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A Catalog of Fruits

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ORIGINATED AT THE

New York Agricultural
Experiment Station

For Sale by the
New York Fruit
Testing Association

Geneva, New York

1931-32

DIRECTORS

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INTRODUCTION

The plants of all hardy fruits are deficient in one character or another. There is no variety the fruit of which cannot be improved in size, color, capacity to keep, or in that combination of texture, flavor, and aroma, which constitute quality.

In particular, there is need of varieties of better quality. Orchards should contribute appetizers, health regulators, relishes, and desserts to increase the pleasure and healthfulness of the diet of millions. The better the quality, the better these purposes will be served and the greater the demand for fruits.

Again, the fruit industries of the country suffer terribly from unpreventable diseases. Unless some pear more resistant to blight, or some raspberry comparatively immune to mosaic, can be bred the profitable culture of these fruits is impossible. Similar problems of immunity present themselves with all other hardy fruits.

Once more, if fruits could be evolved to serve new purposes, the betterment of fruit growing would be great. As examples: Commercial canners want only yellow-fleshed, clingstone peaches which we do not but could grow in the East were good varieties available. So, also, canners want a firm, red-fleshed strawberry, characters not sufficiently well developed in any of the sorts of this fruit.

The New York Agricultural Experiment Station has undertaken the tasks in breeding that have been suggested, with others scarcely less important. The fruits which originate at the Station are sold by the NEW YORK FRUIT TESTING CO-OPERATIVE ASSOCIATION, INCORPORATED, GENEVA, NEW YORK.

Any fruit-grower in any part of the world may become a member of this organization by paying a membership fee of one dollar and signing the by-laws. Application for membership should be made to the Association. All members whose dues are paid will be given a free premium on request.

Varieties with * were not originated at this Station.

APPLES

Types of apples come and go. Russets, once much sought for in several varieties, are not now wanted. Green apples of all kinds are steadily losing in public favor. Baldwin and its similar sorts are falling below the mark of popularity. At present, McIntosh and Delicious types of apples are finding greatest favor in apple markets. Yet all of the varieties of these two types have their faults or do not fully cover apple seasons and purposes. This Association is offering several new varieties of each with the hope that they will prove valuable additions to McIntosh and Delicious.

CARLTON (ASTRACHAN NO. 2391)

Carlton was produced by crossing Montgomery, an attractive red apple, with Red Astrachan. The fruit ripens one month later than Red Astrachan and is large, round-conic, and attractive dark red to scarlet. The flesh is white, tender, juicy, subacid, and of Astrachan flavor. The tree is vigorous and bears annually.

CORTLAND

Cortland is a type of McIntosh that is gaining in popularity each year. The fruits of the two varieties are very similar but those of Cortland are more oblate and flatter across the base than those of McIntosh; they average larger and are more uniform in size; they have more color and the red is lighter and brighter and the stripings and splashes are laid on differently; the taste can hardly be distinguished from that of McIntosh; the flesh is firmer but just as juicy; the season is several weeks later; the apples do not drop so readily and ship better. The trees of the two varieties are much the same, differing chiefly in more slender and willowy branches in Cortland. From this comparison it will be seen that Cortland is an improved McIntosh especially desirable for late keeping, and as a good shipper.

EARLY McINTOSH

Fruit growers 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 roadside booths. Nearly everyone knows McIntosh and likes it 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 in New York. 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 apple pleases the eye. The red is handsome; the uniform round-oblate shape is most attractive and permits packing in various packages in which the apples fit well and look well. The appearance of the fruit is similar to that of McIntosh and the flavor is good although less aromatic. The trees are vigorous, hardy, healthy, productive, and bear annually. 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 a week or ten days 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.

LODI

Lodi originated at the New York Agricultural Experiment Station as a cross between Montgomery and Yellow Transparent and was introduced by this Association in 1924. The tree is of the type of Yellow Transparent, but draws upon Montgomery for increased vigor and size. The fruit is of the type of Yellow Transparent but larger, ripens a little later, thus prolonging the season of that variety; and while sprightly for use in the kitchen, as it commences to ripen the flavor becomes milder and pleasantly aromatic. The variety is an improvement over Yellow Transparent in that the tree is better, and the fruit is larger and keeps longer.

MACOUN

Just as Early McIntosh advances the season for the McIntosh type of apple, Macoun produces a late crop of these red-skinned, white-fleshed, richly flavored, aromatic apples. The season of Macoun is from one to two months later than that of McIntosh with Cortland midway between. 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. The trees bear regularly and heavily. This promises to be an apple of great merit coming in, as it does, long after all other McIntosh-like apples are out of season.

MILTON

Milton is a sister of Early McIntosh which ripens its crop a month later. Its main value is that it is a McIntosh type which ripens with Wealthy and a month before McIntosh. The tree is vigorous but not as large as that of Early McIntosh. The fruits are covered with a very attractive pinkish red and heavy bloom. The flesh is white, tender, crisp, juicy, and of McIntosh flavor and aroma.

MEDINA

Medina originated at the New York Agricultural Experiment Station as a cross between Deacon Jones and Delicious and was introduced in 1923 by this Association. The variety promises well as an apple of the Delicious type to prolong the season of that variety. In appearance the apples resemble those of Delicious closely but are much larger, and are more attractive on account of the golden yellow ground color which the fruits of Delicious rarely develop. The shape of the basin is like that of Delicious with the same deep corrugations and the five distinct crowns.

NEWFANE

Newfane is the last of the Deacon Jones by Delicious crosses to be introduced. It was selected for trial on account of its large-sized fruit and very attractive dark solid red color. The shape is oblong conic and the flesh tender, medium juicy, mildly flavored with a pronounced Delicious aroma. This apple is a good dessert apple and ripens about Christmas time.

OGDEN (STATION NO. 3609)

This is a sweet apple which was produced by crossing Zuzoff, a sprightly, dark red apple, with McIntosh. The fruit ripens a little before McIntosh and is large, roundish oblate, handsomely colored with dark solid red and heavy bloom like McIntosh. The white flesh is often stained with red and altho coarse in texture, is tender and juicy with an aromatic sweetness which makes the sort especially desirable for baking. The tree is hardy and productive. There have been so many requests for trees of this seedling that its limited propagation seems warranted.

ORLEANS

Orleans is a sister plant to Medina and was introduced a year later. The variety is of the Delicious type but the fruits are more attractive in appearance and run larger. While Orleans comes in season about with Delicious, it keeps in common storage six weeks longer. The fruit has the same rich delicious taste that char-

acterizes Delicious, but the flavor is more sprightly. Orleans is very similar in tree and product to Medina but besides keeping longer may thrive in some soils to which Medina is not adapted.

RED GRAVENSTEIN*

This red sport of Gravenstein is offered by the New York State Fruit Testing Association as a more attractive apple than Gravenstein. 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 the new one is so much superior in appearance that in the future its culture alone of these three should be recommended.

RED SAUCE

Red Sauce is a cross between Deacon Jones and Wealthy. The fruit is large, roundish conic, nearly covered with solid red. The flesh is coarse, tender, crisp, juicy, briskly subacid, aromatic, and red to the core-lines making a red sauce when cooked. The apples are too tart for dessert but are excellent for culinary purposes. The crop ripens in October and November.

RED SPY*

Red Spy is a typical Spy except in color. The color is a solid bright red without either stripes or splashes. The new variety has the serious fault of the parent, that of coming in bearing late, but there are many good characters to offset this fault. Thus, there are delectable quality and great beauty in the fruits, and in the tree hardiness, healthfulness, productiveness, and reliability in bearing. Nor should it be forgotten that the trees are long-lived, nearly perfect orchard plants, and that they bloom very late thereby often escaping late spring frosts which ruin the crops of other varieties. Northern Spy is still one of the best apples for New York, and Red Spy, with its beautiful fruits, should give new life to this old sort.

SWEET DELICIOUS

Sweet Delicious originated at the New York Agricultural Experiment Station as a cross between Deacon Jones and Delicious and was introduced in 1923 by this Association. The fruits are flatter than Delicious, but the lipping of the stem and the dull grayish scarf-skin over the surface are characters inherited from Deacon

Jones. The apples are large and attractive in size, color, and shape, with the sweet aromatic flavor of Delicious. The variety is an apple for home use where it will be chiefly appreciated for dessert and baking. Its season is a little later than that of Sweet McIntosh to be described next.

SWEET McINTOSH

Sweet McIntosh originated at the New York Agricultural Experiment Station in 1910 as a cross between Lawver and McIntosh and was introduced by this Association in 1923. Externally the fruit resembles Lawver rather more than McIntosh, but the sweet flavor plainly suggests McIntosh. The variety is, of course, primarily adapted for home use—for baking and to eat out of hand. It should become a splendid home and roadside market sort.

CRAB APPLES

DOLGO*

This handsome red crab apple was imported from Russia in 1897 by Professor N. E. Hansen, of the South Dakota Experiment Station. The fruit is full of juice, jells easily, and makes a rich ruby-red jelly of beautiful color and excellent flavor. The tree is hardy, vigorous, and productive and ripens its fruit early in September.

YOUNG AMERICA*

This crab apple, of unknown parentage, produces abundantly more attractive red fruits of excellent size and quality. While Dolgo is oblong-conic in shape this variety is roundish conic and attains a larger size than does Dolgo or Hyslop. Jelly made from the fruit is clear, attractive red and splendidly flavored. The tree is especially vigorous and hardy. The season is about the middle of September.

CHERRIES

In the breeding of new cherries, the New York Agricultural Experiment Station has so far accomplished but little in a field where much might be done. But one cherry bred at the Station can be offered, but this one—Seneca—is especially meritorious as a reading of its description will show. Fortunately, however, several other noteworthy new cherries, all of which have been thoroughly tested on the Station grounds, can be offered by the Association to cherry growers.

ABUNDANCE*

Abundance is a splendid late cherry of the Napoleon type. The cherries are a little smaller than those of the well-known Napoleon, about the same in quality, but ripens 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 stone clings to the flesh. The tree characters are all good. This is the latest cherry of the Bigarreau type. Further good qualities are that the cherries are not susceptible to rot, and, for some reason, the thieving robin is not fond of it.

CHASE*

Chase is a late black sour cherry of the Morello type. At Geneva the tree is larger, healthier and more spreading than that of the English Morello. The fruit is larger and has a shorter stem and is milder in flavor. Chase ripens a few days earlier than English Morello.

GIANT*

Giant originated with Luther Burbank in 1900 and was introduced in 1914. The variety shows many characters that commend it. The tree is large, vigorous, and very productive. The cherries are attractive in size and color and about the latest of all cherries to ripen, coming in season just before Lambert which it resembles in size and color. The quality is splendid and the cherries do not crack as do those of so many other sorts and, therefore, should keep and ship well. Giant seems to be a splendid new sort.

LYONS*

Though grown for more than a century in Europe, Lyons seems never to have been tried extensively in America, possibly because it was not considered particularly valuable in the Old World. Of the many sweet cherries tested on the grounds at this Station during the past twenty years Lyons is one of the best sweet cherries. It should be planted for an extra early market cherry, and is one of the few early sweet cherries that gives promise of standing handling for distant markets. The tree characters are about all that could be desired in a sweet cherry.

ROYAL DUKE*

This variety has been grown in Europe for more than 100 years and has been valued as a Duke cherry

to follow May Duke. It has been cultivated rather sparingly in America for half a century, but the variety deserves a place in cherry culture. The trees are hardy, healthy and productive, and the fruit is one of the best of the Dukes. The cherries are large, handsome, bright red, well scattered along the branches, pleasantly flavored, refreshing, and very good in quality. For these reasons the variety should be more widely planted. The mildly acid flavor of all the Duke cherries make these hybrids relished for culinary purposes or for eating out of hand. Royal Duke, particularly, has a place in home orchards for roadside and local markets.

SENECA

Seneca is a new cherry 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 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, purple-black, with 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 originated on the grounds of the New York Agricultural Experiment Station and was introduced in 1924.

VICTOR*

Victor is an open-pollinated seedling of Windsor which originated in 1916 at the Horticultural Experiment Station at Vineland, Ontario. The fruit resembles Napoleon in appearance and ripens midway between the season of that sort and Governor Wood. The cherries are large, firm fleshed and light colored like Napoleon and of excellent quality. The tree is large, vigorous, and productive.

PRUNUS TOMENTOSA*

Prunus tomentosa is a beautiful dwarf cherry from northern China, the leaves of which are covered on the under side with tomentum, hence the name. The fruits are small, round, bright red, and similar to those of Montmorency in flavor. The plant is beautiful in leaf, flower, and fruit.

NECTARINES

Nectarines are little grown in New York chiefly because the curculio usually plays havoc with the crop. The curculio, however, is easily controlled

by spraying. The nectarine is a smooth-skinned peach and the skin is in no way objectionable as is the fuzzy epidermis of the peach; the flesh is usually sweeter and richer. Certainly nectarines would add variety to the list of fruits for New York if there were suitable varieties. It seems desirable, almost imperative, that the New York Agricultural Experiment Station try to breed better nectarines.

HUNTER NO. 1

Hunter is the first sort to be offered. The tree is large, vigorous, hardy, healthy, and productive. The fruits are large, handsomely colored, and very good in quality. Hunter is being sent out as the best midseason nectarine for New York.

JOHN RIVERS*

An English nectarine which is the earliest variety tested at the New York Agricultural Experiment Station. Its fruit is medium in size, nearly covered with red, attractive and good in quality. The flesh is white, juicy, and adherent to the stone. John Rivers is well worthy of trial and extends the nectarine season.

RIVERS ORANGE*

This yellow-fleshed nectarine ripens a few days ahead of Hunter No. 1. The fruit is a freestone nearly covered with a dark red blush. It does not equal the Hunter No. 1 in size, but has a rich, sweet flavor.

SURE CROP*

This nectarine was imported from New Zealand by the United States Department of Agriculture. The fruit is large, bright red, and of very pleasing flavor. The tree is hardy and productive. The flesh of the fruit is white, juicy, fine-grained, tender, sweet, aromatic, and very good in quality. The stone is free and the fruit ripens early in midseason. This has been the best white-fleshed nectarine tested on the Station grounds.

PEACHES

MIKADO*

All growers of commercial peaches want an early yellow-fleshed peach. On the grounds of the New York Agricultural Experiment Station, Mikado fills this

place better than any other variety. The fruits are large, handsome, and blushed on the sunny side. They begin to ripen in early August and all mature at the same time, the fruits running very uniform. The quality is good for a peach of its type, nearly all agreeing that the flavor is better than that of Elberta. The trees are vigorous, hardy, and productive. If it turns out that Mikado has to any great degree the character of adaptability to a great diversity of soils and climates as has Elberta, this new variety will be a great addition to peach growing in New York. This sort was introduced as June Elberta, but the correct name is Mikado.

The following peaches are new introductions of the New Jersey Experiment Station:

ECLIPSE*

This variety was introduced as a self-pollinated seedling of Belle. The trees are productive. In size and shape the fruit resembles the mother variety. The color is an attractive yellow with a deep blush; flesh is fine-grained and firm; quality good, a freestone. Ripens after Rochester.

GOLDFINCH*

The fruit of Goldfinch is roundish oval and yellow fleshed and has a free stone and good quality. It ripens about a week ahead of Carman.

GOLDEN JUBILEE

Of the many new peaches originated by the New Jersey Station, none has aroused the interest of the New Jersey grower as has the Golden Jubilee. It is described as ripening a few days before the Carman and resembling the Elberta in tree habits and fruit.

MARIGOLD*

This is a cross of Lola by Arp. In New York it ripens four days after Mikado, and is productive. In shape, color, and flavor it resembles Arp but while Arp is very stringy in texture and a strong cling, Marigold is a semi-cling with tender flesh. In quality as well as in appearance, it is superior to Mikado.

ORIOLE*

This variety is in season two or three days after the Sunbeam. It seems to be a reliable cropper. The fruit is about the size of Elberta but more globular in shape. It is a yellow-fleshed freestone, and very high in quality.

PIONEER*

Pioneer is another of the New Jersey peaches and one produced by the crossing of Belle with Greensboro. The fruit is above medium in size, white fleshed, nearly freestone, and ripens with Goldfinch. Its quality is good.

SUNBEAM*

This peach ripens a week after Marigold. The trees are productive. The fruit, roundish in shape, is of good size; a deep yellow in color nearly covered with red, and of good quality, although a semi-cling.

The three varieties of peaches described below originated at the Horticultural Experiment Station at Vineland, Ontario, Canada:

VALIANT*

Valiant ripens a few days after Vedette. Although Elberta in type it is more roundish in shape and better in quality.

VEDETTE*

This new peach resembles the Elberta rather closely but ripens much earlier. It is in season with St. John.

VETERAN*

Veteran ripens about ten days ahead of Elberta. Although Elberta in type, it seems to be superior in quality and appearance.

These new peaches give a valuable succession of varieties for the summer months.

PEARS

The chief end sought in breeding pears at the New York Agricultural Experiment Station is to obtain varieties less susceptible to blight than any of the standard commercial sorts now grown. Seckel, being fairly free from blight, and with splendid tree and fruit characters is the parent that has been most commonly used. Several Seckel seedlings are now being propagated as in some measure meeting the requirements set for a variety of sufficient merit to be introduced. It will be a surprise to fruit growers to know the number of seedlings discarded from the plantings which have given eight kinds worth a second trial—more than 2,000 seedlings have been rejected, or about 250 discards to 1 saved.

CAYUGA

Of the promising seedlings of Seckel, one has been named Cayuga and is being distributed. The tree characters of this new sort on the Station grounds seem to be about all that could be desired. The young trees are vigorous and healthy. The pears average as large as those of Bartlett but in shape are similar to Seckel and in color to Clairgeau. The flesh is firm and fine in texture quite to the center, with the rich, delectable flavor of Seckel. It is not too much to say that the quality is better than in any other standard sort, excepting Seckel.

EWART*

This pear was received more than 15 years ago by the New York Agricultural Experiment Station from Mortimer Ewart of East Akron, Ohio. The fruit has attracted considerable attention owing to its large size and good quality. As several growers have wished to secure trees, the Association has propagated a limited amount of stock, thanks to Mr. Ewart's courtesy. The fruit is greenish yellow, netted with russet, and has a fine, melting, tender, juicy flesh. The season is about one month later than Bartlett.

GORHAM

Pear growers want a variety to follow Bartlett which lacks some of the conspicuous faults of the several sorts that are now grown for that season. Gorham now offered by the New York Fruit Testing Association ripens its fruits two weeks later than Bartlett, and these keep a month longer. The fruits resemble those of Bartlett in size, color, and shape. The flavor 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. Whether Gorham will resist blight cannot be said—but as yet it has not blighted on the Station grounds. The trees are vigorous and productive.

OVID

Ovid was produced by crossing the Bartlett with Dorset, and ripens at Geneva in December. Its fruit is large and much like Dorset in shape. In color it resembles Bartlett except that it bears russet patches. The flesh is fine-grained, tender, nearly white, sweet, agreeably flavored, and good in quality,

PHELPS

Phelps is a cross between Winter Nellis and Russet Bartlett which originated at the New York Agricultural Experiment Station in 1913. It was introduced by this Association in 1925. The fruit is of the type of Bartlett but ripens much later. The flavor is better than that of Bartlett, but the appearance of the fruit is duller. The flesh is tender and juicy with a pleasant vinous flavor. It ripens around Thanksgiving and keeps until Christmas. The variety prolongs the season of Pulteney which in turn prolongs that of Bartlett.

PULTENEY

Pulteney originated as a sister plant to Phelps and was introduced in 1924 by this Association. The fruit is of the Bartlett type, a little more regular in outline, skin smoother, but possibly not as attractive in color. Its season is four weeks later than that of Bartlett, and continues until Phelps starts to mature. The chief fault of the fruit is in the dullness of the color; the pears do not become yellow until very ripe and seldom have the attractive blush of Bartlett.

WILLARD

A sister of Ovid, Willard ripens about one month earlier and resembles Bartlett more closely in shape and color. Its flesh is yellowish, fine-grained, tender, and juicy. Owing to its good quality and lateness, it is recommended, like Ovid, for trial.

PLUMS

One hesitates to recommend new plums 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, this Association offers Albion

and Stanley, two of the best and handsomest plums in a collection of over 300 varieties grown on the grounds of the New York Agricultural Experiment Station.

ALBION

Albion, a cross between Golden Drop and Grand Duke, is the latest ripening good plum grown at Geneva. It belongs to the Grand Duke type, but its fruit is larger and better in quality. The tree is productive, strong, and vigorous. In consideration of its desirable characteristics, Albion is recommended for trial.

AMERICAN MIRABELLE

The Mirabelle is a small sweet yellow plum which belongs to the same species as the Damsons, from which they differ in color and flavor of fruit, and but little or not at all in tree. There are several Mirabelles in Europe, much liked for dessert and culinary purposes, but none are grown in America, growers having objected to the small fruits. The fruits of American Mirabelle resemble those of the Mirabelles closely in color, but are much larger. The tree is splendid in every way. The flavor is delightfully good and the new variety will be appreciated by all lovers of choicely good fruits.

BEAUTY*

Beauty is an early Japanese plum that precedes Abundance. The fruits are medium in size, roundish conic, medium to dark red, and covered with a lilac bloom; skin thick and tough; flesh yellowish tinged red, very juicy, tender but stringy, subacid to sweet; good; clingstone. Recommended for home use and roadside market.

FORMOSA*

Formosa is a Japanese plum recommended on account of its productiveness and large fruits. The fruits are oval to slightly cordate, greenish yellow nearly overlaid with red; flesh firm, juicy, melting, pale yellow, sweet, and good; stone slightly clinging; ripens mid-season.

HALL

Hall 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 better in flesh and flavor characters. It does not resemble Golden Drop in shape or color but in these characters is similar to Grand Duke. The fruits are so handsome and well flavored that they should sell in either roadside or city markets.

IMPERIAL EPINEUSE*

This is an old French plum of the prune type, reddish purple, tender, sweet, juicy and one of the best flavored of the Old World plums. It ripens late and so often escapes brown rot. The trees grow wonderfully well in the East and the variety should be much more widely grown than it is.

PEARL*

A medium-sized yellow plum originated by Luther Burbank. Its quality is exceptionally sweet and high. Recommended for the home garden.

SANNOIS*

Sannois is a very late reddish-purple French prune of medium size. It is one of the sweetest and most delectable varieties of all the plum family. Recommended for home garden on account of excellent quality.

SANTA ROSA*

Santa Rosa is one of the new and noteworthy Japanese plums which in many characters of tree and fruit surpasses Abundance and Burbank. The tree is a prolific bearer, and the large attractive fruits keep and ship well. It has long been considered about the best of the Japanese plums on the grounds of the New York Agricultural Experiment Station.

STANLEY

Stanley originated on the Station grounds in 1913 as a cross between Agen and Grand Duke. The fruit is of the prune type and should be excellent for cooking or eating out of hand. The tree is healthy, vigorous, and produces full crops annually. The tree is medium size, vigorous, upright spreading, open vase form, productive. The fruit is above medium to large in size, prune shape, dark blue with thick bloom; stem long, glabrous; skin medium in thickness and toughness, not cracking; flesh greenish yellow, moderately juicy, fine-grained, tender, firm, sweet, pleasant; quality good to very good; stone free; midseason, or three days earlier than Grand Duke or a week to ten days earlier than Italian Prune.

GRAPES

All of the men who have undertaken to improve 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 twenty-odd thousand hybrid grapes grown on the grounds of the New York Agricultural Experiment Station in the last twenty-five years, possibly three-fourths of the total number have been made with this end in mind.

BROCTON

Brocton is a green dessert grape suitable for home use and local markets. The flesh is melting, separates readily from the seeds and is sweet, richly and delicately flavored. In berry, season, and flavor, the fruits are of the Diamond type, but the bunches are larger. The vine is not so vigorous as might be wished, is rather slow in growth, and is inclined to bear too heavily, for all of which reasons it should have special care in culture and pruning.

DUNKIRK

Asked to name the grape of grapes for market and home, nearly all would say Delaware. But the vines are small, slow of growth, susceptible to mildew, capricious as to soils, and bunches and berries are small. One of the aims in grape breeding is to produce varieties similar to Delaware without the faults that have just been named. Dunkirk is sent out to fill this place. Bunches and berries of Dunkirk are similar to those of Delaware, but both are larger, and the crop ripens later and keeps longer. The skin is thin like that of Delaware, but is tough enough to make the grapes good shippers. The clusters are unusually uniform in shape and size, compact and well filled by the berries. The vine is vigorous, hardy, healthy and in the Station vineyard very productive.

FREDONIA

Fredonia gives promise of being our earliest good black grape. The vine is vigorous, hardy, and productive and ripens its fruit two weeks earlier than Worden. Its quality is superior to its parents, Champion and Lucile. The clusters are medium in size, cylindrical, and compact; the berries large, round, and persistent; the skin thick and medium tough; the flesh juicy, solid but tender; and the quality very good.

GOLDEN MUSCAT

Golden Muscat is a cross between Muscat Hamburg and Diamond. It possesses the rich golden color of the Diamond and the fine muscat aroma of the European parent. For home use and the roadside market it is one of the best. Possibly the skin is too tender for shipping. The vine is vigorous, productive; the clusters are very large, tapering, single shouldered, and compact; the berries are large, oval, juicy, tender, sweet, vinous, aromatic, and ripen about with Concord.

HANOVER

A red grape produced by crossing Brighton with Niagara. Clusters medium to large, and moderately compact, berries medium, slightly oblong, dark red; flesh slightly tough, sweet, vinous, and good in quality. This seedling which ripens about October first, has been fruiting at Geneva and Fredonia for 25 years and has shown sufficient merit to warrant a trial under other conditions.

KEUKA

Keuka is a cross between Chasselas Rose, a European grape, 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 crisp and juicy with a sweet, vinous, *Vinifera* flavor, and 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.

ONTARIO

Ontario is a cross between Winchell and Diamond which comes in season a little before Winchell, hitherto the best early green grape. Bunches and berries are larger and more attractive in appearance than those of either of the parents, the bunches are not quite so compact, and unlike those of either parent are usually single shouldered. The vines are more vigorous and more productive than those of Winchell or Diamond. The grapes hang on the vine long after ripening.

PORTLAND

Ontario, described above, takes first rank as an early green grape for home use, and Portland, ripening at about the same time, holds first place among the grapes as an early green variety for the market. The vine in this variety is particularly satisfactory, as it is very vigorous, hardy, productive, and healthy. The variety is remarkable for its luxuriant and persistent foliage. Bunches and berries are larger than those of any other early green grape and quite equal in size to the bunches and berries of Niagara. The quality is better than that of any other native green grape excepting Ontario which it does not equal.

X SENECA

Seneca is most highly recommended to all lovers of *Vinifera* grapes. Altho it is not a pure *Vinifera*, being a cross between Lignan Blanc and Ontario, its vine and fruit characters are so similar to a *Vinifera* that one would hardly believe it had any *Labrusca* in it. The remarkable thing about it is, however, that it is perfectly hardy in New York State and ripens in early midseason or two weeks ahead of Niagara.

The bunches are of medium size, tapering and medium compact. The greenish yellow berries are medium, oval and slightly pointed at the apex. The texture is firm, like a true *Vinifera*, melting and tender while the flavor is sweet, vinous and aromatic. The skin is medium thick and tough and is not a slip skin, so can be eaten with the berry or peeled, making it desirable for salads. The vine is vigorous, healthy, productive, and hardy.

SHERIDAN

Sheridan is a promising late-keeping grape to extend the season of Concord. In many places where Sheridan has been grown under the same conditions as Concord, the plants have been found to be just as vigorous, healthy, hardy, and more productive. The bunches of Sheridan are larger and more compact; the berries are firmer and as large as those of Concord; the flavor is sweeter and richer. The season is a week later and the grapes do not shell as readily, so that the crop can be kept longer than that of Concord. It only remains to be seen whether or not Sheridan will thrive in as great a diversity of soils.

URBANA

Urbana promises well for both home and market where it matures. Unfortunately it requires a long season and cannot be grown with certainty where Ca-

tawba does not ripen as it is a few days later than that variety. The vines are vigorous, healthy, and productive, and will withstand as much cold as Catawba or Delaware. Bunch and berry are large and both are very attractive. The berries are large, oval, light red, with rather thick skins which cling to the pulp like that of a *Vinifera*, and the flesh separates readily from the two or three rather small crackling seeds. The flesh is firm but tender, juicy, aromatic, and has a rich, sweet, vinous, spicy, refreshing flavor. The grapes keep in common storage without shriveling, shelling, or decaying until March, and this, possibly, is the character that should commend Urbana most highly to grape growers.

WATKINS

Watkins has attracted considerable attention owing to its high quality. It is a sister of Wayne obtained by crossing the Mills with Ontario. The vine is vigorous and productive; clusters medium to above, slightly tapering and loose; berries reddish black, averaging medium in size, varying from below to above, oval; skin thick, medium tough; flesh slightly tough, meaty, juicy, sweet with a slight Mills flavor. Its high quality makes it well worthy of trial.

WAYNE

This grape was obtained by crossing Mills with Ontario. The vine is strong, vigorous, and productive; clusters medium to above in size, and compact; berries above medium, oval, and reddish black; flesh medium firm slightly tough, juicy, sweet, vinous, with slight Mills flavor; quality very good; skin thick, and tough. Well worthy of trial but its keeping quality is impaired by a tendency to shell.

ELDERBERRY

ADAMS*

This variety is a selection made by the late William W. Adams, Union Springs, N. Y. The bush is strong, vigorous, and productive and the fruit clusters are exceptionally large.

GOOSEBERRIES

The culture of gooseberries has long been on the wane in New York chiefly because nurserymen choose to offer only the wretchedly poor Downing and Houghton. At this Station, the aim has long

been to obtain gooseberries with larger fruits, of better flavor, and of better plant characters than the two old sorts which years ago were past usefulness. Poorman was introduced a number of years ago as a better gooseberry, and where it succeeds is a most admirable sort. Unfortunately it does not do well on sandy soils, thriving only on clays and fertile loams. Now the Station is introducing Fredonia with the hope that it will be more adaptable to soils.

FREDONIA

Fredonia is a very large, late, dark red gooseberry of the English type that has done well on the Station grounds. The fruit is good in quality, and attractive in appearance. The skin is thick and tough and the variety should keep and ship very well. The plants are vigorous, productive, and of an open habit of growth that makes harvesting easier than with other sorts.

POORMAN*

The Poorman gooseberry possesses the highest quality and one of the largest, healthiest, and most vigorous bushes of any worth-while variety in the Station collection. The fruit is large, red and very attractive. The plants are productive, but less so than Chautauqua, and are a year or two later in coming into bearing than other varieties. Poorman should replace Houghton and Josselyn (Red Jacket) to which sorts it is so far superior.

RASPBERRIES

It is apparent that unless varieties of red and black raspberries resistant to mosaic and other diseases can be bred that the production of these fruits must cease to be profitable in this state. The Station is giving its utmost attention to procuring varieties of these fruits resistant to disease—with what success remains to be seen. The Association offers several varieties, however, which seem to be resistant and which are most admirable in every other particular.

JUNE

June is now the standard early variety in this State, and should be grown by all who want a very early sort. The fruit ripens from ten days to two weeks before Cuth-

bert and Latham, and is large, moderately firm, attractive, and of fair quality. The bushes are hardy, vigorous, very productive, and free of thorns. The fruit is borne out in the open, thus making picking easy, and holds its size well over a long season. Although the plants are susceptible to mosaic, the symptoms are very evident and roguing offers no serious difficulties to the careful grower.

LLOYD GEORGE*

Lloyd George is the only English raspberry that has ever succeeded on the Station grounds, most of them suffering severe winter killing, or not withstanding the hot summer sun. The plants are stocky, of medium height, and the dark green foliage is conspicuous in a variety collection. The fruit is very large, averaging seven-eighths of an inch in length on the earlier pickings, rather soft and dark if fully ripe, sprightly, and of excellent quality. It is somewhat hidden in the foliage, making picking more difficult than with other berries. Lloyd George is recommended for trial for home use and local markets. It seems to prefer the heavier soils and a cool, moist climate.

NEWBURGH

Newburgh, a cross between Newman and Herbert, seems to be the most promising variety in the Station collection. The fruit is very large, very firm, does not crumble, and is superior to Latham in quality, but inferior to Cuthbert in that respect. The color is a bright, attractive red. In keeping and shipping quality it has no superior. The plants are vigorous, hardy and very productive, in fact, the weight of the fruit is so great that the canes are often bent to the ground. The fruit is borne out in the open where it may be readily picked. It may be necessary to support them with a wire along each side of the row. No mosaic has yet appeared in the stock of Newburgh. In season it is three or four days earlier than Cuthbert.

NEWMAN*

Newman is a promising berry from Canada that has done very well in the Station tests. The fruit is large, very firm and attractive in appearance. The flavor is mild and the quality good. The plants are vigorous and very productive, bearing the fruit out in the open where it is easily harvested. Under certain conditions it clings to the bush more than is desirable, but at Geneva this is not a serious fault.

STRAWBERRIES

BEACON

The fruits of Beacon are early, large, of good quality and unusually handsome in appearance. The faults of the variety are in the plant characters, which seem not to be generally hardy, or widely adapted to soils. Probably Beacon is at its best on a rich clay loam.

BOQUET

Boquet has been on trial for several years and in some sections it has shown considerable promise as a general market berry. The fruit is large, firm, attractive, and of good quality, and ripens in midseason, but is inclined to produce many green, undeveloped tips. The plants are moderately vigorous and productive.

BLISS

Bliss ripens in late midseason and the berries are large, an attractive light, glossy red, sweet and of very good quality. The plants are medium in number, vigorous, and productive.

NEW STRAWBERRIES

The following new varieties of strawberries are offered this year for the second time. All are from a cross between Marshall and Howard (Premier). The plants of all are very vigorous, productive, hardy and healthy. The vigor and plant making ability exceeds that of any standard varieties in the Station collection. The fruit is large, very glossy and very attractive. All are midseason, except Culver, which is late. The purposes for which the various seedlings were named and the descriptions follow.

CATO

Cato is offered as a high quality variety for home use. It is nearly the equal of Marshall in quality, and much superior in plant characters. Because the skin bruises easily it will not make a satisfactory market berry unless handled very carefully.

CALEDONIA

This seedling was selected by an expert preserver as being well adapted to the making of preserves for which purpose it is offered. The berries are of good size, red

to the center, moderately acid and of excellent quality. Th plants are somewhat susceptible to leafspot under certain conditions.

CAMDEN

Camden is another general market berry and was named because of the extreme vigor and plant making qualities of the plant. The fruit characters are satisfactory for a market berry.

CLERMONT

This variety is offered as a general market berry. The fruits are very large, and hold up well in size throughout the season. The berries are regular, very glossy and attractive, do not bruise easily, and are good in quality.

CULVER

This is a late midseason berry, rather dark in color, and well adapted to preserving. The berries are large, regular, and bruise slightly. The flavor is sprightly and the quality very good. It is excellent for preserving, for market, and for home use.

NOTES IN REGARD TO POLLINATION OF FRUITS

Some varieties of fruit produce good crops when planted by themselves and are known as self-fruitful or self-fertile, while others set little or no fruit unless pollinated by other varieties. In order to avoid disappointments, the following recommendations are made for planting varieties mentioned in this catalog. Where a pollinator is required, solid blocks of over four rows width should be avoided.

Apples—It is advisable to set at least two varieties of apples in the same orchard and when Red Gravenstein is used, three varieties should be used, as the pollen of Red Gravenstein germinates poorly.

Cherries—All sweet cherries require a pollinator. Any combination of the listed varieties should prove satisfactory. Chase should be interplanted with either English Morello or Montmorency, although sour cherries are generally self-fruitful.

Peaches—Mikado should be interplanted either with nectarines or other peaches, but not with J. H. Hale.

Pears—All pear varieties require a pollinator. A combination of any two listed will prove satisfactory.

Plums—Generally speaking, the Japanese plums such as Formosa, Santa Rosa, and Beauty are self-unfruitful. Beauty, however, sets a fair crop when self-pollinated. At least two Japanese plums should be set near together for European plums cannot be depended upon as pollinators.

The European varieties vary in regard to self-fruitfulness. Stanley and Sannois are self-fruitful, while Imperial Epineuse and President are self-unfruitful. Thus, it is advisable to set another variety such as the Stanley with the Imperial Epineuse.

The other fruits, such as grapes, elderberries, gooseberries, raspberries, and strawberries are self-fruitful.

“Forward in the name of God; graft, set, plant, and nourish up trees in every corner of your ground; the labor is small, the cost is nothing, the commodity is great; yourselves shall have plenty, the poor shall have somewhat in time of want to relieve their necessity, and God shall reward your good merits and diligence.”