‘Petite Yellow’ germinated better and its plants were twice as big. I harvested four 5-pound melons on August 2 while the ‘Yellow Doll’ melons were only 1-inch in diameter. In all, ‘Petite Yellow’ produced 16 melons (100 pounds total) and ‘Yellow Doll’ produced four melons (20 pounds total). ‘Petite Yellow’ melons tasted good but ‘Yellow Doll’ was sweeter.

Prefer ‘Yellow Doll’

Petite Yellow  ★★★★★ 😊 😊
Yellow Doll  ★★★★★ 😊 NC

We never got to eat any melons. All of them rotted on the vine with all the rain we had.

‘Petite Yellow’ produced earlier and produced more ripe melons. It was a more reliable performer.

Best yellow watermelon varieties

Top choice
Yellow Doll

Strong performers
Early Moonbeam
Petite Yellow

I loved these yellow watermelons! A great size for the fridge. Sweet and crisp. I harvested more of ‘Petite Yellow’.

Petite Yellow  ★★★★★ 😊 😊
Yellow Doll  ★★★★★ 😊 SC

‘Petite Yellow’ vines were larger, healthier and grew faster. ‘Petite Yellow’ had higher yields and large melons.

Petite Yellow  ★★★★★ 😊 😊
Yellow Doll  ★★★★★ 😊 SW

‘Petite Yellow’ produced more melons and tasted better.

Petite Yellow  ★★★★★ 😊 😊
Yellow Doll  ★★★★★ 😊 SW

‘Petite Yellow’ had better yield and taste. Both varieties tasted great.
Prefer ‘Yellow Doll’ (continued)

Petite Yellow  🌟🌟🌟🌟🌟 ☺ ☑  SW
Yellow Doll  🌟🌟🌟🌟🌟 ☺ ☑  SW

‘Petite Yellow’ only germinated 20% of its seeds; the plants were spindly and produced one golf-ball-sized melon. ‘Yellow Doll’ germinated 100% of its seeds. Its vines weren’t terribly vigorous, but each produced one melon of decent size, which I harvested on October 1, not because I thought they were ready, but because it was about to freeze! However, ready or not they were tasty. This part of the garden turned out to have more afternoon shade than I had anticipated. These varieties may have performed better in a sunnier spot.

Conclusions

‘Yellow Doll’ has performed well in the past, but ‘Petite Yellow’ was the surprise winner in this trial. Its vines were healthier and grew faster. ‘Petite Yellow’ produced earlier and produced more ripe melons. It was a more reliable performer. Gardeners were split on which variety tasted better, and they recommended both varieties at an equal percentage.

Gardeners were split on which variety tasted better, and they recommended both varieties at an equal percentage.
Basil, Compact

Varieties

‘Dolce Fresca’
70 days. Award winner. Bushy plants filled with sweet leaves.

‘Emma’
70 days. Sturdy plants are easy to harvest. Mild, sweet flavor.

Data

Gardeners at 14 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Dolce Fresca</th>
<th>Emma</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>31%</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>31</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>15</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>Higher yields</td>
<td>15</td>
<td>38</td>
<td>46</td>
</tr>
<tr>
<td>More attractive</td>
<td>31</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Tasted better</td>
<td>17</td>
<td>17</td>
<td>67</td>
</tr>
<tr>
<td>Preference</td>
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<td>62</td>
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<tr>
<td>Recommend</td>
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<tr>
<td>Median score</td>
<td>8.00</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Dolce Fresca’

Dolce Fresca 🌾🌾🌾🌾🌾 ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SE

‘Dolce Fresca’ was a fuller plant. It produced higher yields. The germination of ‘Emma’ was spotty. Its plants were taller.

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SE

Both varieties had a high yield and great taste. ‘Dolce Fresca’ had a slightly higher yield, but both were great.

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SE

‘Dolce Fresca’ plants were one-third larger, leading to that much more production. Its leaves were more resistant to leaf-eating insect pests.

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SC

Both gardeners liked both varieties and no clear and consistent differences were detected. They enjoyed the taste of both varieties.

Gardeners liked both varieties and no clear and consistent differences were detected. They enjoyed the taste of both varieties.

Prefer ‘Emma’

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ MN

‘Emma’ was healthier, produced higher yields and looked more attractive.

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SE

‘Emma’ had a sweeter taste to me. Both plants produced really well. I was very impressed with both of them. ‘Dolce Fresca’ seemed to have a head start in the beginning, but they both filled out pretty equally as the season progressed. The aroma from that portion of the garden was amazing. I would recommend both varieties. Both varieties held up to multiple hail events. They did, however, both start to die as soon as the temperature dropped into the mid/low 40s. They were completely gone after they were covered in a foot of snow for a few days in early October. I’d say they reacted pretty equally to the colder temps.

Dolce Fresca 🌾🌾🌾🌾�� ☻ ☃
Emma 🌾🌾🌾🌾�� ☻ SC

Both gardeners liked both varieties and no clear and consistent differences were detected. They enjoyed the taste of both varieties.

Best basil varieties

Top choice
Genovese

Strong performers
Amethyst
Improved
Emma
Italian Large Leaf
Lime
Mrs. Burns
Lemon
Sweet Dani

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**Prefer ‘Emma’ (continued)**

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ NC

Both varieties were pretty good, and they were easy to grow. ‘Emma’ was the winner. Its plants were larger and somewhat tastier.

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ NC

Both varieties did very well and tasted great.

Dolce Fresca ★★★★★ N ☻ NC
Emma ★★★★★ ☻ SC

‘Emma’ germinated better, produced the first yield and produced more. A hailstorm on August 8 destroyed the planting.

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ SC

‘Emma’ germinated better, produced a little earlier and had robust plants. Both varieties were very good tasting and very fragrant.

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ SC

‘Emma’ as a better compact plant, a shorter plant by 4–6 inches. This makes it a better plant to hang and dry for cooking use in the winter. ‘Emma’ grew faster and bloomed first.

**Conclusions**

Gardeners liked both varieties and no clear and consistent differences were detected. Most gardeners preferred ‘Emma’. These gardeners commented that ‘Emma’ had sturdy plants that grew robustly, producing higher yields. Gardeners enjoyed the taste of both varieties.

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**Garden types**

= Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

**Locations**

MN = Minnesota
NE = Northeast
SE = Southeast
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SW = Southwest
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SK = Saskatchewan
SD = South Dakota
MT = Montana

**Key to Site Reports**

(reports are presented from east to west)

**Ratings**

(1 to 10)

| Variety A | ★★★★★ | ☻ |
| Variety B | ★★★★★ | ☻ |

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

**Recommendation to other gardeners**

(1 to 10)

**Garden type**

NC

**Location**

NW NC NE

**Comments**

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ SC

Both varieties were slow to germinate. Their flavors were bold and bright. ‘Emma’ plants were a bit sturdier, fuller and recovered a bit faster after cuttings.

Dolce Fresca ★★★★★ ☻ ☄]
Emma ★★★★★ ☻ SC

‘Emma’ was a better compact plant, a shorter plant by 4–6 inches. This makes it a better plant to hang and dry for cooking use in the winter. ‘Emma’ grew faster and bloomed first.

Most gardeners preferred ‘Emma’. These gardeners commented that ‘Emma’ had sturdy plants that grew robustly, producing higher yields.
Basil, Large Leaf

Varieties

‘Italian Large Leaf’
78 days. Popular. Sweeter than classic ‘Genovese’ basil.

‘Newton’
77 days. New. Classic flavor. Leaves up to 4 inches long.

Data

Gardeners at 13 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Italian L.</th>
<th>Newton</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>38%</td>
<td>23%</td>
<td>38%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>27</td>
<td>18</td>
<td>55</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>18</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>Higher yields</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>More attractive</td>
<td>18</td>
<td>18</td>
<td>64</td>
</tr>
<tr>
<td>Tasted better</td>
<td>9</td>
<td>18</td>
<td>73</td>
</tr>
<tr>
<td>Preference</td>
<td>67</td>
<td>33</td>
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</tr>
<tr>
<td>Recommend</td>
<td>75</td>
<td>83</td>
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<tr>
<td>Mean score¹</td>
<td>7.33</td>
<td>6.67</td>
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</tr>
<tr>
<td>Median score</td>
<td>8.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Italian Large Leaf’

Italian Large Leaf  ★★★★★ ☺ ☞ SE
Newton               ★★★★★ ☺ NE

‘Italian Large Leaf’ and ‘Newton’ were rated similarly for all traits. Neither variety showed a particular strength or weakness.

‘Italian Large Leaf’ and ‘Newton’ plants were more filled out. ‘Newton’ tasted bitter to me.

Italian Large Leaf  ★★★★★ ☺ ☞ SE
Newton               ★★★★★ ☺ SC

The plants of both varieties were very tall and beautiful. I liked the looks of ‘Italian Large Leaf’ a bit better; it was a bit taller.

Italian Large Leaf  ★★★★★ ☺ ☞ SE
Newton               ★★★★★ ☺ SC

‘Italian Large Leaf’ germinated slightly better.

Italian Large Leaf  ★★★★★ ☺ ☮ NE
Newton               ★★★★★ ☺ ☞ SC

‘Newton’ never germinated. This trial was grown in a planter on my balcony. I don’t think it had good drainage.

Italian Large Leaf  ★★★★★ ☺ ☮ SC
Newton               ★★★★★ ☺ ☞ SW

The leaves of ‘Italian Large Leaf’ were larger and easier to harvest.

Italian Large Leaf  ★★★★★ ☺ ☮ SW
Newton               ★★★★★ ☺ ☞ NE

‘Italian Large Leaf’ had sturdier plants. I’m thinking they had too much shade.

Best basil varieties

Top choice
Genovese

Strong performers
Amethyst
Improved Emma
Italian Large Leaf
Lime
Mrs. Burns
Lemon
Sweet Dani

Prefer ‘Italian Large Leaf’

Italian Large Leaf  ★★★★★ ☺ ☮ NE
Newton               ★★★★★ ☺ ☮ NE

‘Italian Large Leaf’ produced really well, and I was able to keep harvesting and using it. I liked the taste of both varieties, but ‘Italian Large Leaf’ was more licorice-like in flavor. ‘Newton’ did not germinate well or produce much but tasted better.
Prefer ‘Newton’

Italian Large Leaf  ★★★★★ ☺ SE
Newton  ★★★★★ ☺ SE

‘Newton’ germinated earlier. Both varieties were very healthy and tasty.

Italian Large Leaf  ★★★★★ ☺ SC
Newton  ★★★★★ ☺ SC

‘Newton’ germinated best, and once it got going it was very productive!

Italian Large Leaf  ★★★★★ ☺ NW
Newton  ★★★★★ ☺ NW

‘Newton’ survived the wind much better. I companion planted the basil with peppers in large plastic whisky-style tubs and I won’t do that again. The basil grew but not real well.

Italian Large Leaf  ★★★★★ ☺ SW
Newton  ★★★★★ ☺ SW

‘Newton’ yielded better. Both varieties were healthy, and I did not notice any difference in their tastes.

Conclusions

‘Italian Large Leaf’ and ‘Newton’ were rated similarly for all traits. Neither variety showed a particular strength or weakness. Gardeners were pleased with the health, productivity and taste of both varieties.

Gardeners were pleased with the health, productivity and taste of both varieties.

Key to Site Reports

(reports are presented from east to west)

Variety A
Variety B
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Ratings (1 to 10)

Recommendation to other gardeners (yes or no)

Garden type

Location

Comments

Garden types

= Organic
= Uses inorganic fertilizers
= Uses inorganic pesticides
- = Not specified

Locations

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

North Dakota Home Garden Variety Trials – 2019 136
Parsley, Flat Leaf

Varieties

‘Giant of Italy’
75 days. Classic. Flavorful leaves on strong stems. High yields.

‘Peione’
75 days. New. Large leaves on thick, upright stems. Sweet flavor.

Data

Gardeners at 6 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Giant of Italy</th>
<th>Peione</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>67%</td>
<td>0%</td>
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</tr>
<tr>
<td>Healthier plants</td>
<td>67</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Harvested earlier</td>
<td>50</td>
<td>0</td>
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<tr>
<td>Higher yields</td>
<td>67</td>
<td>17</td>
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<tr>
<td>More attractive</td>
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<tr>
<td>Tasted better</td>
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<td>Median score(^1)</td>
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<td>8.50</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

 Prefer ‘Giant of Italy’

Both varieties germinated very well. ‘Peione’ germinated within 1 week; ‘Giant of Italy’ took 2 weeks to germinate. Overall, I preferred ‘Giant of Italy’. Its seedlings showed exceptional root development and vigor. ‘Giant of Italy’ plants grew bigger leaves, and therefore produced more yield.

 Prefer ‘Peione’

Both varieties were very good. ‘Peione’ tasted better.

 Conclusions

‘Giant of Italy’ germinated better, was healthier, and produced higher yields. Gardeners who preferred ‘Peione’ often felt it tasted better.

Best parsley variety
Top choice
Giant of Italy
Cosmos, Rose

Varieties

‘Rubenza’
Cranberry blooms fade to an antique rose. The 42-inch plants bloom early and continuously.

‘Xsenia’
New award winner. Its terracotta petals have glowing pink edges. Grows 24 inches.

Data

Gardeners at 25 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rubenza</th>
<th>Xsenia</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>45%</td>
<td>0%</td>
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</tr>
<tr>
<td>Healthier plants</td>
<td>52</td>
<td>0</td>
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</tr>
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<td>Bloomed earlier</td>
<td>57</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>More blooms</td>
<td>52</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>68</td>
<td>14</td>
<td>18</td>
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<tr>
<td>Better cut flower</td>
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<td>9.00</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Rubenza’

Rubenza ★★★★★ ☺ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

I liked the color of ‘Rubenza’ better; it is more striking. However, its plants were way taller and leggier, which led to a more tangled mass. In the garden they weren’t as uniform in size as the plants of ‘Xsenia’. I didn’t care for the color of ‘Xsenia’ as much, but as a drift in the garden, the plants were more uniform and stood better. Both varieties were hailed on multiple times and they perked right back up a few days after each storm. I loved both of these and the fact that they handled the hail was a surprising plus! I have fallen in love with cosmos after this.

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

‘Rubenza’ had more flowers.

Gardeners loved ‘Rubenza’. Its cranberry-red flowers were vibrant when opening, fading to a soft rose.

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

‘Rubenza’ was a beautiful cosmos. It handled lots of rain and high winds. The plants did not get fungus and bloomed for a long time—into mid-October!

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

‘Rubenza’ was about 12 inches taller. The darker blossoms made a beautiful contrast.

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

The color of ‘Rubenza’ was more vivid.

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

‘Rubenza’ germinated twice as much as ‘Xsenia’. The blossoms of ‘Rubenza’ were larger, with a beautiful deep rosy color as a new bloom or a faded one. They always caught my eye. Awesome color. ‘Xsenia’ plants were shorter and kind of all over the place, compared to the more uniform look of ‘Rubenza’. Both were full of blooms, and both were very nice as cut flowers. If doing this trial again, I would stake up both of these varieties. Even though both rows were protected from the wind, both toppled over.

Rubenza ★★★★★ ☻ ☞ NC
Xsenia ★★★★ ☻ ☞ SE

I preferred the darker, rosier color of ‘Rubenza’ flowers. ‘Xsenia’ flowers were pinker. ‘Rubenza’ had taller plants but neither variety was very tall.

Best cosmos varieties
Top choice
Sonata
Strong performers
Double Click
Picotee
Psyche
Rubenza
**Prefer ‘Rubenza’ (continued)**

Rubenza  ★★★★★ 🙄 🙄
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ had beautiful deep rose colors and ruffled petals. I have gorgeous flower arrangements. ‘Xsenia’ had poor germination and bloomed late.

Rubenza  ★★★★★ 🙄 🙄
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ germinated better. I love the dark pink/red color of the flowers. Both varieties were beautiful and great for pollinators.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ germinated a few days earlier. Plants of both varieties thrived, but ‘Rubenza’ plants showed amazing fullness. Both varieties were prolific bloomers and great for cut flowers. ‘Rubenza’ blooms had a bolder color and were more tolerant to wind.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ had twice as many plants, which led to more flowers. Both varieties bloomed late into fall.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ germinated faster and produced stronger plants.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ was a prolific bloomer. Its flowers were attractive and maroon, twice the size of ‘Xsenia’. Both varieties had wispy foliage. ‘Xsenia’ was the first to bloom (July 20) but the flowers were small and not as showy as ‘Rubenza’. Both varieties were planted in the garden but may have done better up against a fence or foundation since both had tendencies to fall over.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Rubenza’ had a beautiful color when its blooms first opened. On its older blooms, its colors faded to the most beautiful tones! ‘Rubenza’ grew taller. I love taller cosmos.

Rubenza  ★★★★★ 🙄 NW
Xsenia  ★★★★★ 🙄 NW

‘Rubenza’ plants were healthier and produced more blooms. I liked the color of ‘Xsenia’ better.

Rubenza  ★★★★★ 🙄 NW
Xsenia  ★★★★★ 🙄 NW

‘Rubenza’ was harder, had many more blooms and was taller.

Rubenza  ★★★★★ 🙄 SW
Xsenia  ★★★★★ 🙄 SW

They had different colors, but I liked them both. Both varieties lodged late in the season. ‘Rubenza’ bloomed first and lodged less.

**Prefer ‘Xsenia’**

Rubenza  ★★★★★ 🙄 MN
Xsenia  ★★★★★ 🙄 MN

‘Xenia’ plants had more branching and more flowers per plant. Both varieties germinated poorly.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

I planted a bit late (June 11), but they came on strong within about a month. I liked the flower color of ‘Xsenia’ more.

Rubenza  ★★★★★ 🙄 SC
Xsenia  ★★★★★ 🙄 SC

‘Xsenia’ bloomed first and produced more flowers.

Rubenza  ★★★★★ 🙄 SW
Xsenia  ★★★★★ 🙄 SW

‘Xsenia’ was shorter and I prefer the look of smaller, daintier cosmos. Both varieties grew well and were healthy. They both had an abundance of blooms. These blooms worked well as cut flowers.

**Conclusions**

‘Rubenza’ was rated higher for all traits—gardeners loved it. Its cranberry-red flowers were vibrant when opening, fading to a soft rose. ‘Xsenia’ had a more compact and uniform habit, but gardeners were less fond of its earthy-pink flower color. Both varieties were prolific bloomers and good for cutting.

‘Xsenia’ had a more compact and uniform habit, but gardeners were less fond of its earthy-pink flower color.
Cosmos, Striped

Varieties

‘Capriola’
Bright white flowers with light red edges. Bushy, 27-inch plants are easy to grow. Great for bouquets.

‘Picotee’
Pure white petals are edged in rosy red. Bushy plants grow 48 inches. A proven performer in North Dakota.

Data

Gardeners at 16 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Capriola</th>
<th>Picotee</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>20%</td>
<td>60%</td>
<td>20%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>13</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>47</td>
<td>40</td>
<td>13</td>
</tr>
<tr>
<td>More blooms</td>
<td>33</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td>Prettiest in garden</td>
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<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Better cut flower</td>
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<td>50</td>
</tr>
<tr>
<td>Preference</td>
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<tr>
<td>Median score ¹</td>
<td>9.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Capriola’

‘Capriola’ plants were healthier and more attractive than ‘Picotee’. It was very attractive and fun to have in the garden.

‘Capriola’ bloomed weeks earlier. The proximity of its flower to leaf was nicer and their leaves weren’t so overwhelming. Both varieties were healthy.

‘Capriola’ had better growth and vigor. It had more flowers and looked more attractive in the garden.

Gardeners liked ‘Capriola’ for its earliness to bloom and compact plant habit.

Best cosmos varieties

Top choice
Sonata

Strong performers
Double Click
Picotee
Psyche
Rubenza
Prefer ‘Capriola’ (continued)

Capriola

Picotee

Both varieties had such pretty flowers! Beautiful colors; great cut flowers. I loved the color of ‘Capriola’ but wish I would have staked the plants up. This was a fun trial, and I’m hoping to see some volunteer cosmos popping up next spring!

Prefer ‘Picotee’

Capriola

Picotee

‘Picotee’ plants were fuller and taller—up to 6 feet tall. ‘Capriola’ bloomed first and had more flowers. Plants of both varieties were good and healthy.

Capriola

Picotee

‘Picotee’ germinated a few days earlier. Its plants were fuller and produced 50% more blooms. The flowers of both varieties were bright.

Capriola

Picotee

‘Picotee’ had more variety of colors and its blooms stayed longer. Plants were taller and had fuller greenery.

Capriola

Picotee

‘Picotee’ was better in all traits—including surviving damage caused by rabbits!

Capriola

Picotee

‘Picotee’ was the winner all around—absolutely gorgeous bloomer with tall, strong, ferny legs. It grew fast. If we didn’t have that early snowstorm, I would have had blooms for weeks. ‘Capriola’ was stunted and barely bloomed at all for me.

Capriola

Picotee

‘Picotee’ grew much taller. It looked healthier and produced more flowers.

Conclusions

Gardeners enjoyed the beauty of both varieties. More gardeners recommended and preferred ‘Capriola’, albeit by a small margin. These gardeners liked its earliness to bloom and more compact habit. ‘Picotee’ grew more vigorously. It had taller plants with more foliage, plus lots of flowers. Both varieties were good for cutting.

Key to Site Reports

(reports are presented from east to west)

Variety A

Variety B

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Garden types

= Organic

= Uses inorganic fertilizers

= Uses inorganic pesticides

- = Not specified

Garden type

Recommendation to other gardeners (yes or no)

Location

Comments

North Dakota Home Garden Variety Trials – 2019

141
Cosmos, White

Varieties

‘Afternoon White’

‘Purity’
Silky white flowers with bright yellow centers. Ferny bushes grow 36–60 inches.

Data

Gardeners at 11 sites submitted information. Afternoon White Purity Same
Germinated best 50% 30% 20% ‘Afternoon White’ blooms were very pretty, very white and large. I love cosmos!
Healthy plants 30 30 40
Bloomed earlier 60 20 20
More blooms 33 44 22 ‘Afternoon White’ germinated at 85% compared to 50% for ‘Purity’. Its stems were better for cutting flowers for bouquets.
Prettier in garden 30 40 30 ‘Purity’ was more attractive because it bloomed non-stop from early on until now into October.
Better cut flower 40 40 20 ‘Afternoon White’ had larger flowers and bloomed earlier at more gardens.
Preference 60 40
Recommend 60 60
Mean score 7.80 6.60
Median score 8.00 7.50

1Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Afternoon White’

‘Afternoon White’ plants were healthy and grew evenly. ‘Purity’ plants bushed out and then laid on the ground. They both bloomed very late, the end of August. Then ‘Afternoon White’ had many more flowers. Both varieties had lots of buds in mid-October when I had to clean up the yard due to the snowstorm coming. The flowers were very pretty but more greenery than I had expected.

‘Afternoon White’ had larger flowers and bloomed earlier at more gardens.

Best cosmos varieties

Top choice
Sonata

Strong performers
Double Click
Picotee
Psyche
Rubenza
Prefer ‘Purity’

Afternoon White  
Purity  
‘Purity’ bloomed first, produced more flowers and looked more attractive in the garden. It was a better cut flower.

Afternoon White  
Purity  
‘Purity’ produced more plants, and consequently, more flowers.

Afternoon White  
Purity  
Although I didn’t sow them until mid-June, they were strong plants by August/September. The stems were tough. Cosmos are always a nice addition to the flower garden. ‘Purity’ had beautiful petals.

Afternoon White  
Purity  
‘Purity’ had very strong, sturdy stems which held up well in the wind. Its taller plants worked better in my flower border.

Conclusions

Gardeners liked both varieties and most preferred ‘Afternoon White’. It had larger flowers and bloomed earlier at more gardens. Both varieties were healthy and bloomed prolifically all summer and fall. ‘Purity’ grew a little taller.

Key to Site Reports
(reports are presented from east to west)

Garden types

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌻= Organic</td>
<td></td>
</tr>
<tr>
<td>🟢= Uses inorganic fertilizers</td>
<td></td>
</tr>
<tr>
<td>🟣= Uses inorganic pesticides</td>
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</tr>
<tr>
<td>- = Not specified</td>
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</tbody>
</table>

Locations

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Variety A  
Variety B  
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Recommendation to other gardeners (yes or no)

Ratings (1 to 10)

Comments
**Sunflower, Confectionary**

**Varieties**

*‘Mongolian Giant’*

Enormous, 18-inch-wide, yellow flowers grow on 14-foot stalks. Huge, 1.5-inch seeds are delicious.

*‘Titan’*

Giant, 24-inch-wide blooms filled with large seeds. Single-head stems grow 13 feet.

**Data**

Gardeners at 16 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Mongolian Giant</th>
<th>Titan</th>
<th>Same</th>
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</thead>
<tbody>
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<td>Germinated best</td>
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<td>15%</td>
<td>62%</td>
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<tr>
<td>Healthier plants</td>
<td>9</td>
<td>27</td>
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<td>Bloomed earlier</td>
<td>36</td>
<td>18</td>
<td>45%</td>
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<tr>
<td>Grew taller</td>
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<tr>
<td>Prettier in garden</td>
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<tr>
<td>More seeds</td>
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<td>Preference</td>
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</tr>
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<td>5.27</td>
<td>5.18</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>5.00</td>
<td>4.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Both varieties recovered from some deer pressure but came back. ‘Mongolian Giant’ produced very tall plants with very large heads. Unfortunately, they were immature at first frost and seeds never hardened. ‘Titan’ plants looked good until they set heads, which looked like clubs and were diseased. ‘Titan’ stems rotted off at ground level. It was a very wet year.

‘Mongolian Giant’ had bigger heads.

**Prefer ‘Mongolian Giant’**

*‘Titan’* was first to lay down; several of its stalks fell over in fall winds. ‘Mongolian Giant’ stayed up.

*‘Mongolian Giant’* grew 12 feet tall; ‘Mongolian Giant’ grew 10 feet tall. Both varieties produced seeds too small for us to harvest (not enough “meat”). When the wind tipped the stalks over, squirrels ripped out the few seeds.

**Diseases, deer, squirrels, cold weather and winds prevented most gardeners from harvesting any quality seeds.**

**Prefer ‘Titan’**

It was a tough year. ‘Titan’ bloomed first and looked more attractive in the garden.

Both varieties had high rates of disease, ‘Titan’ less so.

The stalks of ‘Titan’ were slightly stronger. Both varieties were beautiful.

---

**Best confectionary sunflower seed variety**

Top choice To be determined
**Prefer Titan’ (continued)**

Mongolian Giant ★★★★★ ☺ ☼ NW
Titan ★★★★★ ☺ ☼ SW

The plants of both varieties suffered from diseases. ‘Titan’ had larger heads and fuller seeds, but neither variety was very good.

Mongolian Giant ★★★★★ ☺ ☼ SW
Titan ★★★★★ ☺ ☼ SE

‘Titan’ germinated and grew better, but neither variety produced the advertised size or quality of seeds.

**No Preference**

Mongolian Giant ★★★★★ ☺ ☼ SE
Titan ★★★★★ ☺ ☼ NC

I was very disappointed that most of the plants of both varieties were unable to support the weights of their heads and toppled over onto the rest of the garden. Many of the heads rotted whether they were on the ground or not. I don’t know what influenced the growth of sunflowers this year, but every variety grew ‘crazy tall’. I grew these two in the garden and another beside my house, and all three plants grew very tall and lacked strength to support their height.

The variety near the house I had planted last year in the garden grew to an average of 6 or 7 feet. I have mulled this over and can’t pin down an explanation except maybe the above average moisture in late summer and fall.

Mongolian Giant – – ☺ SE
Titan – – ☺ NW

They were awesome until two deer came through and mowed them off on June 25, and again 2 weeks later! Even with the deer repeatedly damaging the plants, they still grew and bloomed in late summer.

‘Mongolian Giant’ reached 10 feet and ‘Titan’ reached 7 feet. They were very beautiful, and the bees and butterflies enjoyed them.

Un fortunately, they matured too late to develop edible seeds. I hope to try this trial again, but with a better plan to deter the deer.

**Conclusions**

Gardeners were generally disappointed with this trial. Diseases, deer, squirrels, cold weather and winds prevented most gardeners from harvesting any quality seeds. ‘Titan’ produced more seeds and was preferred by more gardeners; however, most gardeners did not recommend it for seed production.

‘Titan’ produced more seeds, but most gardeners did not recommend it for seed production.

---

**Key to Site Reports**

(reports are presented from east to west)

<table>
<thead>
<tr>
<th>Garden types</th>
<th>Garden type</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>☻ = Organic</td>
<td>☻ = NC</td>
<td>NW</td>
</tr>
<tr>
<td>☼ = Uses inorganic fertilizers</td>
<td>☼ = NC</td>
<td>NC</td>
</tr>
<tr>
<td>☼ = Uses inorganic pesticides</td>
<td>☼ = NC</td>
<td>NE</td>
</tr>
<tr>
<td>☼ = Not specified</td>
<td>☼ = NC</td>
<td>SW</td>
</tr>
</tbody>
</table>

**Locations**

MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

Variety A ★★★★★ ☺ ☼ NC
‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Variety B ★★★★★ ☺ ☼ NC
Sunflower, Orange

Varieties

‘Country Roads’
The plants are filled with orange flowers on strong branches. Good for cutting. Grows 48–72 inches.

‘Gold Rush’

Data

Gardeners at 7 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Country Roads</th>
<th>Gold Rush</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>14</td>
<td>29</td>
<td>57</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>43</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>More blooms</td>
<td>14</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>43</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Better cut flower</td>
<td>17</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Preference</td>
<td>43</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>71</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>7.57</td>
<td>8.14</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>8.00</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Country Roads’

Country Roads  ★★★★★ ☺ ☝ SC
Gold Rush      ★★★★☆ ☺ SE
‘Country Roads’ produced an abundance of flowers continuously. My house was filled with sunflowers.

Both varieties were nice, but ‘Country Roads’ was better for me. ‘Country Roads’ grew taller, had more blooms and was better for cut flowers. ‘Gold Rush’ stalks were thinner and spindlier; its leaves were smaller.

Prefer ‘Gold Rush’

Country Roads  ★★★★★ ☺ ☝ SC
Gold Rush      ★★★★★ ☺ ☝  SC
‘Gold Rush’ stalks seemed stronger and produced more flowers.

Country Roads  ★★★★★ ☺ ☝ NW
Gold Rush      ★★★★★ ☺ ☝ SD
‘Gold Rush’ had more flowers per stalk with smaller flower heads. It made a beautiful arrangement. ‘Country Roads’ looked great in the garden because of its larger heads, but it did not do well as a cut flower.

Conclusions

Gardeners liked both ‘Country Roads’ and ‘Gold Rush’. Both varieties bloomed early and produced lots of flowers. Most gardeners preferred ‘Gold Rush’; this classic golden sunflower bloomed more abundantly in more gardens. Both varieties did well as cut flowers.

Best orange branching sunflower varieties

Top choice
Gold Rush

Strong performers
Orange Hobbit

Both ‘Country Roads’ and ‘Gold Rush’ bloomed early and produced lots of flowers. Both varieties did well as cut flowers.
Sunflower, Red

Varieties

‘Chianti’

‘Moulin Rouge’
72 days. Popular variety with deep burgundy petals and dark discs. Pollenless. Grows 70 inches.

Data
Gardeners at 14 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Chianti</th>
<th>Moulin Rouge</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>14%</td>
<td>29%</td>
<td>57%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>8</td>
<td>62</td>
<td>31</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>27</td>
<td>55</td>
<td>18</td>
</tr>
<tr>
<td>More blooms</td>
<td>18</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>9</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Better cut flower</td>
<td>14</td>
<td>0</td>
<td>86</td>
</tr>
<tr>
<td>Preference</td>
<td>9</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>64</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Mean score¹</td>
<td>6.55</td>
<td>7.91</td>
<td></td>
</tr>
<tr>
<td>Median score¹</td>
<td>7.00</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Chianti’

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
‘Chianti’ bloomed first, had more flowers, and had slightly larger flowers.

Prefer ‘Moulin Rouge’

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
‘Moulin Rouge’ seedlings grew more vigorously. ‘Moulin Rouge’ stalks had larger flowers (5–8 inches across compared to 4–7 inches across for ‘Chianti’), larger seedheads for birds, and many more flowers.

‘Moulin Rouge’ has been an extraordinary variety in our trials for years. Every gardener in this year’s trial recommended it.

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
‘Moulin Rouge’ bloomed first and looked much more attractive. Garden conditions were rough due to wet weather.

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
‘Moulin Rouge’ grew faster and had a taller plant. Its flowers were larger with a slightly yellow tinge at the ends of the flower head. Its stalks were hearty and withstood strong winds.

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
The blooms of both varieties were beautiful; almost black in color; stunning. ‘Chianti’ bloomed first.

Chianti ☀️☀️☀️ ☀️ ☿
Moulin Rouge ☀️☀️☀️ ☀️ ☿
Both varieties were healthy, but ‘Moulin Rouge’ grew about 2 feet taller and was healthier. ‘Moulin Rouge’ flowers were large and stunning! They were significantly larger. ‘Chianti’ bloomed approximately 1 month later.

Best red sunflower variety
Top choice
Moulin Rouge
Prefer ‘Moulin Rouge’ (continued)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chianti</td>
<td>★★★★★</td>
<td>☺</td>
</tr>
<tr>
<td>‘Moulin Rouge’ bloomed later but is still blooming today (early October).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moulin Rouge</td>
<td>★★★★★</td>
<td>☺</td>
</tr>
</tbody>
</table>

‘Moulin Rouge’ had larger flowers and more flowers. Its plants were larger and more vigorous, but ‘Chianti’ ended up being more attractive in the garden because it was more petite and they didn’t topple over as much in the windstorms. Both varieties had some yellow color break through.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chianti</td>
<td>★★★★★</td>
<td>☺</td>
</tr>
<tr>
<td>‘Moulin Rouge’ plants were sturdier.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I prefer the color of ‘Moulin Rouge’ flowers.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chianti</td>
<td>★★★★★</td>
<td>☺</td>
</tr>
<tr>
<td>‘Moulin Rouge’</td>
<td>★★★★★</td>
<td>☺</td>
</tr>
</tbody>
</table>

‘Moulin Rouge’ flowers were large and stunning.

Conclusions

‘Moulin Rouge’ has been an extraordinary variety in our trials for years. Every gardener in this year’s trial recommended it. Its stalks were healthier, more vigorous and bloomed earlier than those of ‘Chianti’. ‘Moulin Rouge’ flowers were large and stunning. Most gardeners liked ‘Chianti’ but loved ‘Moulin Rouge’.

The stalks of ‘Moulin Rouge’ were healthier, more vigorous and bloomed earlier than those of ‘Chianti’. ‘Moulin Rouge’ flowers were large and stunning.

Key to Site Reports

(Reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>Garden type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>Organic</td>
</tr>
<tr>
<td>NE</td>
<td>Uses inorganic fertilizers</td>
</tr>
<tr>
<td>SE</td>
<td>Uses inorganic pesticides</td>
</tr>
<tr>
<td>-</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Recommendation to other gardeners (yes or no)

Variety A
★★★★ ★★★ ★★★ ★★★ ★★★
Yes

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

Conclusions

‘Moulin Rouge’ has been an extraordinary variety in our trials for years. Every gardener in this year’s trial recommended it. Its stalks were healthier, more vigorous and bloomed earlier than those of ‘Chianti’. ‘Moulin Rouge’ flowers were large and stunning. Most gardeners liked ‘Chianti’ but loved ‘Moulin Rouge’.

The stalks of ‘Moulin Rouge’ were healthier, more vigorous and bloomed earlier than those of ‘Chianti’. ‘Moulin Rouge’ flowers were large and stunning.

Key to Site Reports

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<tbody>
<tr>
<td>NW</td>
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<tr>
<td>NE</td>
<td>Uses inorganic fertilizers</td>
</tr>
<tr>
<td>SE</td>
<td>Uses inorganic pesticides</td>
</tr>
<tr>
<td>-</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Recommendation to other gardeners (yes or no)

Variety A
★★★★ ★★★ ★★★ ★★★ ★★★
Yes

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
# Zinnia, Candystripe

## Varieties

**‘Peppermint Stick’**

Cream, white and orange blooms covered with reddish streaks. No two are alike. Grows 24–36 inches.

**‘Pop Art’**

Award winner. Gold and white flowers have “drips” of red paint. Grows 24 inches.

## Data

Gardeners at 29 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Peppermint Stick</th>
<th>Pop Art</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>62%</td>
<td>8%</td>
<td>31%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>33</td>
<td>4</td>
<td>63</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>59</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>More blooms</td>
<td>42</td>
<td>17</td>
<td>42</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>39</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Better cut flower</td>
<td>24</td>
<td>24</td>
<td>53</td>
</tr>
<tr>
<td>Preference</td>
<td>58</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Recommend</td>
<td>75</td>
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</tr>
<tr>
<td>Mean score¹</td>
<td>7.04</td>
<td>6.79</td>
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</tr>
<tr>
<td>Median score¹</td>
<td>7.50</td>
<td>7.00</td>
<td></td>
</tr>
</tbody>
</table>

¹Rated from 1 to 10; 1 = poor and 10 = excellent.

## Prefer ‘Peppermint Stick’

Peppermint Stick 🌺🌺🌺🌺 🏆🏆 MN
Pop Art 🌺🌺🌺 🏆🏆 SE

‘Peppermint Stick’ had more colors that were vivid or bright, and there was a little more variety of colors. Lots of flowers on ‘Pop Art’ were only white. A couple ‘Peppermint Stick’ plants had damping off.

Peppermint Stick 🌺🌺🌺🌺 🏆🏆 MN
Pop Art 🌺🌺🌺 🏆🏆 SE

‘Peppermint Stick’ germinated better. It had double the number of flowers. White mold developed on three ‘Pop Art’ plants, particularly on the stems of the striped flowers—not resistant to diseases. Both varieties produced solid and striped flowers. Both produced a large range of colors. Their flowers were large and attractive.

‘Peppermint Stick’ germinated better and bloomed earlier. Its plants were taller, bushier and full of flowers.

## Best candystripe zinnia variety

**Top choice**
Peppermint Stick

---

North Dakota Home Garden Variety Trials – 2019

149
**Prefer ‘Peppermint Stick’ (cont.)**

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Peppermint Stick’ plants grew a little taller, but both grew fantastically! I’m not real fond of the orange petals, and ‘Pop Art’ had more orange ones in it. They were all beautiful!

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

Both varieties germinated poorly. The plants were stunted and fell over in the wind. Both had odd colors—some red and white, some yellow and red, some solid red and a lot of solid yellow blooms. The solids were much prettier than the variegated blooms. ‘Peppermint Stick’ showed marginally better germination and slightly healthier plants, but both varieties were disappointing.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Peppermint Stick’ plants grew much larger.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Peppermint Stick’ was an overall better-looking plant but nothing exceptional. It germinated within 4 days; ‘Pop Art’ germinated 1 day later and not as well. ‘Peppermint Stick’ plants were taller and generally leafier. ‘Pop Art’ bloomed a day or two earlier. Neither variety was a particularly abundant bloomer, and their flowers seemed small relative to plant size. ‘Pop Art’ plants grew tall and leggy toward the end of the growing season; ‘Peppermint Stick’ too, but not so much. Their cut flowers were long lasting.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Peppermint Stick’ had larger stems and bigger flowers. I loved the color! The varieties were similar, and I loved them both.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

They were very slow to germinate and neither of them was very productive. Only a few have even flowered to date (September 16).

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Peppermint Stick’ was awesome! It germinated better and was ahead the whole growing season. Its plants were very bushy; many flowers. Its blooms were big and full. The blooms lasted longer. ‘Peppermint Stick’ grew a full foot taller. Its flowers had more color variations: rose, gold, red/white stripe, yellow/white stripe—maybe more—lots of colors. The predominant color of ‘Pop Art’ was yellow or gold, and red/white stripe.

**Prefer ‘Pop Art’**

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

All flowers of ‘Pop Art’ had the candy stripe. Over half of ‘Peppermint Stick’ flowers were solid without stripes.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Pop Art’ produced large flowers and more robust color variation. It seemed both variations of the flower had some sort of off typing. Some were speckled while others where not. But this is a new variety of zinnia for me, so wasn’t sure what to expect. With ‘Peppermint Stick’, I was expecting white with red specks on the petals, but there were very few of these flowers.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Pop Art’ had more flowers with variegation. The flowers had more striping that looked like peppermint sticks—cream with red. ‘Peppermint Stick’ had a lot of solid colored flowers, mostly yellow and red.

Peppermint Stick  ⭐⭐⭐⭐⭐ 😊 ☀️
Pop Art  ⭐⭐⭐⭐⭐ 😊 ☀️

‘Pop Art’ colors stood out and had more color. ‘Peppermint Stick’ plants were taller and fuller, but the flowers were not as striking.

Most gardeners recommended ‘Pop Art’, but the variety did not excel in any particular trait over ‘Peppermint Stick’.
Prefer ‘Pop Art’ (continued)

Peppermint Stick ☀️☀️☀️ ☀️ ☀️
Popp Art ☀️☀️☀️ ☀️ ☀️ SE

Both varieties germinated around June 9. A major rain event occurred on June 11, and we replanted missing/non-germinated seeds on June 13. Both varieties had healthy plants with little or no damage or browning of leaves. Both varieties had many blooms per plant with ‘Peppermint Stick’ edging out ‘Pop Art’ with more blooms. ‘Pop Art’ had fuller blooms and had little variation while ‘Peppermint Stick’ had incomplete blooms and some without stripes. ‘Pop Art’ had a better look in the garden with very full blooms and little variation between flowers. ‘Peppermint Stick’ had variation in length of stems, had some incomplete flowers, and some flower without stripes. ‘Pop Art’ was more of a genuine, complete and beautiful look in the garden. This trial was fun and engaging. Having grown zinnias several years, we were a tad disappointed in the size of these blooms and the color compared to the larger giant zinnias or the more brilliant colored zinnias. Probably not varieties we would plant for huge mass appeal in a garden, but great for those who plant for enjoyment in smaller gardens or to enjoy up close.

Peppermint Stick ☀️☀️☀️ ☀️ ☀️
Popp Art ☀️☀️☀️ ☀️ ☀️ SE

Enjoyed both varieties and would grow them again. Very long, prolific bloomers. Mine grew to 36–42 inches tall. Loved by butterflies and hummingbirds. I especially loved the colors of ‘Pop Art’.

Peppermint Stick ☀️☀️☀️ ☀️ ☀️
Popp Art ☀️☀️☀️ ☀️ ☀️ NC

I enjoyed both varieties, especially the color variations of ‘Pop Art’.

Peppermint Stick ☀️☀️☀️ ☀️ ☀️
Popp Art ☀️☀️☀️ ☀️ ☀️ NC

These varieties were excellent. Both grew 18–24 inches tall and had beautiful flowers. I would grow both varieties again.

Gardeners especially liked the white flowers with red streaking. They were less fond of yellow flowers with streaking as well as any flowers that lacked streaking.

Conclusions

‘Peppermint Stick’ germinated better and bloomed earlier. Its plants were taller, bushier and full of flowers. Most gardeners preferred it over ‘Pop Art’. Gardeners differed as to which variety looked prettier; however, several expressed a preference for white flowers with red streaking. They were less fond of yellow flowers with streaking, as well as any flowers that lacked streaking on their petals.

These two varieties were both very nice for cut flowers. No disease or insect problems. The butterflies loved them. ‘Pop Art’ was first to germinate and bloom, and it produced more flowers.

Peppermint Stick ☀️☀️☀️ ☀️ ☀️ NW
Popp Art ☀️☀️☀️ ☀️ ☀️ NW

‘Pop Art’ had prettier colors. ‘Peppermint Stick’ germinated better, grew into bigger plants and bloomed a few days earlier.

Peppermint Stick ☀️☀️☀️ ☀️ ☀️ SW
Popp Art ☀️☀️☀️ ☀️ ☀️ SW

I liked the size and look of ‘Pop Art’ in the garden. Its blooms had smaller heads and had more peppermint stripes on them. ‘Peppermint Stick’ germinated faster, had larger seedlings, and bloomed earlier.
Zinnia, Giant Dahlia

Varieties

‘Benary’s Giant’

‘State Fair’
Jumbo, 5-inch flowers come in a wide range of bright colors. Robust plants grow 36 inches.

Data

Gardeners at 30 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Benary’s Giant</th>
<th>State Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>43%</td>
<td>17%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>More blooms</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>58</td>
<td>15</td>
</tr>
<tr>
<td>Better cut flower</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Preference</td>
<td>67</td>
<td>33</td>
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<tr>
<td>Recommend</td>
<td>85</td>
<td>81</td>
</tr>
<tr>
<td>Mean score(^1)</td>
<td>8.41</td>
<td>7.63</td>
</tr>
<tr>
<td>Median score(^1)</td>
<td>9.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

\(^1\) Rated from 1 to 10; 1 = poor and 10 = excellent.

Prefer ‘Benary’s Giant’

Benary’s Giant State Fair
‘Benary’s Giant’ flowers were fuller and more beautiful with more blooms per plant. Their flowers looked like doubles and were velvety looking. Loved their beauty!

Benary’s Giant State Fair
‘Benary’s Giant’ bloomed earlier—from late summer and all the way to frost. It had more gold, red—brighter colors that showed up from a distance. I brought some cut flowers and they lasted almost a week. ‘State Fair’ had more pinks, purples, and was nice. Both varieties gave me much joy watching the butterflies. I have saved seeds for next year.

‘Benary’s Giant’ was outstanding. Its double-petal flowers were large, bright and showy.

Best zinnia varieties for cutting

Top choice
Benary’s Giant

Strong performers
Burpeeanna Giants
Cut and Come Again
Giant Dahlia
Oklahoma Uproar Rose
Zowie! Yellow Flame
Prefer ‘Benary’s Giant’ (continued)

Benary’s Giant ★★★★★ ☺ ☺ SE
‘Benary’s Giant’ was more attractive. It bloomed first and produced more flowers.

Benary’s Giant ★★★★★ ☺ ☺ NC
State Fair ★★★★ ☺ ☺ NC
‘Benary’s Giant’ was slightly taller and larger flowered.

Benary’s Giant ★★★★ ☺ ☺ NC
State Fair ★★★★ ☺ ☺ NC
So nice to pick them from the garden and then have a large bouquet to enjoy on my dining room table. ‘Benary’s Giant’ flowers were larger but didn’t have as strong of stems.

Benary’s Giant ★★★★ ☺ ☺ SC
State Fair ★★★★ ☺ ☺ SC
‘Benary’s Giant’ had big, beautiful flowers with deep pink and dark red colors. Its plants were healthier.

Benary’s Giant ★★★★ ☺ ☺ SC
State Fair ★★★★ ☺ ☺ SC
‘Benary’s Giant’ plants grew a bit straighter and were less bushy. Both varieties had beautiful flowers.

Benary’s Giant ★★★★ ☺ ☺ SC
State Fair ★★★★ ☺ ☺ SC
‘Benary’s Giant’ flowers were nicer, and their stem proportions were better.

Benary’s Giant ★★★★ ☺ ☺ SC
State Fair ★★★★ ☺ ☺ SC
‘Benary’s Giant’ stems were stronger, and the flowers seemed to have more petals, making a more beautiful flower. ‘State Fair’ stems bent sometimes.

Benary’s Giant ★★★★ ☺ ☺ SC
State Fair ★★★★ ☺ ☺ SC
The differences among these two varieties were minimal. The varieties in their flower colors were similar. ‘Benary’s Giant’ plants grew taller.

Benary’s Giant ★★★★ ☺ ☺ NW
State Fair ★★★★ ☺ ☺ NW
‘Benary’s Giant’ had nice, big, showy flowers; great for cutting. It had multiple flowers on a stem. ‘State Fair’ plants were very weak looking.

Benary’s Giant ★★★★ ☺ ☺ SW
State Fair ★★★★ ☺ ☺ SW
‘Benary’s Giant’ germinated better.

Benary’s Giant ★★★★ ☺ ☺ SW
State Fair ★★★★ ☺ ☺ SW
‘Benary’s Giant’ had lots of full blooms. Both varieties had strong stems and stood tall.

‘Benary’s Giant’ plants were loaded with flowers. Most gardeners felt ‘Benary’s Giant’ looked prettier than ‘State Fair’ in their garden.

---

Key to Site Reports
(reports are presented from east to west)

<table>
<thead>
<tr>
<th>Location</th>
<th>NC</th>
<th>NE</th>
<th>NW</th>
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<tbody>
<tr>
<td>Garden types</td>
<td>-</td>
<td>Organic</td>
<td>-</td>
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<tr>
<td>Uses inorganic fertilizers</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Uses inorganic pesticides</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>= Not specified</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Locations
MN = Minnesota
NE = Northeast
SE = Southeast
NC = North Central
SC = South Central
NW = Northwest
SW = Southwest
MB = Manitoba
SK = Saskatchewan
SD = South Dakota
MT = Montana

‘State Fair’ in their garden.

‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.
**Prefer ‘State Fair’**

Benary’s Giant

- ‘State Fair’ bloomed 1 week earlier and had more vibrant colors. It was a good cut flower.

Benary’s Giant

- ‘State Fair’ was really pretty. ‘Benary’s Giant’ died in early summer.

Benary’s Giant

- ‘State Fair’ was more attractive to me. With the wet weather this fall, I found these taller varieties started to break at the plant base and lean over when it was windy. They were among the last plants blooming before the snowfall, and I’m glad I left them in the garden—the butterflies were very happy.

Benary’s Giant

- I preferred the pink colors of ‘State Fair’.

Benary’s Giant

- The rabbits mowed down an entire row of each of the varieties; all that made it were a few seeds of each variety I planted separately in a flower bed. The flowers that made it were very vibrant in color—loved to have some color in the late fall. ‘State Fair’ bloomed first, produced more flowers and bloomed into late September!

Benary’s Giant

- ‘State Fair’ bloomed first and produced more flowers.

Benary’s Giant

- ‘State Fair’ flowers were more attractive and showier. They didn't flop down as much.

Benary’s Giant

- ‘State Fair’ bloomed earlier. Its plants were just as healthy as those of ‘Benary’s Giant’ in most gardens.

Benary’s Giant

- ‘State Fair’ had more blooms and was more showy. Both varieties had healthy plants. Their flowers had very vibrant colors and were good cut flowers. ‘State Fair’ plants were a little taller.

**Conclusions**

‘Benary’s Giant’ was outstanding again this year. Its double-petal flowers were large, bright and showy. ‘Benary’s Giant’ plants were loaded with flowers. Most gardeners felt it looked prettier than ‘State Fair’ in the garden. ‘State Fair’ received high ratings and many recommendations as well. It bloomed earlier and its plants were just as healthy as those of ‘Benary’s Giant’ in most gardens. Both varieties did well as cut flowers.
Zinnia, Mexican

**Varieties**

*‘Jazzy’*

Earthy shades of burgundy, yellow and orange. Flowers are 1–2 inches wide. Grows 24 inches.

*‘Persian Carpet’*

Bushy, 16-inch plants are covered with 2-inch double flowers. Tolerates heat, wind and drought.

**Data**

Gardeners at 28 sites submitted information.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Jazzy</th>
<th>Persian Carpet</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best</td>
<td>19%</td>
<td>43%</td>
<td>38%</td>
</tr>
<tr>
<td>Healthier plants</td>
<td>19</td>
<td>33</td>
<td>48</td>
</tr>
<tr>
<td>Bloomed earlier</td>
<td>29</td>
<td>24</td>
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</tr>
<tr>
<td>More blooms</td>
<td>14</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td>Prettier in garden</td>
<td>48</td>
<td>29</td>
<td>24</td>
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<tr>
<td>Better cut flower</td>
<td>21</td>
<td>42</td>
<td>37</td>
</tr>
<tr>
<td>Preference</td>
<td>38</td>
<td>62</td>
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</tr>
<tr>
<td>Recommend</td>
<td>76</td>
<td>81</td>
<td></td>
</tr>
</tbody>
</table>

Mean score\(^1\)  7.57  8.00
Median score\(^1\)  8.00  9.00

\(^1\)Rated from 1 to 10; 1 = poor and 10 = excellent.

**Prefer ‘Jazzy’**

Jazzy  ![5 Stars](5) ![Smiley](Smiley) ![NC](NC)
Persian Carpet  ![4 Stars](4) ![Smiley](Smiley) ![NC](NC)

So fun to try something new! So many beautiful blossoms on both varieties. Prettiest zinnias I’ve ever grown . . . love the combination of burgundy, red, yellow and orange laced with tips of coordinating colors. With so many blossoms, ‘Jazzy’ had such a nice “mound” look to those plants. ‘Jazzy’ had the compactness, beauty and color combination I enjoyed the most. ‘Persian Carpet’ was a great variety too; just taller and maybe a bit leggy looking.

Jazzy  ![5 Stars](5) ![Smiley](Smiley) ![NC](NC)
Persian Carpet  ![4 Stars](4) ![Smiley](Smiley) ![NC](NC)

‘Jazzy’ looked more attractive in the garden.

‘Jazzy’ blooms had a wider variety of colors. More gardeners felt ‘Jazzy’ was prettier than ‘Persian Carpet’ in their garden.

---

**Best Mexican zinnia varieties**

**Top choice**  Persian Carpet

**Strong performers**  
- Jazzy  Old Mexico

---
Prefer ‘Persian Carpet’

Jazzy  
Persian Carpet  

I loved both varieties but ‘Persian Carpet’ had a more unique variety of coloring. It had a higher percentage of germination. ‘Persian Carpet’ plants seemed larger and fuller with more branching. Its stems were slightly stronger, but the stems of both varieties were very thin for use as a cut flower. I loved the variety of colors in ‘Jazzy’. I will save seeds of these varieties and grow them next year.

The blossoms of ‘Persian Carpet’ were larger and had very bright colors—gold and red. I liked it because it showed up from a distance. ‘Persian Carpet’ bloomed much earlier but its stems laid down in late summer. ‘Jazzy’ plants were shorter and stood more upright. ‘Jazzy’ had very interesting colors and blossoms but its colors were darker and did not show up from a distance. ‘Jazzy’ blossoms had a “pompom” shape.

‘Persian Carpet’ had a better yield, more prolific flowers and was yellow throughout. Its flowers were pretty and held up better in a vase. ‘Jazzy’ was more varied in color, and it did not hold color in a vase.

Jazzy  
Persian Carpet  

The flowers of ‘Persian Carpet’ were more eye-catching. It had brilliant colors.

Jazzy  
Persian Carpet  

‘Persian Carpet’ had longer stems and was a good cut flower choice. ‘Jazzy’ had much shorter stems and was not a good cut flower choice. ‘Jazzy’ is better suited as an accent garden choice or in pots. ‘Jazzy’ had issues with holes in foliage so I had to use some organic pesticide to control the damage. ‘Persian Carpet’ did not have this issue.

Jazzy  
Persian Carpet  

Both varieties were great. I liked ‘Persian Carpet’ best and my best friend liked ‘Jazzy’ best. It all depends on how you are going to use them in an arrangement.

Jazzy  
Persian Carpet  

‘Persian Carpet’ had better color and its flowers were a little larger. I thought these varieties were going to be more like standard zinnias, only shorter. They were bushy and more like short marigolds but larger and bushier than marigolds. I would not, and did not use them as a cut flower.

‘Persian Carpet’ flowers were larger, coming in brilliant shades of gold and red.

---

Key to Site Reports

(reports are presented from east to west)

**Ratings (1 to 10)**

- **Variety A**
- **Variety B**

**Recommendation to other gardeners (yes or no)**

- ‘Variety A’ germinated better and produced the first harvest. We loved its taste. ‘Variety B’ produced higher yields but was tasteless.

**Garden types**

- Organic
- Uses inorganic fertilizers
- Uses inorganic pesticides
- = Not specified

**Garden type**

- NC

**Location**

- NW
- NC
- NE

**Comments**

- SW
- SC
- SE

**Locations**

- MN = Minnesota
- NE = Northeast
- SE = Southeast
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North Dakota Home Garden Variety Trials – 2019 156
Prefer ‘Persian Carpet’ (cont.)

Jazzy  ★★★★★ ☺ ☻
Persian Carpet ★★★★★ ☺ SE

I liked the variety of ‘Persian Carpet’ flowers best. Both varieties had nice compact plants and blooms. Zinnias are always fun to grow, and the deer won’t eat them; that is always a plus for us.

Jazzy  ★★★★★ ☻ ☻
Persian Carpet ★★★★★ ☻ NC

I liked ‘Persian Carpet’ as it looked different than other zinnias, almost more like a marigold. ‘Persian Carpet’ had longer stems that were easier to cut. About 75% of ‘Persian Carpet’ germinated whereas only about half of ‘Jazzy’ came up. My husband preferred the looks of ‘Jazzy’.

Jazzy  ★★★★★ ☻ ☻
Persian Carpet ★★★★★ ☻ NC

‘Persian Carpet’ had very different color combinations and bloomed earlier. ‘Jazzy’ was slow to bloom but looked great when it did.

Jazzy  ★★★★★ ☻ ☻
Persian Carpet ★★★★★ ☻ SC

‘Jazzy’ didn’t do well from the start—poor germination rate and never really amounted to much. ‘Jazzy’ plants barely reached 12 inches in height; ‘Persian’ Carpet maybe 24 inches; both looked as though they were struggling. ‘Persian Carpet’ did better, but the small size of the flowers and overall look of the plant gave it the appearance of a wildflower. Their flowers were small and pretty, but neither variety was an abundant bloomer.

Most gardeners had not grown Mexican zinnias before and they were delighted.

Conclusions

Most gardeners had not grown Mexican zinnias before and they were delighted. ‘Persian Carpet’ flowers were larger, coming in brilliant shades of gold and red. Some gardeners noted its longer stems, which are useful in cut flower arrangements. Gardeners liked the compact habit of ‘Jazzy’. Its blooms had a wider variety of colors. More gardeners felt ‘Jazzy’ was prettier than ‘Persian Carpet’ in their garden.
Appendix 1

Welcome Letter

Dear Gardener,

Welcome to our research team! It will be fun to work with you this summer. Enclosed are the seeds you ordered. If you are missing anything, please let me know. Let’s go over some key points:

1. Each trial compares two varieties. **You must plant both varieties.**

2. To make it a fair comparison, you need to **treat both varieties in the same manner.** They must get the same amount of sunlight and general care (watering and fertilizing).

3. We want to see how these varieties perform under real home garden situations. The packets have instructions on how to sow your seeds, but you may **use your own gardening practices.** For example, I sow my cucumber seeds in a row but you can plant them in hills if you wish. It’s up to you.

4. When possible, **grow the varieties for each trial in rows near each other.** Look at the diagram (top right). Notice the varieties being compared in the lettuce and beet trials are grown next to each other. In this way, they are most likely to get the same amount of sunlight and care.

   Cucumber, melon and pumpkin vines can “run” and become intertwined. Try to keep the vines of each variety within the row so you do not get confused when harvesting and evaluating each variety.

5. You have enough seeds to grow at least 10 feet of each variety. We’ve enclosed a row marker with string. There is a 10-foot space between the two marks on the string. It’s okay if you don’t have enough space for 10-foot rows, but try to get a fair look at both varieties.

6. **Use the plot labels** that are enclosed. This will help you remember which variety is which. I strongly encourage you to **make a plot diagram after you are done planting** for your future reference in case the plot labels get removed accidentally (this happens with kids).

7. An example of a completed evaluation form is enclosed. Use this as a guide to help you when evaluating the varieties.

Let me know if you have any questions. I’ll be happy to help.

Sincerely,

[Signature]

Tom Kalb
Extension Horticulturist
2718 Gateway Ave., Suite 304
Bismarck, ND  58503
tom.kalb@ndsu.edu
701.328.9722

More Info
Go to the ND Home Garden Variety Trials website: www.ag.ndsu.edu/homegardenvarietytrials/
Appendix 2

Example of Evaluation Form

Name: Jenny Gardener
Date Sown: May 30

Did you use a chemical fertilizer (for example, 10–10–10, Miracle-Gro)? Yes  No
Did you use a pesticide for insects or diseases? Yes  No
If yes, was it organic? Yes  No

<table>
<thead>
<tr>
<th>Which variety:</th>
<th>Apollo</th>
<th>Zeus</th>
<th>Same</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germinated best?</td>
<td>X</td>
<td></td>
<td></td>
<td>Both had near 100% germination, but Zeus seedlings showed more vigor</td>
</tr>
<tr>
<td>Had healthier plants?</td>
<td>X</td>
<td></td>
<td></td>
<td>Apollo vines turned gray in fall</td>
</tr>
<tr>
<td>Produced the first ripe melons?</td>
<td>X</td>
<td></td>
<td></td>
<td>Three days earlier than Zeus</td>
</tr>
<tr>
<td>Produced higher yields?</td>
<td>X</td>
<td></td>
<td></td>
<td>Zeus produced 10 good melons; Apollo produced only 6</td>
</tr>
<tr>
<td>Had more attractive melons?</td>
<td>X</td>
<td></td>
<td></td>
<td>Zeus had larger fruits and brighter orange flesh</td>
</tr>
<tr>
<td>Tasted better?</td>
<td>X</td>
<td></td>
<td></td>
<td>Zeus was heavenly; Apollo was not quite as sweet</td>
</tr>
</tbody>
</table>

Overall Performance Rating
Rate each variety on a scale of 1 to 10, with 1 = poor and 5 = good and 10 = excellent. Don’t give both a “10”. Be very critical!

<table>
<thead>
<tr>
<th></th>
<th>Apollo</th>
<th>Zeus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

Preference
Circle the variety you prefer. Don’t circle both—make a choice!
Apollo  Zeus

Please state the reason(s) for your preference:
Zeus was outstanding. Good yields of large, sweet fruits. The vines looked healthy all summer. Apollo ripened early, but the vines were weak and the melons tasted bland.

Recommendation
Circle the varieties you recommend for North Dakota gardeners:
Apollo  Zeus  Both  Neither
Appendix 3

Acknowledgements

Researchers

North Dakota State University Extension is very thankful to the following gardeners who provided results from their research plots:

Sharon Aannerud
Norma Ackerson
Debra Altringer
Christy Ames-Davis
Kenneth Anderson
Nadine Anderson
Orren Anderson
Dina Baird
LaRoy Baird
Gene Baker
Britney Barnett
Alexis Baxley
Matthew Beneda
Ron Beneda and Family
Amanda Berg
Bill Berg
Kim Berseth
Anne Blankenship
Stacy Blawat
Peggy Boe
Tasha Bohl
Royann and Tom Bold
Harriet Bracken
Kathleen Brandt
David Breker
Christine Bunko
Caleb, Olivia and Wanda Burrer
Diane Byrum
Sharon Canfield
Julie Canham
Bob Carlson
Deb Chambers
Lori Cline
Elaine Cuddigan
Josie Dahlberg
Denise Dame
Jonna Dawson
Michelle Deichert
Tammy Dick
Judy Dziengel
Laura Egan

Katie Erickson
Jewel Faul
Rhea Ferry
Katie Fiskness
Shirley Friberg
Florian and Jackie Friedt
Susan Froemke
Sara Gaebel
Darcie Gahner
Larry Gangle and Family
Pat Gates
Sherwood Gibbs
Gail Gjovik
Ruth Glen
Emily Goff
Deb Goplen
Brenda Gorseth
Richard Grabowski
Land and Mona Granrud
Mike Greer
Ann Guanella
Anita Haakenson
Ruth Haaland
Sylvia Hansen
August, Clara, Edison, Jessica and Scott Harms
Ray and Roxanne Hawley
James Helbling
Niki Helbling
Steve Hell
Deb Helvik
Angela Herman
Clarence Herz
Tricia Hettwer
Shelby Hewson
Kim Hoffmann
Lucas Holmes
Kathy Holte
Nathan Horgeshimer
Dick Horner
Linda Hovda

Kerri Howard
Jeremy Hughes
Alecta Hultgren
Kristina Hylton
Diane Isakson
Jenny Jaggi
Joyce James
Mary Jantzer
Sonya Jensen
Anthony Johnson
Glenna and Kolin Johnson
Jill Johnson
Sara Johnson
Sean Johnson
Durand Jones
Brian Jongeward
Joanne Kadmas
Joe and Maria Kalb
Gary and Kathy Kennedy
Chad Klindtworth
Cody, Kara and Keegan Kostohryz
Elizabeth Kraft
Rosemarie Kuntz
Valerie Kuntz
Sara Laire
Kelsey and Tristan Lako
Wanda Lanz
Curt Larson
Deb Larson
Mary Lass
Lindsey Lee
Jessica Linback
Ellin Lindree
Muriel Lippert
Michael Luckenbill
Michelle Lytle
Lorraine Manz
Margaret Marcusen
Tamara Markel
Brandon Markey
More Researchers

Janell Martin  
Megan Martin  
Theresa Martin-Johnson  
Marjorie Martin-Robert Martz  
Amanda McClean  
Mike McDaniel  
Peter Meberg  
Mary Meyer  
Aubrie, Darrick, Gabrielle, Gavin,  
Kathryn and Olivia Mischke  
Brianne Moos  
Bonnie Munsch  
Katie, Eli, Logan and Madison  
Muth  
Kelsey Nash  
Dorothea Nelson  
Gabrielle Nelson  
Susan Nelson  
Linda Ness  
Penny Nester  
William Niehaus  
Emily and Forrest Nielsen  
Kim Ohlhauser  
Aaron, Garin, Jasper, Levi, Sterling  
and Westin Opdahl  
Season Parlier  
Parshall FFA  
Mark Patlovich  
Shannon Paul  
Pam Paulson  
PAY-DAK DAIRY/Jonas Heyl  
Kari Perreault  
Donna and Floyd Peterson  
Jodi Peterson  
Shelley Porter  
Diane Randle  
Tim Rasmussen  
Carmen Rath-Wald  
Katie Reindl  
Teresa Ringenberg  
Nicole Rivinius  
Phyllis Rogstad  
Blake and Rena Rustad  
Judy Ryan  
Jennifer Sabo  
Debby Salvevold  
Amy Sand  
Annette Schewe  
Marilyn Schlosser  
Bruce Schmidt  
Kristy Schmidt  
Susan Schmitt  
Blaine Schumacher  
Mark Schumaker  
Emily Schwartz  
Stacy Schwarz  
Sandi Schwede  
Jennifer Seamands  
Angela Seligman  
Nicole Severance  
Anna, Olivia and Rose Shelton  
Juliana Skogen  
Andrew Smith  
Courtney Sprenger  
Marlene Sprenger  
Caitlin, Henry and Olive Stegmiller  
Bette Stieglitz  
Patricia Stockdill  
Eileen Stokkeland  
Jared Stoll  
Kathy Suda  
Beth Suelzle  
Lee Svangstu  
Dave and Ruth Swenson  
Arlene and Victor Teigen  
Deb Tellinghuisen  
Lyle Thomason  
Cheryl Thompson  
Andrew, Elizabeth, James,  
Katelynn and Maria Toomey  
Holly Triska  
Corynna, David, Erica and  
Samantha Turnquist  
Dawn Ueckert  
Margaret Vellenga  
Lillian Volochenko  
Mary Jo Wagar  
Joyce Waldock  
Angie, Kara and Sheyenne  
Waletzko  
Debra Wallace  
Ken Weinzierl  
Briona Weisbeck  
Dana Weiskopf  
Angie Wells  
Jeff Western  
Kimberly and Logan Whitehead  
Karen Wickham  
Jan Wild  
Elaine Willenbring  
Marie Williams  
Sue and Trent Williams  
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Tracy Wolf  
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Variety Descriptions

This is an academic report published for educational purposes only. The author gratefully acknowledges the sources of the descriptions of the varieties tested in this project: Fedco Seeds, Harris Seeds, Horticultural Products and Services, Kitazawa Seed, Johnny’s Selected Seeds, Jung Seed, Osborne Seed, Prairie Road Organic Seed, Reimer Seeds, Seed Savers Exchange, Seeds of Change, Stokes Seeds, Swallowtail Garden Seeds, Territorial Seed and Veseys Seeds.
The finest cultivars will lead to the finest gardens. North Dakota State University and its team of over 200 gardeners evaluate promising cultivars every summer. The following cultivars have excelled in these and other trials in the Midwest:

**ASPARAGUS.** Jersey Giant, Jersey Knight, Jersey Supreme, Purple Passion.

**BEAN. Bush:** Bush Blue Lake 274, Crockett, Derby, Espada, Inspiration, Jade II, Lewis, Maxibel, Pike, Provider, Purple Queen Improved, Royal Burgundy, Serengeti, Strike. **Dry:** Arikara Yellow, Great Northern. **Lima:** Fordhook 242, Eastland. **Pole:** Fortex, Monte Cristo, Orient Wonder, Seychelles, Stringless Blue Lake S-7.

**SOYBEAN:** Envy, Tohya. **Wax:** Borsalino, Carson, Gold Rush, Roodor.

**BEET. Red:** Bull’s Blood, Cylindra, Detroit Dark Red, Early Wonder Tall Top, Merlin, Red Ace. **Other:** Avalanche, Boldor, Burpee’s Golden, Touchstone Gold.

**BROCCOLI.** Green Magic, Packman.

**CABBAGE. Chinese:** Blues. **Head:** Early Jersey Wakefield, Golden Acre, Ruby Perfection, Stonehead.

**CARROT. Orange:** Baltimore, Bolero, Caracas, Goldfinger, Hercules, Imperator 58, Laguna, Mokum, Napoli, Nelson, New Kuroda, Scarlet Nantes. **Other:** Chablis Yellow, Purple Haze.

**CAULIFLOWER.** Amazing, Cheddar, Snow Crown, Violet Queen.

**CORN. Shrunken kernel:** American Dream, Anthem XR, SS2742, SS3778R, Xtra-Tender 274A and 277A. **Sugary enhanced:** Ambrosia, Bodacious RM, Delectable, Luscious, Peaches & Cream, Sugar Buns, Sweetness, Temptation. **Synergistic:** Allure, Cuppa Joe, Honey Select. **Ornamental:** Fiesta. **Popcorn:** Dakota Black.

**CUCUMBER. Pickling:** Alibi, Calypso, Eureka, Homemade Pickles, H-19 Little Leaf. **Slicing:** Dasher II, Diva, Fanfare, General Lee, Mercury, Muncher, Orient Express II, Raider, Salad Bush, Silver Slicer, Straight Eight, Summer Dance, Sweet Slice, Sweet Success, Talladega, Tasty Green.

**EGGPLANT.** Black Beauty, Dusky, Fairy Tale, Millionaire, Orient Express.

**GREENS.** Hon Tsai Tai, Koji, Joi Choi, Komatsuna, Miz America, Mizuna, Mei Qing Choi, Osaka Purple, Red Giant, Tatsoi, Tendergreen, Tokyo Bekana, Vegetable Amaranth, Win-Win Choi.


**KOHLRABI.** Early White Vienna, Kolibri, Kossak, Winner.

**LETTUCE. Leaf:** Bergam’s Green, Cervaneck, Deer Tongue, Merlot, New Red Fire, Red Sails, Red Salad Bowl, Red Velvet, Royal Oakleaf, Slobolt, Starfighter, Tropicana. **Bibb/Crisphead/Lollo:** Buttercrunch, Dark Red Lollo Rossa, Muir, Nancy, Nevada, Red Cross, Sierra, Skyphos. **Romaine:** Crisp Mint, Fusion, Green Forest, Newham, Starhawk.

**MELON. Muskmelon:** Aphrodite, Athena, Goddess, Solstice, Superstar. **Specialty:** Arava, Early-Dew, Passport, San Juan.
OKRA. Candle Fire, Clemson Spineless.
ONION. Ailsa Craig, Candy, Copra, Sweet Sandwich, Walla Walla.


RADISH. Standard: Amethyst, Bacchus, Champion, Cherry Belle, Easter Egg II, French Breakfast, Pretty in Pink, Rover, Roxanne, White Icicle.

RUTABAGA. American Purple Top.

SPINACH. Avon, Bloomsdale Long Standing, Emperor, Escalade, Gazelle, Melody, Olympia, Red Kitten, Space, Tyee.


SWEET POTATO. Beauregard.

SWISS CHARD. Bright Lights, Flamingo, Lucullus, Oriole, Peppermint, Rhubarb.


TURNIP. Hakurei, Purple Top White Globe, Tokyo Cross.

WATERMELON. Seeded: Petite Yellow, Sangria, Stargazer, Sugar Baby, Sweet Dakota Rose, Yellow Doll. Seedless: Millionaire.

Seed Sources

The following is a sample of companies offering seeds. This list is provided for educational purposes only; no discrimination is intended and no endorsement is implied.

Baker Creek Seed, 2278 Baker Creek Rd., Mansfield, MO 65704; www.baker creekheirloom.com; 800.888.1447.
Burpee Seed, 300 Park Ave., Warminster, PA 18974; www.burpee.com; 800.888.1447.
Fedco Seeds, PO Box 520, Waterville, ME 04903; www.fedcoseeds.com; 207.426.9900.
Gurney’s Seed and Nursery, PO Box 4178, Greendale, IN 47025; www.gurneys.com; 513.354.1492.
Harris Seeds, 355 Paul Rd, PO Box 24966, Rochester, NY 14624; www.harrisseeds.com; 800.544.7938.
Henry Fields, PO Box 397, Aurora, IN 47001; www.henryfields.com; 513.354.1494.
High Mowing Seeds, 76 Quarry Rd., Valcott, VT 05680; www.highmowingseeds.com; 866.735.4454.
Johnny’s Selected Seeds, 955 Benton Ave., Winslow, ME 04901; www.johnnyseeds.com; 877.564.6697.
Jung Seed, 335 S. High St., Randolph, WI 53956; www.jungseed.com; 800.297.3123.
Osborne Seed, 2428 Old Hwy 99 S Rd., Mt. Vernon, WA 98273; www.osborneseed.com; 360.424.7333.
Pinetree Garden Seeds, PO Box 300, Gloucester, ME 04260; www.superseeds.com; 207.926.3400.
Prairie Road Seed, 9824 79th St. SE, Fullerton, ND 58441; www.prairieroadorganic.com; 701.883.4416.
Seed Savers Exchange, 3094 N. Winn Rd., Decorah, IA 52101; www.seedsavers.org; 563.382.5990.
Stokes Seeds, PO Box 548 Buffalo, NY 14240; www.stokesseeds.com; 800.396.9238.
Territorial Seed, PO Box 158, Cottage Grove, OR 97424; www.territorialseed.com; 800.626.0866.

All gardeners are invited to join our team of backyard researchers. Go to www.ag.ndsu.edu/homegardenvarietytrials/

Written by Tom Kalb, Extension Horticulturist, North Dakota State University, email: tom.kalb@ndsu.edu. The author gratefully acknowledges the efforts of over 1,000 gardeners in North Dakota and nearby states/ provinces who evaluated these cultivars. December 2019