Bulletin No. 514

# New Jork State Agricultural Experiment Station GENEVA, N. Y.

### NEW OR NOTEWORTHY FRUITS. VII U. P. HEDRICK



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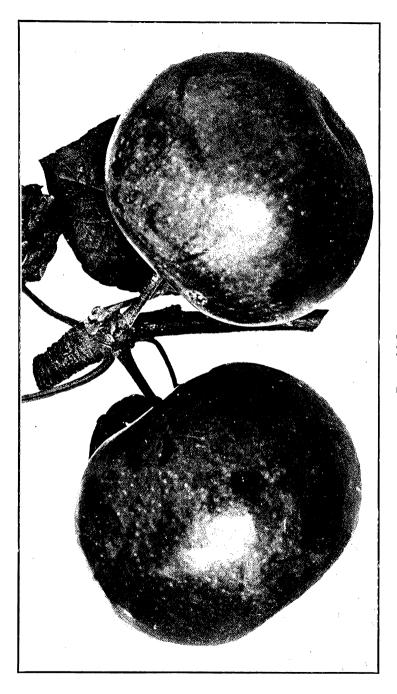
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#### NEW OR NOTEWORTHY FRUITS. VII

#### U. P. HEDRICK

#### INTRODUCTION

Fruit tree buyers are confused when they consult the nurserymen's catalogs. The great number of new varieties offered from every side, named and described to impress the buyer that they possess nearly every quality and virtue of a perfect tree and fruit, perplex even the experienced pomologist. There is no state or national jury of approval, no pomological congress, to pass upon the merits of these new fruits, partly because, by common consent, the experiment stations are expected to try them out and report on their worthiness. This Station attempts this task for New York. Every new fruit, of whatever kind, that will grow in the soil and climate of New York, and serve a useful purpose in the fruit industry, is grown to determine as well as may be its merits. From time to time these novelties are described in the fruit books or bulletins of the Station. This is the seventh of the bulletins published on new or noteworthy fruits with the end in view of discussing and describing the fruits indicated by the title.

#### APPLES

Early McIntosh.—Fruit growers in New York are in need of an early red apple of good quality. Such an apple would sell well in all markets, and would be particularly valuable for the roadside booths where so many early apples are now being sold. Nearly every one now knows McIntosh and likes it to eat out of hand or however served from the kitchen. It is hardly too much to say that it is about the best general purpose apple. Who can name an early apple with fewer faults of fruit than a McIntosh ready to eat in August? That is what Early McIntosh is. Besides pleasing the taste, this early apple pleases the eye. The red is handsome; the heavy waxen bloom is pleasing; the uniform round-oblate shape is the most attractive of apple moulds and permits packing in various packages in which the apples fit well and look well. The size of fruit is about that of McIntosh or a little smaller. Cut thru the skin the pure white flesh rimmed with red is displayed—the most

alluring flesh to be found in any apple. The appearance does not belie flavor. It is similar to and quite the equal of McIntosh in flavor which for most of those who eat apples is unsurpassed.

The trees of this as of all varieties of the McIntosh type have fewer faults than most of their orchard associates. They are vigorous hardy, healthy, productive, and bear annually. Early McIntosh has borne five crops in succession on the Station grounds. The parents of Early McIntosh are Yellow Transparent and McIntosh. The light color of the wood and the large leaf betoken Yellow Transparent; the shape and framework of the tree, especially the heavy-butted branches, are like those of McIntosh. The crop ripens about a week later than that of Yellow Transparent and hangs on the tree as well as that of any early apple—quite as well as that of McIntosh. The date of ripening at Geneva is early August. The seed of Early McIntosh were sown in 1909; the trees were set in the orchard in 1912; the first crop was borne in 1918; and as has been said, there has been a crop every year since.

Tree large, very vigorous, tall, upright-spreading, very productive, healthy; trunk and branches stocky, smooth. Flowers midseason. Fruit ripens in early August; medium in size, uniform, round-oblate, symmetrical; stem medium in length; cavity acute, medium in breadth and depth, smooth, symmetrical; calyx open; lobes narrow, acute; basin narrow, abrupt, gently furrowed, symmetrical; skin tender, smooth, with heavy bloom; color greenish-yellow, almost entirely covered with solid clear, deep red, with indistinct stripes and splashes of carmine; dots numerous, large, conspicuous, gray-russet; flesh white, often with a pinkish tinge under skin, firm, fine, crisp, tender, juicy, subacid, with a brisk pleasantly aromatic flavor; quality very good. Core small, closed, with indistinct, clasping, core-lines; calyx tube medium in length, wide, conical; seeds large, wide, plump, obtuse.

Macoun.—Just as Early McIntosh advances the season for the McIntosh type of apple, Macoun, another seedling of McIntosh grown by the Station, produces a late crop of these red-skinned, white-fleshed, richly flavored, aromatic apples. The fruits of Macoun are so similar to those of McIntosh that were it not for season of fruit the two varieties might easily be confused. The season of Macoun is from one to two months later than that of McIntosh with Cortland midway between. Thus, with Early McIntosh, followed a few weeks later by a Station seedling named Milton, to be introduced next year, apple growers may now plant varieties of this type for a succession from summer to late winter. In shape, the fruits of Macoun are similar to those of McIntosh; the color is a darker red, less striped, and with a heavier bloom;



the flesh is much the same in color, texture, flavor, and aroma, but as grown on the Station grounds the fruits are smaller. This may be a serious or a fatal defect, but as the original tree stands thickly set with other seedlings, it is not too much to hope that the fruits will run larger when the trees are grown under good orchard conditions. The trees bear regularly and heavily; they cannot be compared with those of McIntosh until they stand in a more open plantation.

The seed from which Macoun originated was planted in 1909; the trees were set in the orchard in 1912; the first crop was borne in 1918; and more or less fruit has been borne in every succeeding season. The other parent of Macoun is Jersey Black, a late-keeping, highly colored fruit. The variety was named in honor of W. T. Macoun, Dominion Horticulturist, who is an originator of several choice apples on the grounds of the Central Experimental Farms, Ottawa, Canada.

Tree medium in size, and vigor, tall, upright, slightly spreading, productive; trunk stocky, smooth; branches slender, smooth. Flowers midseason. Fruit midwinter, six weeks later than McIntosh, uniform, round-oblate, slightly conical, ribbed; stem short, slender; cavity acute, deep, narrow, symmetrical, occasionally russeted; calyx nearly closed, small; lobes separate, short, broad, acute; basin narrow, abrupt, slightly furrowed, symmetrical; skin tenderer than in McIntosh, smooth, with heavy bloom; color pale greenish-yellow, entirely covered with solid, dark red deepening to crimson on the exposed cheek, mingled with indistinct splashes of carmine; dots small, conspicuous, gray-russet; flesh white, often with pinkish tinge, firm, fine, crisp, tender, juicy, mild subacid, highly aromatic; quality very good. Core large, closed, with clasping core-lines; calyx tube long, wide, slightly funnel-shaped; seeds medium in size, wide, plump, acute.

Red Gravenstein.—In Bulletin No. 497, New or Noteworthy Fruits VI, from this Station, Red Spy was described with the recommendation that it take the place of the old Northern Spy because of its handsomer fruits. This year a red sport of Gravenstein is offered by the New York State Fruit Testing Association and by several nurserymen as a more attractive apple than Gravenstein which all know. It has been exhibited at several fruit shows in New York and wherever shown the fact that it is more attractive in color than its parent has been at once apparent. It differs from the old Gravenstein only in the solid, dark red colored fruits, the parent fruit being light red and much striped with yellow and green. Banks Gravenstein, another sport of Gravenstein is also striped, and much lighter in color than Red Gravenstein, altho handsomer than the original variety of this type. All of these Gravensteins are most excellent

autumn apples, but on the grounds of this Station the new one is so much superior in appearance that in the future its culture alone of these three will be recommended.

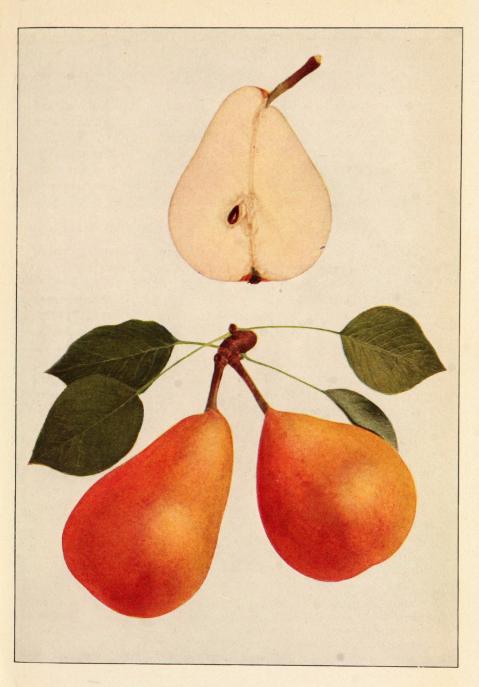
The trees on the Station grounds came from the Washington Nursery Company, Toppenish, Washington, in 1911. They have fruited several times so that we are now certain of the new fruit and that it differs only in color of fruit. According to the Washington Nursery Company, the sport originated with Van Sent V. Whipple San Juan County, Washington, about 1907 or 1908. It is now to be had from several nurseries in the Northwest and from the New York Fruit Testing Association at Geneva and at least one nursery in this State

#### PEAR

Gorham.—Pear growers in New York want a variety to follow Bartlett which lacks some of the conspicuous faults of the several sorts that are now grown for that season. A pear of the Bartlett type would be most acceptable, and the Station has made many crosses with Bartlett as one parent to obtain such a variety. Gorham, now offered by the New York Fruit Testing Association, is a cross between Bartlett and Josephine de Malines which ripens its fruits a month later than Bartlett, and keeps six weeks or two months longer. The fruits resemble those of Bartlett in size, color, and shape. They are even better in the flavor, which is sweet and vinous with a very marked and pleasing aroma. The flesh is white, tender, buttery, and juicy—a combination, which with the rich flavor and spicy aroma, make this one of the very best flavored pears of its season. The chief requisite of a pear tree is that it be resistant to blight. The degree of resistance is not easy to determine without many Therefore, whether Gorham will resist and mature plantations. blight can not be said—but as yet it has not blighted on the Station grounds. The trees are vigorous and productive, and have borne good crops four years in succession.

The cross from which Gorham came, as given above, was made in 1910. The tree was set in the orchard in 1913 and bore its first crop in 1920.

Tree large, vigorous, tall, upright, narrow becoming broader with age, productive; trunk stocky, smooth; branches smooth. Flowers late midseason. Fruit matures from two to four weeks after Bartlett; large, uniform, oblong-obtuse-pyriform, often tapering to an acute neck, symmetrical, uniform; stem medium in length, thick, curved; cavity obtuse, shallow narrow, lipped, russeted



GORHAM (Reduced size)



SENECA (Reduced size)

with outspreading rays of russet, sometimes flesh folds up around base of stem in a thick lip; calyx open, medium in size; lobes separate, long, narrow, accuminate; basin shallow, narrow, obtuse, slightly furrowed; skin thin, tender, smooth, dull; color clear pale yellow, with few traces of russet; dots numerous, small, greenish-russet, obscure; flesh white, fine, slightly granular at the center, tender, melting, buttery, juicy, sweet, with a refreshing vinous flavor; quality good to very good. Core small, closed, with clasping core-lines; calyx tube long, narrow, funnel-shaped; seeds large, long, narrow, plump, accuminate.

#### CHERRIES

Seneca.—The cultivated cherry seems to be well along in its evolution—at least it is more difficult than with most fruits to get new varieties of cherries superior to those we have. Also, the improvement of the cherry from crosses lags because one cross gives but one seed, cross-pollination often fails, and oftener than with most other fruits the seeds of crosses are sterile. For these reasons altho much work has been done at this Station in the attempt to improve the cherry, until this year no new cherry from Station crosses has been offered. The Seneca is a new sort of promise, and it is so remarkable in one character at least, earliness, that it is bound to be a great acquisition to cherry growing. Its fruits ripen on the Station grounds in the first weeks of June, more than two weeks earlier than Black Tartarian, the standard early cherry in New York. The cherries resemble those of Black Tartarian—large, round-cordate, purpleblack, with soft, juicy, melting flesh, and a rich, sweet flavor. The pit is free and the skin does not crack. The tree is very vigorous. productive, and has an upright-spreading habit of growth.

Seneca is a cross between Early Purple Guigne and an unknown early sweet cherry. The cross was made in 1910; seed were sown in 1911; and the young tree was set in the orchard in 1915. While a few cherries were produced in 1920, the first full crop was borne in 1922, to be followed by another in 1923. Seneca should be a splendid cherry to start roadside markets. It is being distributed by the New York Fruit Testing Association at Geneva.

Tree large, vigorous, upright, tall, hardy, productive; trunk stocky, rough; branches medium in size and smoothness. Leaves large, elongated-oval, taperpointed, dark green; petiole long; glands 1 to 4, large, reniform, arranged alternately on the petiole at the base of the leaf. Flowers early. Fruit very early, large, round-cordate, compressed along sutures, smooth; cavity deep, abrupt; suture indistinct; apex roundish, with slightly depressed point; stem long, slender, glabrous; skin thin, tender, adherent to the pulp; color dark red to purplish black, indistinctly mottled; flesh dark red to purplish red with dark red juice, tender, melting, sweet, with a spicy flavor; quality very good. Stone free, of medium size, round-ovate, plump, oblique, with smooth surfaces.

Abundance.—At the other end of the season from Seneca is offered Abundance, from Luther Burbank, on the Station grounds a splendid late cherry of the Napoleon type. On these grounds the cherries are a little smaller than those of the well-known Napoleon, about the same in quality or possibly not quite so good, but ripen from one to two weeks later and the cherries seldom crack as those of Napoleon too often do. To be more specific as to characters, the fruits are large, round-cordate, yellow-amber, mottled with red; the flesh is whitish, juicy, crisp, firm, sweet, rich, and aromatic; the quality puts Abundance in the class with the best; the stone clings to the flesh. The tree characters are all good, mostly resembling those of Napoleon. This is the latest cherry of the Bigarreau type on the Station grounds. Further good qualities are that the cherries are not susceptible to rot, and, for some reason, the thieving robin is not fond of it.

Abundance was introduced by Luther Burbank, Santa Rosa, California, in 1912 as a seedling of Napoleon. At this Station it is one of the best of Burbank's new fruits. Several nurserymen offer it for sale.

Tree large, vigorous, upright-spreading, productive; trunk and branches stocky, smooth. Flowers midseason. Fruit very late, medium to large, round-cordate, compressed along the sutures; cavity medium in depth and width, obtuse; suture a line; apex roundish with a slightly depressed point; stem medium in length and thickness, plabrous, free; skin thick, slightly adherent to the pulp; color yellow-amber mottled or nearly covered with red; flesh yellow-amber, with colorless juice, firm, sweet with a spicy aroma; quality good to very good. Stone clinigng, of medium size, ovate, plump, blunt, with smooth surfaces.

#### **PLUM**

Hall.—One hesitates to recommend a new plum, for in New York, at least, the culture of this splendid fruit is on the wane. This is partly the fault of the growers of plums, since for years they have supplied the markets with varieties, such as Lombard and Bradshaw, which no one would choose to eat as dessert after a first attempt and which are none too good in cooked products. Probably, however, the competition with western-grown plums, which are larger and handsomer, is the chief cause of the dull market for New York plums. It may be that a large, handsome plum of prime quality might be profitably grown in this State. Certainly such a plum would sell on roadside markets. To stimulate anew the growing of plums in this region, if possible, the Station offers Hall, one of the best and handsomest plums in a collection of over 300 varieties grown on these grounds.



HALL (Reduced size)

The new variety is a cross between Golden Drop and Grand Duke, two of the largest and handsomest European plums, but both below the mark in quality, while Hall is choicely good in flesh and flavor characters. It does not resemble either parent in shape or color but in these characters is similar to Pond, and the fruits are nearly as large in size. The tree is hardy, healthy, vigorous, and productive—much above the average of its orchard associates. The fruits are so handsome and well-flavored that they are certain to sell in either roadside or city markets. The seed from which Hall came was planted in 1908; the tree was set in the orchard in 1911; and the first fruits were borne in 1915.

Tree medium in size, upright-spreading; leaves small, flat, of medium thickness. Fruit large, elongated-oval, slightly obovate; cavity small, narrow, abrupt; suture distinct; color reddish-purple, with many nettings toward the base; flesh greenish with trace of yellow, firm but tender, juicy when fully ripe, sweet, mild; quality very good; stone semi-clinging, long, narrow, flat, with pitted surfaces.

#### GRAPE

Keuka.—All of the men who have undertaken to improve our native grapes, and there have been many, have chosen as their chief task hybridization with the European grape to obtain a combination of the fruit characters of the European grape with the vine characters of American grapes. Of the 20 odd thousand hybrid grapes grown on the grounds of this Station in the last 25 years, possibly three-fourths of the total number have been made with this end in mind. In the last bulletin on new or noteworthy fruits¹, Urbana was offered as being nearer a European fruit on an American vine than any other named seedling from the Station. The usefulness of Urbana is cut by reason of late maturity in a region as far north as Geneva. This year, Keuka is being put out as a European grape on a native vine which ripens in a shorter season than is required by Urbana.

Keuka is a cross between Chasselas Rose, a European grape of good quality, and Mills, a hybrid between an American and a European. Thus, the variety is more nearly a European than a native grape, and this the fruit shows in every character. Bunch and berry are but medium in size, but the bunch is compact and as trim as a well-formed cluster of Delaware. The berries are round-oval, dark red with heavy bloom which gives them a lilac color. The flesh is delightfully crisp and juicy with a sweet, vinous, Vinifera flavor, and

<sup>&</sup>lt;sup>1</sup>Hedrick, U. P. New or Noteworthy Fruits. VI. New York Agr. Exp. Sta. Bul. No. 497, 14. 1923.

scarcely separates from the tender skin so that the berries may be eaten skin and all as are those of all Vinifera grapes. The vines are vigorous, healthy, productive, and hardy and ripen their crop at least two weeks earlier than do those of Catawba. Seed from which Keuka came were sown in 1914; the plants went to the vineyard in 1915; and the vines have borne since 1919.

Vine is vigorous, and productive; shoots glabrous and tinged red; tendrils intermittent (a European characteristic). Leaves medium in size, dark green above, hairy and slightly cobwebby beneath, and five lobed. Flowers with upright stamens, self-fertile. Fruit ripening later part of September, or about two weeks later than Delaware and two weeks earlier than Catawba; clusters medium in size and compact, varying from nearly cylindrical to tapering; berries medium in size, roundish-oval to oval, adherent to pedicel; skin medium in thickness and toughness, slightly astringent, dark red with lilac bloom; flesh tender, juicy, sweet, vinous; quality very good to best.

#### RED RASPBERRY

Newman.—For several years, Newman has been one of the most remarkable red raspberries on the Station grounds, because of its large, handsome berries borne in great profusion. If one may judge from the dozen plants in the berry plantation at Geneva, it is the most productive of the hundred or more red raspberries that have been tested on the Station grounds. The quality is not of the highest, but is good and few would notice that it falls below the best. berties are firm and without doubt would ship well. The plants are vigorous, hardy, healthy, and, as has been said, very productive. But the character that should commend Newman most highly to New York berry growers is that Newman is almost free from the mosaic disease that has played havoc with nearly all other varieties of this fruit. The variety originated with C. P. Newman, Ville Lasalle, Quebec, Canada, about 1918, and has been growing on the Station grounds since. Mr. Newman has given the New York Fruit Testing Association permission to distribute his new berry, and some plants will be available in the fall of 1924.

Plants above medium in height, upright, vigorous, hardy; productive; suckers numerous; canes glossy, glabrous; prickles very short, slender, weak, straight, blunt, very few, distributed chiefly at the base of the canes. Flowers bloom early in June. Fruit midseason, with or a little later than Cuthbert, berries large, uniform, roundish, slightly conic, the surface covered with heavy bloom and slight pubescence; styles adherent; drupelets numerous, medium in size, coherent; color medium red, glossy; pulp juicy, firm but tender, with a mild flavor; quality good.