

# North Dakota Home Garden Variety Trials

### Summary of Results for 2009

#### Introduction

Approximately 350 households across North Dakota and surrounding states evaluated 113 varieties of vegetables and flowers in their gardens. Varieties were rated for germination, plant health, earliness, yield, and fruit/flower quality. In each of the trials, gardeners were asked to rate the performance of each variety using a scale of 1 to 10, with 1 = poor and 10 = excellent. They were asked which of the varieties they would recommend to other gardeners, and which of the two varieties they preferred. The following is a summary of the data, including our conclusions for each trial.

#### **Vegetable Trials**

- **#1. Bean, Green.** 9 sites in 2008 and 54 sites in 2009. 'Bush Blue Lake 274' (rating: 7.23; recommended: 81%; preferred: 53%) and 'Espada' (rating: 7.45; recommended: 78%; preferred: 47%). Both varieties were outstanding. Both performed well across the state and were recommended by the vast majority of gardeners. Both varieties produced good yields of quality beans. The pods of 'Espada' were darker green; otherwise, there was very little difference between the two varieties.
- **#2. Bean, Flatpod.** 14 sites. *'Greencrop'* (rating: 6.86; recommended: 64%; preferred: 46%) and *'Kentucky Dreamer'* (rating: 7.43; recommended: 64%; preferred: 54%). This trial had relatively few participants compared to other bean trials and gardeners were not especially impressed with the performance of either variety. Nonetheless, many growers raved over the long 9-inch pods of 'Greencrop', which were remarkably tender for a bean of that size. But a slight majority of gardeners preferred 'Kentucky Dreamer'. Several of these gardeners noted 'Kentucky Dreamer' beans matured earlier, were more uniform, did not curl, and tasted better.
- **#3. Bean, Wax.** 5 sites in 2008 and 29 sites in 2009. 'Carson' (rating: 7.43; recommended: 75%; preferred: 58%) and 'Rocdor' (rating: 7.69; recommended: 67%; preferred: 42%). Gardeners were impressed with the abundant yields and beautiful pods of both varieties. Most gardeners preferred 'Carson'—they felt its pods were more uniform, tender, and flavorful. 'Carson' is white-seeded, a desired trait for freezing/canning. 'Rocdor', an heirloom black-seeded type, produced high yields of deep yellow, long, slender pods.
- **#4. Bean, Yardlong.** 13 sites in 2008 and 21 sites in 2009. 'Gita' (rating: 5.62; recommended: 48%; preferred: 58%) and 'Liana' (rating: 4.91; recommended: 39%; preferred: 42%). We evaluated these heat-loving bean varieties during two cool summers. Most gardeners had limited success growing both varieties. Most enjoyed the novelty of these beans. Some gardeners liked the asparagus-like flavor and some did not. 'Gita' showed greater adaptability to our growing conditions. It germinated slightly better. Its vines were generally healthier and produced harvestable pods sooner. 'Gita' produced higher yields and more attractive beans at more sites than 'Liana'. 'Gita' was more highly recommended, although less than half of our gardeners liked it.



'Espada' Green Bean



'Carson' Wax Bean

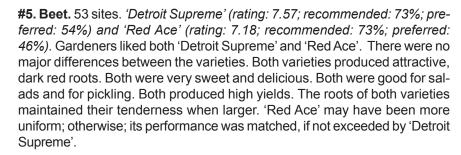




'Detroit Supreme' Beet



'Nelson' Carrot



#6. Carrot. 78 sites. 'Mokum' (rating: 6.85; recommended: 69%; preferred: 41%) and 'Nelson' (rating: 7.42; recommended: 77%; preferred: 59%). 'Mokum' and "Nelson' grew well and produced lots of tasty carrots in most gardens. The majority of gardeners preferred 'Nelson'. They liked its remarkably straight, smooth-skinned, and very uniform carrots. Many gardeners felt it tasted better, especially when eaten raw. Several gardeners noted 'Mokum' produced larger roots and felt these roots had richer flavor and texture.

#7. Carrot, Purple. 19 sites in 2008 and 53 sites in 2009 sites. 'Dragon' (rating: 6.91; recommended: 67%; preferred: 45%) and 'Purple Haze' (rating: 7.33; recommended: 77%; preferred: 55%). Most gardeners preferred 'Purple Haze' for its uniform, tapered carrots with beautiful contrasting colors. It had a sweet, mild flavor that was especially good when eaten raw. When cooked, it retained its color better than 'Dragon', but still created off-colors to many cooked dishes. Many gardeners noted the impressive germination, growth, and yields of 'Dragon'. Most gardeners felt that 'Dragon' was bitter when eaten raw, but very flavorful when cooked. Its roots were burgundy red on the outside but inconsistent in color on the inside. It was less likely to retain its purplish color when cooked. The roots of 'Dragon' were more blunt-tipped and more subject to splitting.

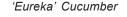


'Purple Haze' Carrot

#8. Cucumber, Burpless. 77 sites. 'Sweet Slice' (rating: 6.68; recommended: 67%; preferred: 47%) and 'Sweeter Yet' (rating: 6.34; recommended: 65%; preferred: 53%). Some results from this trial are unexpected. 'Sweeter Yet' is an ultra-early variety and yet it produced fruit later than 'Sweet Slice' at many of the plots. 'Sweet Slice' has a reputation for productivity, but it produced lower yields than 'Sweeter Yet' at many of the plots. Neither variety excelled under the late spring and cool summer conditions, but gardeners generally liked both varieties. About half of the gardeners liked the yields and slimmer cucumbers of 'Sweeter Yet'. The other half preferred the straighter, more uniform cucumbers of 'Sweet Slice'.

#9. Cucumber, Pickling. 46 sites. 'Calypso' (rating: 6.22; recommended: 69%; preferred: 53%) and 'Eureka' (rating: 6.08; recommended: 54%; preferred: 47%). Many seedlings died from a late frost in spring and both varieties struggled during the cool summer. Neither variety was rated high by gardeners. The plants of 'Eureka' were more vigorous, but its yields were no greater than those of 'Calypso'. The cukes of 'Eureka' were uniform in shape, had a smooth skin,

and remained of good quality even when large. This made 'Eureka' a good variety for both pickling and slicing. The cukes of 'Calypso' matured earlier and produced good yields when picked regularly. Its cukes were dark green, more spiny, and outstanding for pickling.



**#10. Cucumber, Slicing.** 38 sites. 'Marketmore 76' (rating: 6.94; recommended: 71%; preferred: 57%) and 'Straight Eight' (rating: 7.03; recommended: 68%; preferred: 43%). 'Straight Eight' is the most popular cucumber grown in North Dakota, but its performance was matched—if not surpassed—by that of 'Marketmore 76'. 'Marketmore 76' rated higher for vine health, earliness, and taste. Most gardeners preferred it over 'Straight Eight'.

**#11. Greens, Flower Bud.** 9 sites (Fall). *'Hon Tsai Tai'* (rating: 6.83; recommended: 83%; preferred: 67%) and *'Summer Jean'* (rating: 6.50; recommended: 83%; preferred: 33%). Gardeners liked both varieties. The yield of 'Summer Jean' was impressive. The reddish-purple stems of 'Hon Tsai Tai' were appealing and very mild in flavor. All gardeners preferred the taste of 'Hon Tsai Tai' and most gardeners preferred this variety overall.

**#12. Greens, Mizuna.** 9 sites (Fall). 'Lime-Streaked Mizuna' (rating: 6.29; recommended: 71%; preferred: 29%) and 'Mizuna' (rating: 8.29; recommended: 86%; preferred: 71%). Gardeners were pleased with the delicate flavor and uniquely fringed leaves of this Asian green. Both varieties were easy to grow and found to be a nice addition to a mixed salad. 'Mizuna' was faster growing and preferred by most gardeners.

**#13. Greens, Mustard.** 6 sites (Fall). 'Osaka Purple' (rating: 8.00; recommended: 67%; preferred: 60%) and 'Red Giant' (rating: 7.80; recommended: 67%; preferred: 40%). Both varieties grew well. 'Red Giant' displayed more robust growth, especially after the initial harvest. 'Osaka Purple' had a milder flavor that gardeners preferred. Gardeners appreciated the beauty of both varieties in the garden and on the plate.

**#14. Greens, Mustard Spinach.** 11 sites (Fall). 'Summer Fest' (rating: 7.25; recommended: 88%; preferred: 57%) and 'Tendergreen' (rating: 6.13; recommended: 63%; preferred: 43%). Gardeners enjoyed the deep green leaves and mild flavor of 'Summer Fest'. Nearly all gardeners recommended it. 'Tendergreen' was especially vigorous and also pleased most gardeners.

**#15. Greens, Pac Choi.** 12 sites (Fall). 'Joi Choi' (rating: 5.78; recommended: 56%; preferred: 44%) and 'Mei Qing Choi' (rating: 5.67; recommended: 56%; preferred: 56%). 'Joi Choi' grew robustly and the contrast between its dark green leaves and white stalks was beautiful. But a slight majority of gardeners preferred 'Mei Qing Choi'; in most cases, due to its superior flavor. Both varieties struggled to mature before the first hard frost and would have benefited from planting earlier (late July/early August) in the fall season or in early spring.

**#16. Greens, Tatsoi.** 14 sites (Fall). 'Tatsoi' (rating: 6.33; recommended: 67%; preferred: 100%) and 'Tatsoi Savoy' (rating: 5.00; recommended: 33%; preferred: 0%). All gardeners preferred 'Tatsoi' over 'Tatsoi Savoy'. 'Tatsoi' plants grew faster and matured earlier. Its plants were sturdy and productive. Gardeners liked the appearance and mild flavor of its fleshy, spoon-shaped leaves. 'Tatsoi Savoy' did not generate any interest or enthusiasm.

**#17. Kohlrabi.** 27 sites. *'Early White Vienna'* (rating: 6.83; recommended: 83%; preferred: 45%) and *'Winner'* (rating: 7.43; recommended: 96%; preferred: 55%). 'Winner' lived up to its name. Gardeners were extremely impressed with its uniformly round bulbs. Yields were good and its bulbs resisted splitting. The uniquely smooth, fruity flavor of 'Winner' was an enjoyable taste experience for gardeners, including those who have grown kohlrabi for years. 'Early White Vienna' matured early and produced quality bulbs.



'Marketmore 76' Cucumber



'Osaka Purple' Mustard



'Winner' Kohlrabi



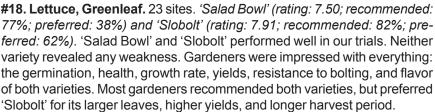


'Nevada' Lettuce



'Goddess' Melon

'Earli-Dew' Melon



**#19.** Lettuce, Redleaf. 26 sites. 'New Red Fire' (rating: 8.13; recommended: 79%; preferred: 58%) and 'Red Sails' (rating: 8.08; recommended: 92%; preferred: 42%). 'New Red Fire' and 'Red Sails' were exceptional. Gardeners loved the appearance, yield, and taste of both varieties. 'New Red Fire' was generally preferred for its early season vigor and resistance to bolting. Gardeners liked its bright red, shiny leaves. Nevertheless, almost all gardeners recommended 'Red Sails', which was extremely productive.

**#20. Lettuce, Specialty.** 34 sites. 'Buttercrunch' (rating: 7.61; recommended: 64%; preferred: 44%) and 'Nevada' (rating: 7.84; recommended: 76%; preferred: 56%). Gardeners were pleased with the performance of both varieties. Both varieties produced good yields of lettuce through the summer. 'Buttercrunch' had a darker green, fuller leaf and its heads were very attractive. 'Nevada' received the highest ratings, usually due to its excellent flavor and high yields. Both varieties are noted for their resistance to warm weather and bolting. The cool summer did not reveal this quality, but our growers certainly didn't mind harvesting lettuce until frost.

**#21. Melon, Cantaloupe.** 52 sites. 'Goddess' (rating: 6.38; recommended: 59%; preferred: 55%) and 'Sweet 'N Early' (rating: 5.87; recommended: 52%; preferred: 45%). This was a hard year for melons. Late spring frosts often froze seedlings. Then came a cool summer. Melon yields were low or nil. Even these two extra early varieties struggled to produce ripe fruit. 'Goddess' was the winner. Its melons ripened earlier. Its melons were more attractive and tasted much better. A few gardeners found 'Goddess' to be worthy of its heavenly name, indeed, the best cantaloupe they have ever grown. 'Sweet 'N Early' was more productive, but its fruits were small and less tasty.

**#22. Melon, Galia.** 9 sites in 2008 and 9 sites in 2009. 'Diplomat' (rating: 5.23; recommended: 50%; preferred: 25%) and 'Passport' (rating: 6.45; recommended: 67%; preferred: 75%). 'Passport' was superior, although both varieties struggled in our cool summer weather. 'Passport' produced higher yields and its melons tasted much better. Yields of both varieties were low as many melons never ripened before frost. The melons of both varieties had a tendency to crack, too.

**#23. Melon, Specialty.** 25 sites. *'Earli-Dew'* (rating: 5.79; recommended: 70%; preferred: 56%) and *'Lambkin'* (rating: 5.47; recommended: 50%; preferred: 44%). Both varieties struggled due to the cool summer temperatures. In many cases, no fruit ripened before the frost. There is no reliable honeydew variety for our region, but *'Earli-Dew'* showed again that it is the best. 'Lambkin' may be the biggest disappointment in this year's trials. This new All-America Selections Winner was extremely promising since it was reported to mature early and could provide a new taste sensation for melon

lovers. Unfortunately, the most notable characteristic of 'Lambkin' Christmas melon was the unique mottling of its *rind* (and not its flavor or yield).

**#24.** Okra. 11 sites. 'Annie Oakley II' (rating: 6.57; recommended: 60%; preferred: 50%) and 'Cajun Delight' (rating: 6.71; recommended: 50%; preferred: 50%). Okra loves hot weather; unfortunately our summer was very cool. Both varieties struggled mightily. 'Cajun Delight' ripened earlier and produced higher yields (although yields of both varieties were very low).

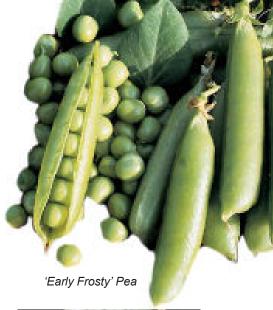
**#25. Pea.** 78 sites. 'Dakota' (rating: 5.46; recommended: 40%; preferred: 26%) and 'Early Frosty' (rating: 7.52; recommended: 81%; preferred: 74%). Early Frosty' was the clear winner. Its vines were more vigorous, much higher yielding, and produced peas for a longer time period (in many cases into August). Many gardeners thought its peas were sweeter, too. Most gardeners did not like 'Dakota'—its yields were too low. 'Dakota' is only suited for freezing/canning. It produces a single crop and very early, at least one week earlier than 'Early Frosty'. Its compact vines do not need support. Some gardeners did not like either variety compared to other pea varieties they have grown in the past.

**#26. Pumpkin, Gray.** 9 sites in 2008 and 14 sites in 2009. 'Jamboree' (rating: 7.17; recommended: 73%; preferred: 67%) and 'Jarrahdale' (rating: 6.95; recommended: 59%; preferred: 33%). 'Jamboree' was preferred by most gardeners. Its fruits matured earlier and tasted better (similar to a buttercup). Its fruits were smooth-skinned and extremely attractive as decorations. The vines of both varieties—especially those of 'Jarrahdale'—were vigorous. This extra vigor displayed by 'Jarrahdale' led to a stronger performance under the unfavorable weather conditions of 2009. Gardeners liked the look of these 'Jarrahdale' pumpkins, too.

**#27. Pumpkin, Jack-O'Lantern.** 41 sites. 'Neon' (rating: 7.38; recommended: 75%; preferred: 68%) and 'Spirit' (rating: 6.81; recommended: 67%; preferred: 32%). The performance of 'Neon' was a pleasant surprise. This extra-early variety produced pumpkins that turned orange in *summer*. This was especially valuable during the cool growing season of 2009. Its vines were healthy and its yields were very good. Its pumpkins were deep orange in color and uniform in size. 'Spirit' produced larger pumpkins, but these pumpkins were fewer in number and less uniform. Both varieties had semi-bush vines, which did not overrun the garden.

**#28. Pumpkin, Seed.** 6 sites in 2008 and 13 sites in 2009. 'Kakai' (rating: 5.56; recommended: 75%; preferred: 57%) and 'Lady Godiva' (rating: 5.37; recommended: 64%; preferred: 43%). The seeds of both varieties struggled to germinate in the cool soil. Once established, 'Lady Godiva' showed the capacity to produce lots of small orange fruits, which are suited for decorations and edible seeds. The fruits of 'Kakai' are fewer in number but larger. The seeds of 'Kakai' are plumper and tastier. Overall, most gardeners prefer 'Kakai', but ratings for both varieties were low.

#29. Radish, Chinese. 18 sites (Fall). 'Red Meat' (rating: 3.75; recommended: 13%; preferred: 12%) and 'Shunkyo Semi-Long' (rating: 6.69; recommended: 81%; preferred: 88%). 'Shunkyo Semi-long' was the clear winner. This Chinese radish outperformed 'Red Meat' in every way. It grew better, produced higher yields, looked better, and tasted better. Growers were especially impressed with its hardiness and suitability for fall planting. 'Red Meat' needed more time—it never got started in most cases. It needs to be planted as a spring/early summer crop or perhaps in July for fall harvest.



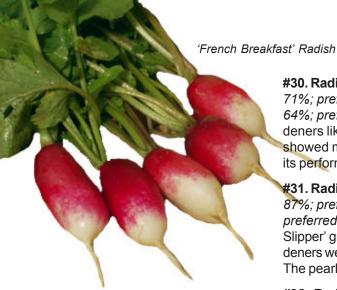


'Jamboree' Pumpkin



'Shunkyo Semi-Long' Radish







'Amethyst' Radish



'Bordeaux' Spinach



**#30.** Radish, French. 17 sites (Fall). 'D'Avignon' (rating: 5.71; recommended: 71%; preferred: 43%) and 'French Breakfast' (rating: 6.00; recommended: 64%; preferred: 57%). Neither variety excelled in this fall season test. Gardeners liked the earliness and mild flavor of D'Avignon'. 'French Breakfast' showed more robust growth and higher yields. Its roots were attractive and its performance was more consistent.

**#31.** Radish, Pink. 18 sites (Fall). 'Lady Slipper' (rating: 6.47; recommended: 87%; preferred: 47%) and 'Pink Beauty' (rating: 7.13; recommended: 93%; preferred: 53%). Gardeners were very impressed by both varieties. 'Lady Slipper' grew vigorously and produced high yields of oval-shaped roots. Gardeners were even more impressed with the beauty and flavor of 'Pink Beauty'. The pearl-shaped roots of this variety were very attractive, mild, and crispy.

**#32. Radish, Purple.** 42 sites in Spring 2009 and 11 sites in Fall 2009. 'Amethyst' (rating: 7.10; recommended: 71%; preferred: 73%) and 'Plum Purple' (rating: 5.19; recommended: 38%; preferred: 27%). Gardeners liked the dark purple skin color of 'Amethyst' and enjoyed the mild taste of this radish. It grew vigorously and produced good yields in both spring and fall plantings. Gardeners were not impressed with 'Plum Purple'. This variety produced low yields, was less attractive, hotter tasting, and more subject to bolting.

#33. Radish, White. 6 sites (Fall). 'Hailstone' (rating: 5.33; recommended: 20%; preferred: 50%) and 'Ping Pong' (rating: 6.33; recommended: 40%; preferred: 50%). Few gardeners were interested in this trial and these gardeners were not impressed with either variety. Neither variety was recommended by half of the gardeners, which is a rare and disappointing result. At this time, 'Hailstone' seems to be more attractive and better tasting, but much more testing is needed.

**#34. Spinach, Fall.** 30 sites (Fall). 'Bordeaux' (rating: 5.83; recommended: 68%; preferred: 53%) and 'Space' (rating: 6.39; recommended: 86%; preferred: 47%). Gardeners liked the vigor and yields of 'Space'. Although 'Bordeaux' did not grow as well in the fall, many gardeners preferred it. Its unique red stems and arrow-shaped leaves were very appealing. Several of these trials in fall would have benefited from an earlier planting.

#35. Spinach, Spring. 35 sites. 'Melody' (rating: 7.27; recommended: 80%; preferred: 41%) and 'Olympia' (rating: 7.47; recommended: 89%; preferred: 59%). Gardeners were impressed with both varieties. Even first-time spinach growers succeeded in producing bountiful crops of tasty leaves.

Given the choice, most gardeners preferred 'Olympia'. They preferred its larger, smoother (easier to clean) leaves and its superior resistance to bolting. In grower-initiated tests, both of these hybrids produced higher yields and resisted bolting better than 'Bloomsdale Long Standing', the standard variety grown in the state.

#36. Squash, Summer Romanesco. 6 sites. 'Costata Romanesco' (rating: 6.17; recommended: 67%; preferred: 50%) and 'Italian Largo' (rating: 7.00; recommended: 67%; preferred: 50%). In our limited testing, we found most gardeners liked, but only a few gardeners loved these varieties. Half preferred 'Costata Romanesco', noting its earliness and flavor. The other half preferred 'Italian Largo', noting its higher yields and more uniformly shaped fruit.

**#37. Squash, Summer Romanesco Hybrid.** 5 sites in 2008 and 8 sites in 2009. 'Italian Largo' (rating: 6.31; recommended: 46%; preferred: 38%) and 'Portofino' (rating: 6.93; recommended: 54%; preferred: 62%). Neither variety performed very well. Only about half of gardeners could recommend either variety. As to which variety is better, there was no consistent winner in this two-year trial. 'Portofino' excelled in 2008, but 'Italian Largo' was superior in 2009. The uniform and narrow shape of 'Portofino' fruits impressed many gardeners. 'Italian Largo' produced higher yields both years—this is a positive attribute, but productivity is rarely a concern with zucchini.

**#38. Squash, Summer Scallop.** 6 sites in 2008 and 15 sites in 2009. 'Flying Saucer' (rating: 7.24; recommended: 80%; preferred: 68%) and 'Sunburst' (rating: 6.81; recommended: 70%; preferred: 32%). Gardeners liked both varieties, but most preferred 'Flying Saucer' for its eye-catching fruits. The contrast between the bright yellow and green colors of the fruit was beautiful and its deeper ribs added even more visual interest. Both varieties were productive, mild in flavor, and good for cooking. 'Sunburst' showed good early season vigor and produced earlier. Its fruits were more tender and easier to prepare for cooking.

#39. Squash, Summer Zucchini. 30 sites. 'Cashflow' (rating: 7.00; recommended: 57%; preferred: 32%) and 'Spineless Beauty' (rating: 8.11; recommended: 82%; preferred: 68%). Spineless Beauty' was the superior variety in this trial. Gardeners liked the open habit and spineless stems of the plants. This variety was more vigorous, matured earlier, and produced higher yields. Its fruits were more uniform and attractive. 'Cashflow' was fine, but it was outperformed in every way by 'Spineless Beauty'.

**#40. Squash, Winter Acorn.** 24 sites. 'Honey Bear' (rating: 6.50; recommended: 43%; preferred: 57%) and 'Table Ace' (rating: 6.91; recommended: 74%; preferred: 43%). Our gardeners preferred 'Table Ace'. It germinated better and its plants were more vigorous and productive. Gardeners generally liked the flavor of both varieties. 'Honey Bear' may have a niche as a variety suitable for small gardens, but the fact that less than half of our gardeners recommend it is disconcerting.

**#41. Squash, Winter Butternut.** 15 sites. 'Early Butternut' (rating: 6.85; recommended: 62%; preferred: 42%) and 'Waltham' (rating: 7.47; recommended: 62%; preferred: 58%). Both varieties struggled under the unusually cool temperatures and short growing season of 2009. Many gardeners reported low or no yields. 'Early Butternut' got off to a strong start and its fruits often matured earlier. Its semibush vine habit is especially useful for gardeners with limited space. 'Waltham' showed robust growth and produced a higher yield. Gardeners liked the taste of both varieties.

#42. Squash, Winter Hubbard. 4 sites in 2008 and 16 sites in 2009. 'Blue Ballet' (rating: 5.70; recommended: 56%; preferred: 47%) and 'Blue Magic' (rating: 5.45; recommended: 63%; preferred: 53%). Both varieties struggled during the two cool summers of testing. Neither variety generated much excitement among gardeners. 'Blue Ballet' matured earlier and its fruits were uniform and attractive in appearance. These fruits were relatively small (about 4 pounds), but still plenty big for today's smaller families. 'Blue Magic' had more vigorous vines and larger fruits (about 6 pounds). The flavor of both varieties was mild, perhaps bland. The fine texture of the flesh of 'Blue Magic' squash was appreciated by gardeners.





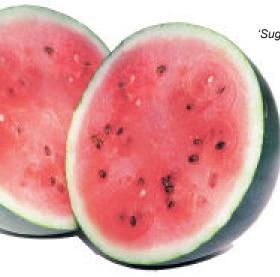
'Portofino' Summer Squash



'Table Ace' Winter Squash



'Blue Magic' Winter Squash





'Bright Lights' Swiss Chard



'Diablo' Sulphur Cosmos



**#43. Swiss Chard, Multicolor.** 15 sites in Spring 2008, 20 sites in Spring 2009, and 20 sites in Fall 2009. 'Bright Lights' (rating: 7.90; recommended: 83%; preferred: 69%) and 'Five Color Silverbeet' (rating: 7.41; recommended: 68%; preferred: 31%). Gardeners were impressed with both varieties for their beauty, taste, and production. Both varieties tolerated cool temperatures in spring and fall. Most gardeners preferred 'Bright Lights' for its brighter colors and slightly higher yields. Other gardeners were impressed with the vigor and flavorful stalks of 'Five Color Silverbeet'.

#44. Swiss Chard, Red. 11 sites (Fall). 'Rhubarb' (rating: 6.85; recommended: 50%; preferred: 57%) and 'Sunset Magenta' (rating: 6.85; recommended: 38%; preferred: 43%). We tried this as a fall crop and generally failed. The plants only got a few inches tall and most gardeners were not interested in harvesting baby greens. There was no clear standout among the two varieties. We'll learn from this trial and limit testing of Swiss chard to spring plantings in the future.

**#45. Watermelon.** 34 sites. 'Mickeylee' (rating: 4.50; recommended: 42%; preferred: 40%) and 'Sugar Baby' (rating: 5.35; recommended: 63%; preferred: 60%). 'Sugar Baby' is well liked across the nation for its reliability and our trials reinforced this reputation. 'Sugar Baby' outperformed 'Mickeylee' in a year marked by snowfall in June and a cold summer overall. Its vines were healthier and produced more melons. Its melons were earlier, better looking, and better tasting. However, neither variety grew well. Neither variety received high marks or rave reviews. Many gardeners had to replant due to the cold spring and some gardeners did not harvest a ripe melon.

#### Flower Trials

#46. Cosmos. 7 sites in 2008 and 37 sites in 2009. 'Sonata Mix' (rating: 7.34; recommended: 78%; preferred: 62%) and 'Versailles Mix' (rating: 7.09; recommended: 73%; preferred: 38%). Both varieties performed well—both in the garden and as a cut flower. Most gardeners preferred 'Sonata Mix' for its earlier blooms. Its compact (24-inch) habit was less sensitive to wind damage, too. If a taller (42-inch) plant is preferred, 'Versailles Mix' would be a good choice.

**#47. Cosmos, Sulphur.** 40 sites. 'Diablo' (rating: 7.79; recommended: 83%; preferred: 55%) and 'Red Crest' (rating: 7.63; recommended: 81%; preferred: 45%). Many gardeners mentioned these varieties were almost identical—and they liked both. Both 'Diablo' and 'Red Crest' produced lots of vibrant red-orange flowers throughout the summer. Plants were healthy and bushy. Individual flowers were short lived and not suited for cutting.

#48. Sunflower, Gold. 10 sites. 'Sunbeam (rating: 5.33; recommended: 56%; preferred: 12%) and 'Sunrich Gold' (rating: 6.67; recommended: 89%; preferred: 88%). Sunrich Gold' clearly outperformed 'Sunbeam'. It bloomed weeks earlier and looked more attractive in the garden. The 'Sunrich' series is the most popular series of cut sunflowers and 'Sunrich Gold' did not disappoint—its blooms were very attractive as a cut flower.

**#49. Sunflower, Orange.** 7 sites in 2008 and 22 sites in 2009. *'Pro Cut Orange' (rating: 7.10; recommended: 71%; preferred: 62%) and 'Sunrich Orange' (rating: 7.10; recommended: 64%; preferred: 38%).* Both varieties were outstanding, especially for cut flower production. 'Pro Cut Orange' blooms very early and reliably. The flowers of 'Sunrich Orange' bloom later, but are larger, more uniform, and especially attractive. The slender stems of 'Sunrich

Orange' make this variety easier to use in flower bouquets, too. These varieties complement one another for cut flower production with 'Pro Cut Orange' serving the role as an early maturing variety that extends the harvest season. The single-headed trait of these varieties limits their use in gardens since their season of bloom is short. Multibranching varieties, in contrast, produce many more blooms and have a longer display of color.

**#50. Sunflower, Primrose.** 24 sites. 'Buttercream' (rating: 7.39; recommended: 78%; preferred: 73%) and 'Vanilla Ice' (rating: 4.91; recommended: 43%; preferred: 27%). 'Buttercream' was superior in all measured categories. Its larger seed led to a higher germination rate. Its plants were healthy and bloomed much earlier compared to those of 'Vanilla Ice'. 'Buttercream' produced a higher number of flowers, more attractive flowers, and were more useful for cutting. It's an impressive new variety which adds a soft primrose color to the ever expanding palette of sunflower colors available for gardeners. Beautiful and lovely!

**#51. Sunflower, Red.** 37 sites. 'Moulin Rouge' (rating: 7.31; recommended: 68%; preferred: 64%) and 'Prado Red' (rating: 6.69; recommended: 68%; preferred: 36%). 'Moulin Rouge' continues to impress gardeners. It has displayed strong vigor under all kinds of weather conditions. In this trial, it produced flowers earlier and in greater abundance compared to 'Prado Red'. Gardeners loved the unusual flower colors of both varieties: dark red in the case of 'Moulin Rouge' and a deeper, darker red in the case of 'Prado Red'. Both would be fascinating additions to any flower garden.

**#52. Sweet Pea.** 45 sites. 'Cuthbertson Choice Mix' (rating: 6.12; recommended: 59%; preferred: 32%) and 'Mammoth Choice Mix' (rating: 6.45; recommended: 70%; preferred: 68%). The plants of both varieties started slowly due to very cool weather. Several gardeners did not see blooms until August and some did not see any flowers at all. 'Mammoth Choice' was generally preferred for its earlier display of flowers. Its vines were strong and vigorous, producing more flowers compared to those of 'Cuthbertson Choice'. Both varieties did well as cut flowers.

**#53. Zinnia, Bicolor.** 14 sites in 2008 and 37 sites in 2009. 'Candy Cane Mix (rating: 6.71; recommended: 70%; preferred: 41%) and 'Peppermint Stick Mix' (rating: 7.65; recommended: 85%; preferred: 59%). Gardeners fell in love with the bright, splashy colors of both varieties. Plants of both varieties were sturdy and well suited for cutting. Most gardeners felt 'Peppermint Stick Mix' showed a greater intensity and broader range of colors in its blooms. Its plants were more robust and produced more flowers.

#54. Zinnia, Cactus. 47 sites. 'Art Deco Mix' (rating: 6.91; recommended: 73%; preferred: 40%) and 'Giant Cactus Mix' (rating: 7.67; recommended: 87%; preferred: 60%). Gardeners loved 'Giant Cactus Mix'. They especially liked the giant size and color variation of its flowers. Its plants grew vigorously and produced lots of eye-catching blooms. The performance of 'Art Deco Mix' was solid—not spectacular—and generally inferior to that of 'Giant Cactus Mix'.





'Mammoth Choice Mix' Sweet Pea



'Peppermint Stick Mix' Zinnia



'Benary's Giant Mix' Zinnia



#55. Zinnia, Green. 6 sites in 2008 and 22 sites in 2009. Benary's Giant Lime' (rating: 7.02; recommended: 72%; preferred: 44% and 'Envy' (rating: 7.17; recommended: 80%; preferred: 56%). Gardeners liked both varieties, but neither variety distinguished itself from the other. Both varieties produced lots of blooms, which were often used for cut flower arrangements. Our gardeners were split as to which variety had showier flowers. Some preferred the flatter, more open blooms of 'Envy', while others preferred the fuller, rounder blooms of 'Benary's Giant Lime'. 'Benary's Giant Lime' generally performed better than 'Envy' as a cut flower. Gardeners were also split on whether or not they would ever grow a green zinnia again; several were disappointed with the lack of brilliance in the petals, while others marveled at the novel color.

**#56. Zinnia, Semidwarf.** 14 sites in 2008 and 39 sites in 2009. 'Cut and Come Again' (rating: 7.76; recommended: 80%; preferred: 47%) and 'Oklahoma Mix' (rating: 7.67; recommended: 82%; preferred: 53%). Both varieties were very impressive. They grew vigorously, resisted powdery mildew, and produced lots of gorgeous flowers. Their blooms were outstanding both in the garden and in the vase. Some gardeners noted the vigor of 'Cut and Come Again', whether it was recuperating from a storm or a harvesting of flowers. Its long stems were favored for cut flowers. Gardeners who liked 'Oklahoma Mix' were especially impressed with the variety and brilliance of colors in the mix

**#57. Zinnia, Tall.** 9 sites in 2008 and 22 sites in 2009. 'Benary's Giant Mix' (rating: 8.00; recommended: 85%; preferred: 63%) and 'State Fair Mix (rating: 7.68; recommended: 74%; preferred: 37%). Both varieties grew well and produced lots of large flowers. The blooms of 'State Fair Mix' were especially big and impressive. Nonetheless, most gardeners preferred 'Benary's Giant Mix', which produced a much greater number of blooms. These blooms were slightly smaller, but had more petals, making them look fuller. The blooms of 'Benary's Giant Mix' were especially vibrant and maintained their brightness when used as a cut flower.

'Benary's Giant Lime' Zinnia

## NDSU Extension Service

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