



The New York Berry News

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This month, there should be three items on your checklist. First, you should be thinking about your finishing up your fall herbicide applications if you haven't done so yet; please refer to the September issue of the NYBN for details on fall weed management. Second, straw mulch. Strawberries need mulch to survive winter lows and fluctuating temperatures. A 2" to 4" layer of mulch is usually put down around Thanksgiving after several freezes in the high 20's F or low 30's F occur during the same week; this is about 2.5 to 5 tons (125 to 250 forty pound bales) per acre. Clean wheat, oats or rye straw is best but any material that doesn't compact can be used. And lastly, you need start planning new plantings; particularly if you intend to place a large order. This month, Courtney Weber and Dick McGinnis review several new and old varieties of your favorite berries.

Calendar of Upcoming Events:

December 3, 2003: *Cornell University Organic Production and Marketing PWT Meeting* will meet in 400 Riley Robb Hall on the Cornell University campus. Hear about organic research and extension programs at Cornell University over this last year as well as new, planned activities. For more info contact Anu Rangarajan (ar47@cornell.edu) or Abby Seaman (ajs32@cornell.edu). RSVP with Maxine Welcome (mw45@cornell.edu).

December 9, 10, 11, 17, 18, 2003: *Cornell Regional Farm and Small Business Tax Schools* will feature an

explanation of the new 2003 Federal and NYS Tax Legislation affecting individual taxpayers and farmers. Topics will include: capital gains, earned income credit, child tax credit, income averaging, education credits, installment sales, leasing, estate taxes, NYS school tax credit, tax management and reporting recommendations. *The nearest locations, dates and contact phone numbers are:*

December 9 in Delevan (716-699-2377),
December 10 in Auburn (315-255-1183),
December 11 in Owego, (607-687-4020), and
December 18 in Oneonta (607-687-4020).

These are full-day classes (9:00 AM - 4:30 PM). The cost to attend is \$100 and pre-registration is required by December 4.

December 16-18, 2003: *New England Vegetable and Berry Conference*, Holiday Inn, Manchester, New Hampshire. Joint meeting with the New England Fruit Growers. For information please call 603-625-1000 or visit <http://www.nevbc.org/>.

January 21-23, 2004: *Ohio Fruit and Vegetable Conference*, Toledo SeaGate Convention Center and Radisson Hotel in Toledo, Ohio. Please visit <http://www.ohiofruit.org/> for more information.

February 9-12, 2004: *NY State Berry Growers Association Annual Meeting*, Riverside Convention Center in Rochester, N.Y. First combined show of the New York State Vegetable Growers Association (NYSVGA), the New York Horticultural Society (NYHS), the New York State Berry Growers Association and the Empire State Potato Growers. For information, contact Jeff or Lindy Kubecka at 315-687-5734.

February 23-25, 2004: *North American Strawberry Growers Association Annual Meeting*, Hilton Westshore, Tampa Bay, FL. For more information Contact Patricia E. Heuser at 814-238-3364. Email: info@nasga.org.

February 26-28, 2004: *19th Annual NY Farm Show*, Syracuse, NY. Over 400 companies and manufacturers were represented in 2003! For more information contact Scott Grigor, Show Manager at 315-457-8205, e-mail sgrigor@ne-equip.com.

Current News & Events:

DuPont Buys Out Griffin's Interest in Griffin LLC

DuPont announced Nov. 5 that it has acquired Griffin Corporation's interest in Griffin LLC, thereby becoming the sole owner. Financial terms were not disclosed. This purchase will enable DuPont Crop Protection to provide its customers with a broader product portfolio in key segments, including cotton, fruit, vegetable, and professional products. Griffin LLC's product line will complement the existing crop protection business. Griffin LLC has five manufacturing sites in North and South America. Griffin LLC was formed in 1998. "Purchasing Griffin Corporation's equity interest in Griffin LLC will provide opportunities for profitable top line growth," said James C. Borel, president, DuPont Crop Protection. "This action is consistent with our objective to grow our specialty markets business globally, and these additions to our portfolio will help us serve customers better." DuPont is a science company. Founded in 1802, DuPont now operates in more than 70 countries. The company offers a wide range of products and services to markets including agriculture, nutrition, electronics, communications, safety and protection, home and construction, transportation and apparel. (Source: *The Fruit Growers News*)

Strawberry, Raspberry, and Blueberry Cultivar Review 2003

Courtney Weber, Dept. of Horticultural Science, Cornell University, Geneva, NY

The winter months are a good time to review your current small fruit cultivars and to make plans for new plantings. New cultivars are released all the time, and the vast majority of them fail to catch on for various reasons including poor adaptability to diverse growing regions, unforeseen disease or insect susceptibility, or fruit characteristics that are unacceptable to the buying public. The following sections are meant as a guideline for New York and the northeastern U.S. No cultivar will work well in all locations, soil types, and production systems, but many have proven to be useful in many different situations. In addition, many new cultivars show promise and may be suitable for your operation. However, as always, try new cultivars on a limited basis before abandoning cultivars that have proven reliable in your production scheme. This list is by no means complete but should address most situations. For convenience, an asterisk follows the standard cultivars (*). The author can be contacted with questions or to discuss other possibilities at caw34@cornell.edu.

Strawberry Cultivars

Strawberries are probably the most variable and temperamental of the small fruits and also probably have the most cultivars to choose from because they are often adapted to a relatively small growing region. June-bearing types are most commonly grown in NY and the NE U.S., but interest is growing in day-neutral types grown on plastic

Early Season

Earliglow (USDA) is still considered the best tasting berry around. Primary berries are large and attractive and are suitable for retail or wholesale. Berry size drops off quickly after the primary berries and yields are relatively low.

Honeoye (Cornell University-NYSAES) has reigned as the yield king for many years and produces an abundance of large, attractive, firm, berries that are suitable for all markets. Closer to an early mid season, the look of this berry sells it, but taste is the major drawback as it can be tart and can develop disagreeable aftertastes when over ripe or in heavy soils. It is susceptible to red stele disease but is manageable.

Northeaster (USDA) was billed as a replacement for Earliglow and out performs it in all ways except flavor. Yield is higher and fruit size and attractiveness are equal to Earliglow but the flavor is unusual. The grape Kool-Aid like aftertaste can be a turn off to many customers.

Sable (Nova Scotia, Patent Pending) is slightly earlier than Earliglow and is equal or better in flavor. Unfortunately it lacks size and firmness. This cultivar is only suitable for direct retail and u-pick operations. Frost damage can be a problem because the flowers open very early.

Mid Season

Brunswick (Nova Scotia, Patent Pending) has fruit size and yield similar to Honeoye. However, it has a squat, round shape and tends to be dark and bruise easily. The flavor is good but can be tart when under ripe.

Cavendish (Nova Scotia, Plant Patent #11,110) is a high yielding, high quality berry in a good year. However, high temperatures during ripening can cause uneven ripening that can be a real problem.

Darselect (France, Plant Patent #10,402) is a large fruited, high yielding cultivar. The berries are an attractive bright red with a long conical shape. The flavor is very good. However, it tends to be soft. It is worth a look.

Kent* (Nova Scotia) produces medium sized berries with very good yield, especially in new plantings. Hot weather can cause skin toughness to deteriorate. It is very susceptible to leaf spot and scorch and to angular leaf spot. It is very sensitive to Sinbar herbicide. It does not do well in hot weather.

L'Amour (NY1829, Patent Pending) is a new cultivar from Cornell for 2004. It is an early mid-season type with excellent fruit quality. Berries are bright red and firm but not hard, with excellent eating quality and flavor. Fruit is long round-conical with a fancy calyx, which makes them very attractive. Disease and insect resistance is unknown at this stage but no significant problems have been noted to date. I like this one a lot.

Mesabi* (University of Minnesota, Plant Patent #11,116) is a very high yielding berry with large berries and good flavor, but does not store well. It is resistant to red stele and tolerant to leaf diseases and powdery mildew.

Late Season

Allstar* (USDA) is good yielding, high quality cultivar with good flavor. Unfortunately, the color is pale red to orange and is unacceptable to an uninformed consumer.

Cabot (Nova Scotia, Patent Pending) produces impressive berries. Average fruit size is far larger than any cultivar currently available. Primary berries often weigh 40-50 g. The color can be pale and primary berries are often irregular in shape. Secondary berries do not have this problem. Yields are very good. It is resistant to red stele. It is susceptible to virus infection.

Clancy (NYUS304B, Patent Pending) is a new release from Cornell that was developed through a joint venture with the USDA breeding program in Beltsville, MD. It has parents that are resistant to red stele root rot. The fruit is a round conical shaped with darker red color and good flavor. The flesh is firm with good texture and eating quality. Insect and other disease resistance is unknown at this time but no significant problems have been noted to date. Growers looking for a firm late season berry may want to try this one.

Jewel* (Cornell University-NYSAES, Plant Patent # 5897) continues to be the favorite in this season. The high quality berries are large and attractive with good flavor. Yields are moderate. On a good site, it's hard to beat. It is susceptible to red stele and can have vigor problems in poor sites.

Ovation (USDA) is extremely late. It doesn't flower after most others are past their peak. Fruit quality is average but there is little to compare it to in its season. Yields are moderate

Seneca (Cornell University-NYSAES, Plant Patent #8991) is probably the firmest cultivar available for the northeast. The fruit is large, bright red and attractive but the flavor is only acceptable. It does not runner heavily and can be adapted to plasticulture.

Winona (University of Minnesota, Plant Patent #10,191) has very large berries and average yields but can not compete with Jewel for fruit appearance. It has good vigor though and might be useful where Jewel does poorly.

Day Neutral

Everest is a fairly new cultivar out of the U.K. It has large, firm, bright red berries. It does not runner well and is only suited for plasticulture. Over wintering can be a problem with this one.

Seascape (UC-Davis, Plant Patent #7614) is a day neutral out of California that is seeing some success in the east. The fruit is large and very attractive. It is firm and good quality. It does not runner and is only suited for plasticulture. Over wintering can be a problem with this one.

Tribute and Tristar (USDA) have been the standard day neutral cultivars for the northeast for the last 20 years. They are disease resistant, vigorous, and runner enough for matted row production. Both are relatively small fruited and low

yielding but off-season fruit may pay off. Of the two, Tribute has better size and Tristar has better flavor.

New Cultivars: these have not been tested in Geneva but may be of interest.

Evangeline (Patent Pending) this new cultivar from Nova Scotia ripens in the early season. The fruit is long conical in shape with a pronounced neck. The interior is white and it is susceptible to red stele. The fruiting laterals are stiff and upright which keeps the fruit off the ground and clean.

Sapphire is a late mid season cultivar from the U. of Guelph in Ontario. The fruit are bright red and large. It is reported to be tolerant of the herbicide Sinbar (terbacil).

Serenity is a late season cultivar that is also from the U. of Guelph in Ontario. It is tolerant to Sinbar (terbacil). The fruit is large and bright red. The skin tends to be soft. It reported to be moderately resistant to scorch and mildew.

Saint Pierre is a new cultivar out of Quebec. It has large conic shaped fruit that are pale red to orange, much like Allstar. Fruit firmness and flavor are reported to be very good.

Elsanta (Netherlands) is one of the most widely planted cultivars in Europe. It is June-bearing with high yield potential. Fruit is firm and aromatic. It is susceptible to red stele, anthracnose, and verticillium wilt.

Bish (Patent Pending) is a new cultivar out of North Carolina State University. This cultivar is large and firm. It is resistant to anthracnose. It is a June-bearing cultivar developed for use in plasticulture systems.

Avalon (Rutgers University, Plant Patent #11,372) is an early season berry with large fruit size. The fruit is rounder than Earliglow and somewhat dark. Flavor and firmness are very good. Plants are large and vigorous.

Raspberry Cultivars

There are a lot of raspberry cultivars out there dating from the 1940's to 2003. They come in summer bearing floricanes types and fall bearing primocane types. By planting a series of cultivars, it is now possible to have fruit from mid to late June until frost in much of NY and the northeastern U.S. with only a short late summer lag in production. Here are some thoughts on some of the cultivars available.

Early Season

Boyne (Manitoba, sibling to Killarney) plants are spiny and produce many suckers. The fruit ripens early and is small to medium in size and somewhat dark and soft, but it has fair flavor and good freezing quality. It has excellent winter hardiness but is susceptible to anthracnose. It is moderately resistant to late yellow rust and tolerant to Phytophthora root rot and crown gall, but is susceptible to raspberry fire blight. Boyne yields very well and is recommended for colder climates.

Killarney* (Manitoba, sibling of Boyne) has short to medium canes, is spiny, and produces many suckers. It is moderately resistant to Phytophthora root rot. It is susceptible to mildew and anthracnose. The fruit ripens early, but after Prelude and Boyne. The fruit is medium-sized but very bright red and may crumble. Flavor and freezing quality are good, but berries may soften in warm weather. This cultivar is very hardy and is recommended for colder climates.

Prelude* (Cornell University-NYSAES, Plant Patent #11,747) is the earliest summer fruiting cultivar available. The fruit is medium sized, round, and firm with good flavor. It is very resistant to Phytophthora root rot and has good cold hardiness. A moderate fall crop is large enough to warrant double cropping. It is probably the best early season cultivar available for the northeast.

Mid Season

Canby* (Oregon) canes are tall, nearly spineless, and moderately productive. The fruit ripens mid season, is medium to large in size, firm, and bright red with excellent flavor. It has moderate to poor hardiness, and buds may winter kill in cold climates. It is susceptible to Phytophthora root rot.

Claudia (KCE-1, University of Maryland, Patent pending) produces stout, upright canes. The fruit is large and conical with good flavor and ripens mid to late season. A late fall crop is common. It has acceptable cold hardiness for most areas. This is a new release that is relatively untried, but has performed well in Geneva.

Emily (JAM-1, University of Maryland, Plant Patent #12,350) produces large midseason fruit with good yield potential. It is susceptible to Phytophthora root rot and has suspect cold hardiness. This is a new release that is relatively untried and has performed poorly at Geneva.

Esta (GEL-114, University of Maryland, Patent pending) produces fruit mid to late season that are large and conical with a mild, bland flavor. It is susceptible to Phytophthora root rot and lacks cold hardiness. It is resistant to leaf hoppers. It needs trellising for ease of picking. This is a new release that is relatively untried.

Nova (Nova Scotia) is vigorous and upright with long, fruiting laterals. The canes have very few spines. The fruit ripens in mid-season and is medium sized, bright red, firm, and somewhat acidic in taste. It is considered to have better than average shelf life. The plants are very hardy and appear to resist most common cane diseases, including rust. It will set a late fall crop.

Titan* (Cornell University-NYSAES, Plant patent # 5404) produces large canes with very few spines with suckers that emerge mostly from the crown, so it is slow to spread. It is susceptible to crown gall and Phytophthora root rot but is extremely productive. Fruits ripen mid to late season and are extremely large and dull red, with mild flavor. Berries are difficult to pick unless fully ripe. With only fair hardiness, Titan is for moderate climates. It is resistant to the raspberry aphid vector of mosaic virus complex.

Late Season

Encore* (Cornell University-NYSAES, Plant patent # 11,746) is one of the latest summer fruiting raspberry available. It produces large, firm, slightly conical berries with very good, sweet flavor. The fruit quality is considered very good. It is moderately susceptible to Phytophthora root rot and has good cold hardiness.

K81-6 (Nova Scotia) produces canes that are medium tall with spines only at the base. The fruit is very large with good flavor that ripens very late summer with average firmness. It is resistant to late yellow rust but is susceptible to leaf curl virus and raspberry fire blight. Hardiness is judged adequate for most areas.

Black Raspberries

Bristol (Cornell University-NYSAES) is vigorous and high yielding for a black raspberry especially in a newly established planting. The fruit ripens early and is medium to large and firm, with excellent flavor. Bristol is hardy for a black raspberry but should be tested to ensure adequate hardiness. It is susceptible to anthracnose and raspberry mosaic complex but is tolerant to powdery mildew.

Jewel* (Cornell University-NYSAES) is vigorous, erect, and productive for a black raspberry. This cultivar appears to be more disease resistant than others and includes resistance to anthracnose. The fruit is firm, glossy, and flavorful and ripens in mid-season. This is a hardy black raspberry cultivar.

Mac Black is new to the scene and has not been tested much. It is a late season black raspberry with medium large berries. It is reported to have good cold hardiness for a black raspberry. Definitely worth a look to extend your black raspberry harvest by 7-10 days.

Purple Raspberries

Brandywine (Cornell University-NYSAES) produces canes that are very tall with prominent thorns, and suckers grow only from the crown so the plant will not spread. It is susceptible to crown gall but partially resistant to many other diseases. Fruits ripen later than most red cultivars and are large, dull reddish-purple, and can be quite tart. Berries are best used for processing. This is a high yielding cultivar.

Royalty* (Cornell University-NYSAES, Plant patent # 5405) is considered the best purple raspberry available. The canes are tall and vigorous, with thorns, and are extremely productive. Royalty is immune to the large raspberry aphid, which decreases the probability of mosaic virus infection, but is susceptible to crown gall. Fruits ripen late and are large and reddish-purple to dull purple when fully ripe. Berries tend to be soft but sweet and flavorful when eaten fresh. Excellent for processing. Hardiness is acceptable for northern growing areas.

Fall Bearing

Anne (University of Maryland, Plant patent # 10,411) produces large, conic, pale yellow fruit with very good flavor and

texture in mid to late season. It produces tall upright canes but does not sucker adequately for good stands. It is resistant to Phytophthora root rot.

Autumn Bliss (Great Britain, Plant Patent #6597) is an early ripening raspberry with large, highly flavored fruit. It ripens 10 to 14 days before Heritage. Much of the crop is produced within the first two weeks of harvest, which is an advantage in northern climates. It produces short canes with few spines. The fruit is somewhat dark fruit. It is susceptible to raspberry bushy dwarf virus.

Autumn Britten* (Great Britain) is early ripening with large, firm, good flavored fruit. It is taller than Autumn Bliss with better fruit quality but slightly lower yields. It is a day or two later than Autumn Bliss.

Caroline* (University of Maryland, Plant patent # 10,412) is a large, good flavored, conical fruit. It produces tall upright canes. The short fruiting laterals can be challenging to pick, but yields are very good for the fall. It has moderate to good resistance to Phytophthora root rot.

Goldie ('Graton Gold', California Plant Patent #7625) and Kiwigold (New Zealand, Plant patent # 11,313) are nearly identical cultivars. They are amber sports of Heritage, similar in all characteristics except fruit color. Fruit blushes pink when fully ripe. Goldie blushes slightly more than Kiwigold.

Heritage* (Cornell University-NYSAES) is considered the standard for fall bearing cultivars. These tall, rugged canes have prominent thorns and are very high yielding. The primocane crop ripens relatively late. Fruit is medium-sized and has good color and flavor, firmness, and good freezing quality. It is resistant to most diseases. Due to its late ripening, this cultivar is not recommended for regions with cool summers or a short growing season with frost before September 30.

Josephine (JEF-fl, University of Maryland, Plant Patent #12,173) plants are upright and vigorous. Fruit is large with average flavor that ripens mid season. It is resistant to Phytophthora root rot and leafhopper. This is a new release that is relatively untried.

Polana (Poland) is a very early season cultivar that ripens 2 weeks before Heritage. It produces short productive canes with multiple laterals per node. The fruit is medium sized fruit with good flavor. Susceptible to verticillium wilt and Phytophthora root rot. It needs extra nitrogen to perform well.

Ruby (Cornell University-NYSAES, Plant patent # 7067) is moderately vigorous with good productivity. The primocane crop ripens slightly ahead of Heritage. The fruit is large with a mild flavor. Ruby is moderately susceptible to Phytophthora root rot. The cultivar is suggested for fresh market or shipping in areas with longer growing seasons. It is susceptible to mosaic virus complex and resistant to late yellow rust and powdery mildew.

Greenhouse Production

Tulameen* (British Columbia) has been shown to be superior for greenhouse production. It produces very large fruit, and high yields. The fruit is glossy and firm. It is resistant to aphid vector of mosaic virus complex. Plants are not adequately hardy for field production in the Northeast.

Blueberry Cultivars

While blueberries are not widely grown in NY there are regions with suitable soil and they are more widely grown in other regions in the northeast. They exhibit a wide range of hardiness that must be taken into account when selecting cultivars.

Early Season

Bluetta* is very hardy but has small dark berries that are difficult to machine harvest. The large scar on the berry is also a problem. Suitable for Zones 3-4.

Duke* is considered the best early season cultivar available. The fruit size and quality is very good but the flavor can be bland if picked late. It can be machine harvested. Frost tolerance and winter hardiness is good. Suitable for Zones 5-6.

Early Mid Season

Bluejay has high quality fruit that can be machine harvested but may be less productive than other cultivars. Suitable for Zones 5-6.

Northland*, as the name suggests, is very winter hardy. It is a half-high bush with small, dark, soft fruit. It is productive but requires heavy pruning. Suitable for Zones 3-4.

Patriot is winter hardy but frost sensitive. It is a smaller bush but still productive but must be pruned hard for large fruit. It must be fully ripe for best flavor. A recent disease problem resembling virus infection has taken it off the recommend list.

Spartan produces large, good quality fruit with good flavor. It can be machine harvested, but it needs cross pollination for good yields and can be difficult to grow in some sites. Suitable for Zones 5-6.

Mid Season

Bluecrop* is a commonly planted cultivar in New York. It has good flavor and fruit size and firmness. It has high yield potential. It is hardy in most of NY and can be machine harvested. The canes tend to be weepy. Suitable for Zones 5-6.

Blueray* is also one of the more widely planted cultivars in New York. Fruit size is very good with good flavor and high yield potential. Extra pruning is needed with this spreading bush. Suitable for Zones 5-6.

Chippewa* is a very winter hardy cultivar that is productive with large firm fruit. This half-high bush is relatively new and has not been widely tested. Suitable for Zones 3-4.

Sierra is productive and has large firm berries that can be machine harvested. It is less hardy than other cultivars. Suitable for Zones 5-6.

Toro is a productive cultivar with large fruit that ripen uniformly. The clusters tend to be tight which makes picking harder. The canes tend to be too upright and thick. Competes with Bluecrop, which is probably better. Suitable for Zones 5-6.

Late Season

Brigitta is a large flavorful fruit that stores well. It is vigorous but can be less hardy because it grows late into the fall. Excess nitrogen will make this worse. It is susceptible to phomopsis. Suitable for Zones 5-6.

Elliott* is a very late season berry with very good shelf life, 30-45 days in a Modified atmosphere. The fruit is large and firm but can be tart. It is a good producer. Suitable for Zones 5-6.

Jersey is an old (1928) cultivar that is adapted to a wide soil range. It has high yields of machine harvested fruit but the berries are small and soft. Suitable for Zones 3-6.

Nelson* is productive with firm, attractive, good flavored that can be machine harvested. The fruit can hang on the bush for extended periods. It is a vigorous, hardy bush with wide soil adaptation. Suitable for Zones 5-6.

New Cultivars

Aurora is a late season cultivar out of the Michigan State University program. The plants are vigorous and upright with numerous, moderately branched canes. The fruit is moderately large with excellent quality.

Draper is an early mid-season cultivar out of the Michigan State University program. It has high fresh market quality and prolonged storage life. The plants are vigorous and upright. Fruit quality is very good with moderate size.

Liberty is a very late season cultivar out of the Michigan State University program. The plants are vigorous and upright with numerous, moderately branched canes. The fruit is very firm with good flavor. Storage life is very good.

Ribes Cultivar Review

The following are descriptions of common varieties of currants and gooseberries suitable to New York conditions. The descriptions follow closely to those on the McGinnis Berry Crops website (<http://www.berrycrops.net>). For more information contact: Dick McGinnis at mcginnis@island.net.

Black Currants

Ben Alder (U.S. Plant Patent # 9,889) is a high yielding variety with superior juice quality. Growth habit is compact and upright and the fruit is well presented for machine harvesting. Bush height varies according to climate but Ben Alder grows to about 120 cm (4') in coastal British Columbia. Bloom period is late April to early May in coastal BC. Harvest dates are late July to early August. Resistance to mildew is very high but it is very susceptible to white pine blister rust.

Ben Lomond (Scandinavia, 1972) is the first of the "Ben Series" to gain general commercial acceptance. The main features of Ben Lomond are frost tolerance during flowering, even ripening, high yields, large fruit, long hang time and very high Vitamin C content. Originally resistant to mildew, but resistance has broken down in some regions. Requires long chilling time - 2,000 hours at 2 degrees C (36 degrees F). Flowering is in early April in coastal BC and harvest begins about July 9. Ben Lomond forms a compact bush, is rather spreading due to its Scandinavian ancestry and is of medium vigor reaching average height of 135 cm (4 1/2') in coastal BC.

Ben Sarek (Scandinavia, 1984) has compact bush size, very large fruit and ease of hand harvest are the main features of Ben Sarek. Flowers and ripens about 7 days earlier than Ben Lomond with high tolerance for frost and cold injury. Ben Sarek forms a small, compact bush of medium vigor which rarely exceeds one meter (3') in height. It fruits prolifically as indicated in its high "harvest index", i.e., the proportion of the total plant growth that is harvested as fruit in any one season. Fruiting branches are commonly borne down under the weight of the crop.

Titania (US Plant Patent No. 11,439) is immune to white pine blister rust and has good resistance to powdery mildew. Fruit size is large, similar to Ben Lomond, and fruit quality is good. In some locations, yields are extremely high. Flowering and ripening seasons are very similar to Ben Lomond. The plant is very vigorous - reaching heights of 2 meters (6'). Titania reaches full maturity in three seasons as opposed to four or five with most other popular varieties.

Tiben (Canadian Plant Breeders' Rights Pending (release from Poland)) is a very high yielding variety characterized by even ripening, high levels of anthocyanins and vitamin C, upright growth habit and resistance to mildew. Reported to be moderately resistant to white pine blister rust in Poland but shows no infection in coastal B.C. Ripens mid-season with Ben Lomond. Recommended for commercial trials in all northern regions. **Not yet available in the U.S.**

Tisel (Canadian Plant Breeders' Rights Pending (release from Poland)) has exceptionally high yields, even ripening, very high levels of Vitamin C, very pleasant fresh flavor, resistant to mildew and complete resistance to white pine blister rust in coastal B.C. Ripens with Titania one week earlier than Tiben. Recommended for commercial trials in all northern regions. **Not yet available in the U.S.**

Red, White, and Pink Currants

Jonkheer van Tets (Holland, 1941) is a very popular early season variety top rated for flavor. Very productive but best grown as cordon because of untidy growth habit. Early flowering (early April) makes Jonkheer van Tets susceptible to frost damage. Gray mold may be a problem in wet seasons. Harvest season begins in mid to late June.

Red Lake (Minnesota Fruit Breeding Farm, 1920) is one of the most popular varieties grown in North America. Fruit size is very large and of good quality with high juice content. The fruit ripens in mid-season (July) and produces high yields of firm fruit. Two problems limit Red Lake's appeal. First, it is quite susceptible to mildew, and second, it does not have much tolerance to late spring frost.

Rovada (Holland, 1990) has very large fruit on extremely long strigs and crops heavy crops. Very resistant to mildew and other leaf diseases. Late flowering (May) avoids frost. Harvest begins in mid-August.

HRON (Slovakia) is extremely vigorous and very attractive upright growth habit, leaves are dark green which contributes to ornamental value, good resistance to foliar diseases, adapts well to variable climate conditions, particularly well suited to higher elevations, high degree of tolerance to late spring frost, very long clusters of bright red fruit, mean yields in European trials 10-12 kg. per bush.

Blanka (Slovakia) has very heavy yields, good shelf life, very long clusters and some resistance to spring frost (flowers late April). Blanka is very vigorous with a somewhat spreading growth habit. The fruit is large, opaque, off-white. Attractive green and red foliage. Very reliable, easy to grow.

Primus (Slovakia) berries are translucent, white with a yellow cast and good flavor. The growth habit is upright and vigorous. Yields are high but not as spectacular as Blanka. Frost may be a problem as flowering takes place earlier than Blanka and berries, strigs, and plant height are smaller. Very attractive plant. Leaves have an appealing red cast and new shoots are fully red.

Pink Champagne has beautiful translucent pink fruit of good quality and flavor. Vigorous upright growth habit. Resistant to leaf diseases. Easy to grow but not a terrific yielder. Best suited for home gardens.

Gooseberries

Invicta (U.K) produces a vigorous, rather spreading bush. The pale green fruit is a good choice for fresh market outlets. It is suitable for processing, giving a product of high quality, even color and good flavor. Yields are very heavy. Fruit size is large (8 g). Resistance to mildew is very good; susceptible to leaf spot. Requires good drainage. Spines are large and numerous.

Tixia™ (Rafz Switlerland, 1990) has large (similar to Invicta), bright red fruit; elongated and quite smooth. In addition to the attractive fruit, the main feature of Tixia is that the one year shoots have few thorns and the thorns are relatively soft; usually as single thorns with very few, if any, on the upper part of shoots. Growth is medium to strong, upright. Ripens mid-season.

Hinnonmaki Red (Finland) has outstanding flavor. Outer skin is tangy while the flesh is sweet. Very productive with dark red medium sized fruit (3.6 g) on upright plants. Favorite with home gardeners. Very adaptable to various growing systems. Would make good edible hedge or space barrier. Good mildew resistance. Begins fruiting in the planting year - a real nice feature for home gardeners.

Xenia™ (Rafz, Switzerland, 1990) has large (40% larger than Invicta), dark red fruit; oval shape and quite smooth. In addition to the attractive fruit, the main feature of Xenia is that the upper part of shoots have few thorns and the thorns are relatively weak; usually as single thorns. Growth is medium to strong, upright. Ripens early to middle season. ***Not yet available in the U.S.***

Check out the NYSAES Tree Fruit and Berry Pathology web site at:

www.nysaes.cornell.edu/pp/extension/tfabp

Questions or Comments about the New York Berry News?

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Table 1. Summary of the blueberry, strawberry, and raspberry varieties covered in the article. For convenience, the standard cultivars are followed by an asterisk*.

Blueberry				Strawberry			
<i>Early season</i>	<i>Early-mid</i>	<i>Mid season</i>	<i>Late season</i>	<i>Early season</i>	<i>Mid season</i>	<i>Late season</i>	<i>Day neutral</i>
Bluetta*	Bluejay	Bluecrop*	Brigitta	Earliglow*	Brunswick	Allstar*	Everest
Duke*	Northland*	Blueray*	Elliot*	Honeoye*	Cavendish	Cabot	Seascape
	Patriot	Chippewa*	Jersey	Northeaster	Darselect	Clancy	Tribute*
	Spartan	Sierra	Nelson*	Sable	Kent*	Jewel*	Tristar*
		Toro			L'Amour	Ovation	
					Mesabi*	Seneca	
						Winona	

Raspberries							
<i>Early season</i>	<i>Mid season</i>	<i>Late season</i>	<i>Black raspberries</i>	<i>Purple raspberries</i>	<i>Fall bearing raspberries</i>		<i>Greenhouse</i>
Boyne	Canby*	Encore*	Bristol	Brandywine	Anne	Heritage*	Tulameen*
Killarney*	Claudia	K81-6	Jewel*	Royalty*	Autumn Bliss	Josephine	
Prelude*	Emily		Mac Black		Autumn Britten*	Polana	
	Esta				Caroline*	Ruby	
	Nova				Goldie/Kiwigold		