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STRAWBERRY CULTIVARS FOR NEW YORK

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Choice of cultivars is one of the most important and difficult decisions the strawberry grower has to make. To read a typical nursery catalog, all strawberry cultivars are equally "superior" to all the rest. Obviously, it is not that simple. The relative performance of different cultivars can vary enormously. Some cultivars will easily yield twice as much fruit per acre as others, but may or may not prove acceptable for the end use of the buyer. There is a bewildering number of strawberry cultivars commercially available, and new cultivars are being named every year. To make matters even more complicated, each cultivar can vary in its performance from region to region, from year to year, and even from farm to farm. Lastly, the relative value of different cultivars is inherently subjective. People naturally differ in their appraisal of flavors, and growers assign different levels of importance to different characters such as productivity versus firmness versus quality.

Despite these complications, a grower can succeed in identifying the cultivars that will serve him or her best. The grower must combine the information he or she receives from the cooperative extension service and other qualified sources, with a certain amount of on-farm testing. Outdated extension bulletins and typical nursery catalogs are poor sources of information, and will usually recommend out-dated cultivars. Most traditional cultivars were superior in their day, but have been substantially surpassed by new cultivars, relative to fruit size, attractiveness, firmness, and frozen quality. The traditional varieties have also generally been surpassed for productivity, and the newer cultivars are generally as good or better in terms of fresh fruit quality. However, just because a cultivar is new does not mean it is good, and a certain fraction of the new cultivars will fail. New cultivars which are recommended for test should be planted on a limited scale, to determine if they are adapted to your farm conditions and your marketing needs. On this basis, the proper combination of cultivars can be found which best suit your needs.

Table 1 includes scores based on quantitative and subjective evaluations of the most promising cultivars for New York, derived from replicated trials conducted at the Geneva Experiment Station. Additional comments regarding specific cultivars are given below. This is meant to be only a partial listing. There are numerous traditional cultivars not listed which are still suitable, and there are numerous new cultivars which we have not listed because they have not yet been adequately tested. However, listed below are the cultivars of greatest interest currently:

Earliglow is presently the recommended early variety. It is very attractive, with excellent fresh fruit quality, and is moderately firm. In Northern states its yield and fruit size tend to be moderate. Earliglow is resistant to red stele and verticillium wilt root rots.

Lester is a newly released variety from the USDA. It is early, has excellent fresh fruit quality, is very attractive, and has good size. Yields appear to be moderate in New York, but it may be an improvement over Earliglow, as an early cultivar. Lester is resistant to red stele root rot.

Honeoye is a recent release from New York, which has become very popular. It is perhaps the most consistently high-yielding cultivar for the northern states. It is very attractive, with good size, moderate firmness, and has excellent frozen fruit quality. Honeoye tends to be mid-early maturity, but on some sites it is as early as Earliglow. It has very good winter hardiness.

Holiday is grown on a limited scale in New York. It is very attractive, large, extremely firm, tough-skinned and has a very distinctive aromatic flavor. This flavor makes it the best freezing strawberry, and creates distinctive fresh fruit quality. Fresh fruit are often low in sugars, which some people do not like. Yields tend to be average. Maturity is early-mid season.

Raritan is a more traditional variety which continues to perform well. It is very attractive, large, moderately soft, and has average quality. Yields can be high, but are less consistent than for Honeoye. It is early-mid season.

Red Chief is an older variety which is suitable as a red stele resistant, mid-season cultivar. It lacks size

Table 1. Strawberry cultivars, their origin, and their relative scores for various characteristics (5 = best, 1 = worst). Cultivars are listed from earliest to latest.

Cultivar	Origin	Productivity	Size	Appearance	Firmness	Fresh Quality	Frozen Quality	Red Stele Resistance
Earliglow	USDA	2	2	4	3	5	4	+
Lester*	USDA	2	4	5	3	5	3	+
Honeoye	NY	5	4	4	3	3	5	-
Holiday	NY	3	4	3	5	2-5	5	-
Raritan	NJ	4	4	4	3	3	2	-
Red Chief	USDA	3	2	3	2	3	3	+
NY 1324+	NY	3-4	3-4	5	4	3-4	4	-
Guardian	USDA	3	3	2	3	2	3	+
NY 1529+	NY	4	3-4	4	5	3-4	4	-
Scott	USDA	3	4	4	3	2-3	4	+
Allstar	USDA	3	5	4	4	3	2	-
Fletcher	NY	3	3	3	3	4	4	-
Canoga	NY	4	5	2-3	5	2-3	2-3	-

*newly released by the USDA.

+Available from the New York State Fruit Testing Cooperative Association, Hedrick Hall, NYS Agricultural Experiment Station, Geneva, New York 14456

and firmness, but it has reasonable over-all performance. It is verticillium wilt resistant.

NY 1324 is a New York selection which is available for testing. It is very attractive, moderately firm, has good quality, and appears to have good size and good productivity. It is mid-season.

Guardian is an older variety which is suitable as a mid-season, red stele resistant cultivar. It tends to be firmer, larger, and higheryielding than Red Chief, but does not have very attractive or high quality fruit. It is verticillium wilt resistant.

NY 1529 is another New York selection which is available for testing. It is very attractive, tough-skinned, extremely firm, and has good freezing quality. It appears to have good size and productivity. It is mid-late maturity.

Scott is a recent release from the USDA. It is very attractive, large, firm, and has average productivity in New York State. While there have been some complaints about its fresh fruit quality, it has very good frozen quality. It is late maturing. Scott is red stele resistant, and verticillium wilt resistant.

Allstar is another recent release from the USDA. It is attractive, very large, and moderately firm. It has average productivity in New York. It lacks internal color, which results in a poor frozen product. It is late maturing. Allstar is red stele resistant, and verticillium wilt resistant.

Fletcher is a traditional variety which is average in most respects, but has been grown principally for its fresh and frozen fruit quality. It is late maturing.

Canoga is a recent release from New York which is very large fruited, tough-skinned, extremely firm, and moderately attractive but has only average fresh and frozen quality. It can be very high yielding. It tends to runner weakly the first year and produces large branched-crowns.This may make it uniquely suited to ribbon-row culture. It is late maturing.

Tristar and **Tribute** are two new day-neutral releases from Beltsville. These cultivars bear fruit during the normal season, and after a brief rest, begin to produce fruit intermittently through the rest of the summer. Such "ever-bearing" cultivars have not traditionally been important in New York, and the regional adaptation of these new cultivars has yet to be shown. However, these new cultivars are clearly superior to traditional "ever-bearing" varieties in terms of appearance, firmness, and fresh fruit quality. Both are resistant to red stele and verticillum wilt.

Other recently released cultivars which appear promising, but require further testing, include Kent, Micmac, and Cardinal.