

YARD & GARDEN REPORT

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Great tasting sweet corn

Over the past three years, home gardeners across North Dakota have been evaluating varieties of sweet corn. We tested corn with “normal” sweetness and “super” sweetness. Some varieties had yellow kernels and some had a mix of yellow and white kernels. Some varieties were developed in America and some in Asia.

One variety stood out for its exceptional flavor: the super sweet variety ‘Xtra-Tender 277A’.

Super sweet varieties are prized for their flavor—they have two to three times more sugars than “normal” sweet corn varieties. Their major drawback is the seed itself, which is thin and often lacks vigor. Such “shrunk kernel” types struggle to germinate in cold, wet soils.

Spring 2013 was cold and wet, which made it a great year to test for seedling vigor. We expected our super sweets to suffer. To make matters worse, our project does not use treated seed since so many kids are involved. We expected lots of the seed to rot in the field.

To our surprise, we were encouraged with the germination of our super sweets. The germination was not great, but over 50 percent.

Gardeners loved the flavor of ‘Xtra-Tender 277A’:

“I have been planting this variety for years. For my family it is the #1 sweet corn to eat. They always ask, “When is the good stuff ready to eat.” Very sweet and tender ...”



Fig. 1. New corn varieties offer spectacular eating quality for gardeners.

“Really tender taste—pops in your mouth. Great sweet taste.”

‘Xtra-Tender 277A’ is famous for its tenderness—a rare quality among super sweets, which typically have a crunchy texture.

Other promising corn varieties in our 2013 tests include the bicolor ‘Allure’ and yellow kernel varieties ‘Vision’ and ‘Honey Select’. All of these varieties produced ears with outstanding flavor.

Details of all of our variety trials from recent years are available at www.dakotagardener.com/trials/results.html.

Looking ahead, one of the biggest challenges in growing sweet corn in gardens is to get a good stand. Our growing season is short, and we have a tendency to plant our seed too early in the spring. Corn should not be planted until soil

temps reach 60°F. Treating seeds with fungicides can help to reduce seed rot in the garden. Conventional and organic treatments are available for sweet corn seed from some companies.

In 2014, we will continue testing the Xtra-Tender’ series of sweet corn. We expect over 250 gardeners to join our team. Everyone is welcome. If interested, please contact Tom Kalb via e-mail at tom.kalb@ndsu.edu.

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Top vegetable varieties for North Dakota

A team of over 500 gardeners across our state have evaluated hundreds of vegetable varieties over the past five years. The team rated the varieties for

germination, vigor, earliness, yield and taste. The following is a brief summary of our findings. A more complete listing of recommended varieties, as well

as annual reports and summaries since 2009 are available at www.dakotagardener.com/trials/.



BEANS

The standard bean variety for gardeners is **'Bush Blue Lake 274'**. It is a dependable producer of high quality beans. **'Derby'**, **'Jade'** and **'Strike'** will match, if not exceed it for taste qualities. **'Provider'** is well liked for its earliness and high yields.

Gardeners are encouraged to try filet beans, which are known for long, slender beans of highest quality. The filet **'Maxibel'** was the highest rated bean in our 2013 trials.

'Carson' is the best wax bean. Its pods are light yellow, tender and delicious.



BEETS

'Merlin' is impressive. Its roots are uniform, round, bright red and very sweet.

Among non-hybrids, **'Early Wonder'** is preferred for its strong early growth, sweet flavor, and tall tops (good for bunching). **'Detroit Dark Red'** and **'Detroit Supreme'** produce good yields of smooth, globular, deep red roots. The reddish-purple foliage of **'Bull's Blood'** is great for greens and baby beets.



CARROTS

Nantes types are easy to grow and good for both snacking and cooking. The roots of **'Nelson'** are straight, sweet and crisp. **'Laguna'** shows more vigor and higher yields.

Chantenay types produce massive, cone-shaped roots, which are preferred for processing and storage. **'Hercules'** is productive and reliable; its roots are deep orange, smooth and crisp. **'New Kuroda'** offers rich flavor.

'Purple Haze' is the best purple carrot and **'Chablis Yellow'** is best among yellow carrots.



CORN, SWEET

Sugary enhanced types are easy to grow, sweet and tender. The bicolor **'Trinity'** is early, reliable and delicious.

Gardeners love the flavor of super sweet bicolor **'Xtra-Tender 277A'** and yellow **'Vision'**. Yields are good, too.

The vigor, yields and taste of synergistic bicolor **'Allure'** and yellow **'Honey Select'** are impressive.



CUCUMBER

'Straight Eight' is early maturing and productive, even in cool summers. **'General Lee'** produces high yields of quality slicers.

Burpless **'Sweeter Yet'** shows remarkable earliness, good yields, and outstanding flavor. The productivity of burpless **'Tasty Green'** is impressive; its fruits are smooth and attractive.

Gourmet **'Diva'** produces high quality cukes. The fruits are thin-skinned, uniform, crisp, mild and burpless.

'Homemade Pickles' is a remarkable pickler. It matches or exceeds all other pickling varieties for vigor and productivity, year after year. The fruits are uniform, straight, crisp and solid.



KOHLRABI

'Winner' is preferred for its early maturity, good yields, and superior quality. Its smooth, fruity taste is enjoyable. **'Kossak'** produces high yields of large, delicious bulbs that resist becoming woody. **'Kolibri'** is the top rated purple type; its flavor is crisp and delicious.



LETTUCE (GREEN)

'**Buttercrunch**' is highly recommended for its dark green leaves, mild and bitter-free flavor, and superior yields. This bibb type is productive, reliable, and resists bolting.

'**Nevada**' is the finest crisphead type. Its productivity, taste and heat tolerance is outstanding. The heads are bright green and heavy.

'**Green Forest**' is a splendid romaine lettuce. It has deep green and tender leaves, mild flavor and superb yields. '**Crisp Mint**' is liked for its high yields, ruffled leaves and full heads.

'**Tropicana**' has performed well as a leaf lettuce. It tolerates heat, leading to an abundant harvest from spring through summer. Gardeners like the flavor of its deep green leaves.



LETTUCE (RED)

'**Red Cross**' is the leading butterhead/bibb type. It shows impressive vigor, superior resistance to bolting, and bright red leaves.

The crisphead '**Sierra**' is highly regarded for its heat tolerance and resistance to bolting. The plants are healthy, vigorous, and productive.

'**New Red Fire**' is one of the most popular varieties among growers. The vigor and heat tolerance of this leaf

type is outstanding. It will form heavy bunches of ruffled, reddish-bronze leaves. '**Red Velvet**' shows more intense red color and is delicious.

'**Red Salad Bowl**' is a popular oakleaf type. Its deeply lobed, reddish-bronze leaves are mild and bitter-free. It is resistant to heat and bolting, leading to an extended harvest.



MELON (CANTALOUPE)

'**Athena**' is superior. It is a reliable producer of good tasting melons even under cool conditions.

For extra large melons, '**Superstar**' is popular among growers; '**Solstice**' looks promising.



MELON (SPECIALTY)

'**Arava**' and '**Passport**' are the most reliable green-flesh melons for the north. These galia melons have sweet, aromatic flesh.

'**Sun Jewel**' Korean melon is very early, reliable and productive. The yellow-skinned fruits have white flesh that is sweet and refreshing; reminiscent of pears.



PEA

'**Lincoln**' is an outstanding shell pea. The compact yet vigorous vines produce superb crops of long, attractive pods. The peas are delicious and well suited for fresh eating and freezing.

'**Sugar Ann**' is the top rated snap pea. The vines are healthy and vigorous, leading to good early crops and a long harvest season. The pods are attractive, sweet and crunchy.

'**Oregon Sugar Pod 2**' always excels in our snow pea trials. Its robust vines produce superior yields of delicious, tender pods.



PEPPER (BELL & SWEET)

Our tests on pepper began last year and so our data are limited.

Gardeners like the size and shape of '**Bell Boy**' fruits. Most fruits have four lobes and are good for stuffing.

'**Orange Blaze**' is the top rated bell pepper. Its compact, sturdy plants produce good yields of fruits with brilliant orange color.

'**Flamingo**' and '**Gypsy**' produce loads of pale green, elongated fruits.

Among Italian peppers, gardeners like the large fruits of '**Giant Marconi**'. '**Marcato**' produces good yields of glossy red fruits while the earliness of '**Carmen**' is appreciated.



PEPPER (HOT)

Our tests on pepper began last year and so our data are limited.

'**Cheyenne**' looks like a promising cayenne pepper. Its plants are tall and sturdy. Yields are very good, and the fruits are especially large.

'**Mucho Nacho**' vines are loaded with large, deep green, thick-walled jalapenos. Yields are impressive. '**Early Jalapeno**' seems well adapted to North Dakota, too.

The compact plants of '**Mariachi**' are full of colorful fruits in shades of ivory, yellow, orange and red. The fruits are mild in pungency.

Gardeners like the productivity of '**Tiburón**' ancho pepper.



PUMPKIN

Gardeners marvel at the precocious orange color and early maturity of '**Neon**'. The semi-bush vines set 6-pound pumpkins that are bright orange, round and uniform.

'**Gladiator**' is widely grown by commercial growers and it does well in North Dakota gardens. The semi-vine plants grow 15-pound, deep orange pumpkins with strong handles.

'**Howden Biggie**' produces good yields of 24-pound pumpkins.



RADISH

'**Cherry Belle**' is popular and grows well in our state. '**Rover**' is brighter red, more uniform and displays superior vigor. Its flesh is crisp and pure white.



SPINACH

'**Tyee**' is a widely grown savoy (crinkly) leaf type. It is reliable and productive. It tolerates heat and tastes mild. '**Donkey**' has darker green leaves with more flavor.

'**Olympia**' has smooth, easy-to-clean, delicious leaves. It is very productive and the yields are consistent from site to site, year to year. It shows outstanding resistance to heat and bolting.



SWISS CHARD

'**Bright Lights**' will be the most eye-catching vegetable in your garden. The stems come in a vibrant array of pink, red, orange, gold and white colors. The hot pink and white striped stalks of '**Peppermint**' are appealing, too.



SQUASH, SUMMER

'**Spineless Beauty**' rates highest. Yields are early and abundant; the fruits are dark green and smooth. The open, spineless vines are easy to harvest. '**Green Tiger**' has interesting green-striped fruits.

'**Easypick Gold**' shows promise as a gold zucchini; its vines are spineless and have an open habit.

'**Sunburst**' is an outstanding scalloped squash. Its vines are loaded with tender, bright yellow fruits.



SQUASH, WINTER

Many gardeners say buttercup squash has the finest flavor. '**Burgess**' is preferred for its early maturity, high yields and uniformly shaped fruits.

The compact vines of '**Table King**' produce good yields of glossy acorn fruits. It's early maturing. Gardeners are encouraged to try '**Carnival**' acorn squash. Its semi-bush plants produce fruits in attractive shades of green and gold. The flesh is nutty and delicious.

The robust vines of '**Waltham**' produce high yields of fruits with sweet and nutty flesh. The compact vines and earliness of '**Early Butternut**' are noteworthy.

It's hard to grow sweet potatoes in ND, but easy to grow '**Bush Delicata**' squash, which has a similar taste.



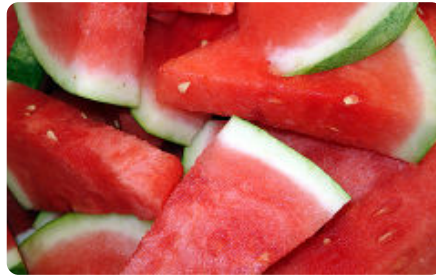
TOMATO

Our tests on tomato began last year and so our data are limited.

Gardeners appreciate the reliable yields of **'Celebrity'** as well as the big, bright red tomatoes produced by **'Mountain Fresh Plus'**. **'Early Girl'** is widely grown in our state and **'Big Beef'** is a popular beefsteak variety.

'Roma VF' is the most popular canning tomato. Its vines are compact and loaded with meaty fruits.

Gardeners are impressed with the high yields of **'Bush Early Girl II'**; it looks promising as a container type. Among ultra-early types, the flavor and early yields of **'Stupice'** are remarkable.



WATERMELON

'Sweet Dakota Rose' is the most reliable high-quality watermelon for our state. Bred here in North Dakota, the 15-pound melons have delicious flesh and good yields.

'Sugar Baby' is the most reliable ice-box variety. Its melons are small (8 pounds) with a hard, dark rind.

'Early Moonbeam' grows vigorously and produces reliable crops of 6-pound, bright yellow-flesh fruits.

How to water plants

Watering houseplants seems like a simple thing, but many of us don't do it properly. For some reason, we think our plants benefit from a drink of water whether or not their soil is already moist. This is wrong! Roots need to breathe (just like we do). When we keep the soil constantly wet, roots can't get the air they need.

Water only when the soil needs it. Stick your finger one inch deep into the soil. If the soil is dry, then it's time to water. If the soil is moist, the plant does not need—or want—more water.

Water thoroughly so all the soil becomes wet. Make sure water comes out of the drainage hole at the bottom of the pot. Use water that is at room temperature to avoid shocking the roots. After 30 minutes, dispose of the water that accumulated in the tray (don't dump it back into the pot since this water is full of salts).

Seed catalogs: Adventure books for gardeners

It's the middle of winter and mailboxes are already being filled with seed catalogs! It seems like they come earlier and earlier every year.

That's fine with me. I love seed catalogs. When I was a kid, my friends read *comic books*. Not me, I read *seed catalogs*. Seed catalogs are full of wonder and possibilities!

Now is the time to order your seed catalogs for 2014. Allow me to recommend the seed catalog of Johnny's Selected Seeds. Not necessarily for their seeds (which are fine by the way), but for the valuable information in the catalog. For each crop they give you accurate insights on planting dates, spacing, and soil requirements. They alert you to major diseases and insect pests, and

give advice on how to control these threats. Harvesting and storage information is included. It's much more than a *seed catalog*; rather it's more like a *grower's guide* for the north.

The following is a sample of free catalogs that can be ordered online.

- ♦ Baker Creek Heirloom Seeds, www.rareseeds.com.
- ♦ Burpee Seed, www.burpee.com.
- ♦ Cook's Garden, www.cooksgarden.com.
- ♦ Fedco Seeds, www.fedcoseeds.com.
- ♦ Gurney's Seed & Nursery, www.gurneys.com.
- ♦ Harris Seeds, www.harrisseed.com.
- ♦ Henry Fields Seed & Nursery, www.henryfields.com.
- ♦ Horticultural Products & Services, www.hpseed.com.
- ♦ Johnny's Selected Seeds, www.johnnyseeds.com.
- ♦ Jordan Seeds, www.jordanseeds.com.
- ♦ Jung Seed, www.jungseed.com.
- ♦ Kitazawa Seed, www.kitazawaseed.com.
- ♦ Mountain Valley Seed, www.mvseeds.com.
- ♦ Osbourne Seed, www.osbourneseed.com.
- ♦ Park Seed, www.parkseed.com.
- ♦ Pinetree Garden Seeds, www.superseeds.com.
- ♦ Seed Savers Exchange, www.seedsavers.org.
- ♦ Seedway, www.seedway.com.
- ♦ Stokes Seeds, www.stokeseeds.com.
- ♦ Territorial Seed, www.territorialseed.com.

Rejuvenate your old apple tree

There are lots of backyard apple trees in North Dakota. Most of these trees are tall, rarely pruned, and never sprayed (*Fig. 2*). The trees provide us with some nice flowers in spring, some shade in summer, and a few nice fruits in the fall. It's nice—but we can do better.

Pruning the tree every winter will get more sunlight in the canopy—this will lead to brighter red apples.

Pruning the tree every winter will increase air movement in the canopy—this will prevent diseases, which thrive on humidity (*Fig. 3*).

Pruning the tree every winter will keep it at a more manageable size. This will make it easier for you to spray the tree (if needed), and harvest the fruit.

Young apple trees are trained into “Christmas tree” shapes to maximize sunlight in the canopy. In the case of an overgrown tree, it's too late for that type of shaping.

In most cases, we will go for an umbrella shape now, with branches arching in all directions from the main trunk, not allowing the major



Fig. 2. This apple tree has been neglected. It is highly susceptible to diseases and will produce inferior quality fruit.

scaffold branches to exceed 12 feet tall (*Fig. 4*).

There are no quick fixes here. Old trees that have been neglected for years will take years to get back into decent shape.

The best time to prune is in March since the tree is dormant and the wounds will not be exposed to the worst of winter. But anytime the tree is dormant (including today) is okay.

This first year, let's focus on reducing the height of the tree. Our ultimate goal is to bring the tree down to 12 feet tall.

We want to establish a network of sturdy branches, preferably at 60-degree angles from the trunk (*Fig. 5*). Using the face of a clock as our guide, the strongest, most productive branches will be at angles of 2 and 10 o'clock.



Fig. 3. Congested canopies and rainy weather led to an outbreak of scab disease in 2013.



Fig. 4. The major branches of trees in old apple orchards develop an umbrella-like shape. These canopies are low and easy to manage. Sunlight and air movement is maximized, leading to fewer diseases and better fruit.

Search for sturdy branches about four inches thick within the old canopy. We want young, strong branches; these branches have glossy bark (old branches are scaly).

When we identify a strong scaffold branch, we will trim above it. The overall effect will be to bring the tree down to size (Fig. 5)

To avoid sunscald damage and shocking the tree, try not to remove more than 25 percent of the tree's wood at any one time. It's best to give yourself at least two years to reshape the tree.

Remove the clutter within the tree. Remove suckers at the base (Fig. 6), branches that cross over one another (Fig. 7), vertical branches in the canopy (called water sprouts), broken branches, and inward facing branches. Remember, we want to open the canopy to maximize sunlight and air movement.

Your old tree has an extensive root system and it will keep pumping a lot of nutrients and water to the branches. Expect many new shoots to appear this year. You need to aggressively trim out the vertical shoots next winter; they will not be fruitful.

After a few years, you will see a big difference in the health of the tree and the quality of the fruit. Nevertheless, you still have an old tree—and the best days of the tree are long gone.

The best long-term solution may be the single-cut "chainsaw" method. Remove the old tree. In the place of the overgrown tree, you could plant two apple trees (or perhaps add a cherry or plum), which will be properly trained.

After five years, you will be harvesting buckets of superior fruit. The best days of your fruit trees will be ahead of them—not behind them. The trees will be an attractive feature in your yard.

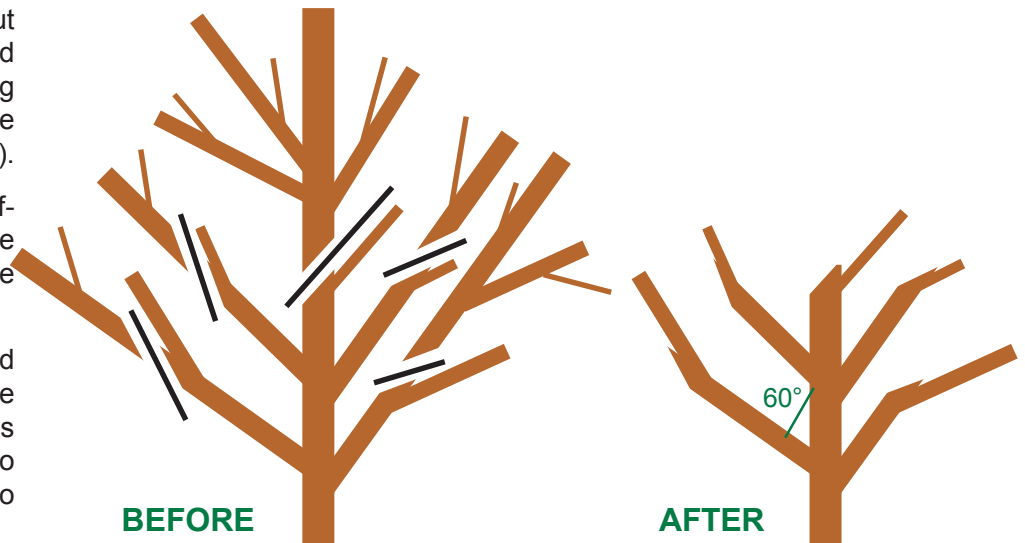


Fig. 5. Bring the tree down to size and open up the canopy. Select sturdy branches with strong (60°) angles to serve as main scaffold branches.



Figs. 6, 7. Remove suckers at the trunk (left photo). Open up the canopy (right photo); remove branches growing inwards and rubbing against other branches (red cuts in right photo). Keep young sturdy branches (blue arrows).



Figs. 8, 9. In the long run, you may be better off by starting all over. These young trees will be easier to manage and produce good crops for decades.

Gardening tips for January



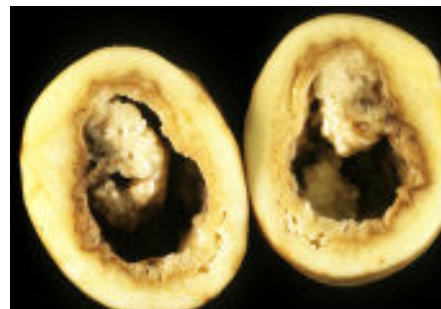
Brush snow off

Heavy loads of snow can damage the branches of shrubs and trees. Brush the snow away using a gentle, upward, sweeping motion.



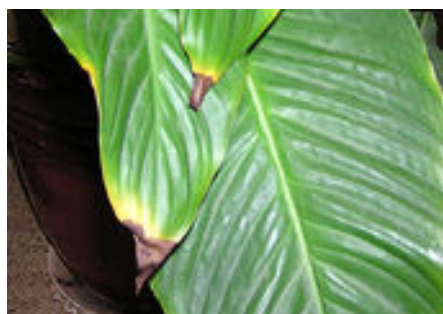
Deicing salts

Deicing salt can burn plants. Apply deicing compounds down the middle of walks and drives, avoiding the edges near grass and shrubs. Sand or kitty litter can provide traction and minimize the need for salt.



Rotten potatoes

Monitor potatoes in storage for mold, greening or sprouting. Tubers store best in a cold (35°F), dark, clean environment with moderate humidity. Avoid storing wounded or diseased tubers. Use disease-free seed.



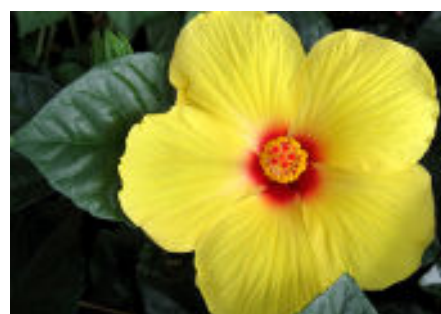
Brown tips on leaves

Accumulation of salts in soil and/or inconsistency in soil moisture can lead to browning along leaf margins. Peace lilies are sensitive. Trim off damaged tissue. Irrigate thoroughly to flush out salts; discard excess water from tray.



Fungus gnats

Little gnats may appear around houseplants in winter. Fungus gnats prefer a humid environment. Let plants dry a bit between watering and these gnats will be less of a nuisance.



Prune and rejuvenate hibiscus

Spindly hibiscus can be pruned to develop a fuller plant. Reduce height by making cuts just above side shoots. In severe cases, plants may be trimmed down to 6 inches. Keep near a sunny window.

Credits

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