

New York Agricultural Experiment Station.

BULLETIN No. 109—NEW SERIES.

SEPTEMBER 1896.

STRAWBERRIES.

WENDELL PADDOCK.

GENEVA, N. Y.

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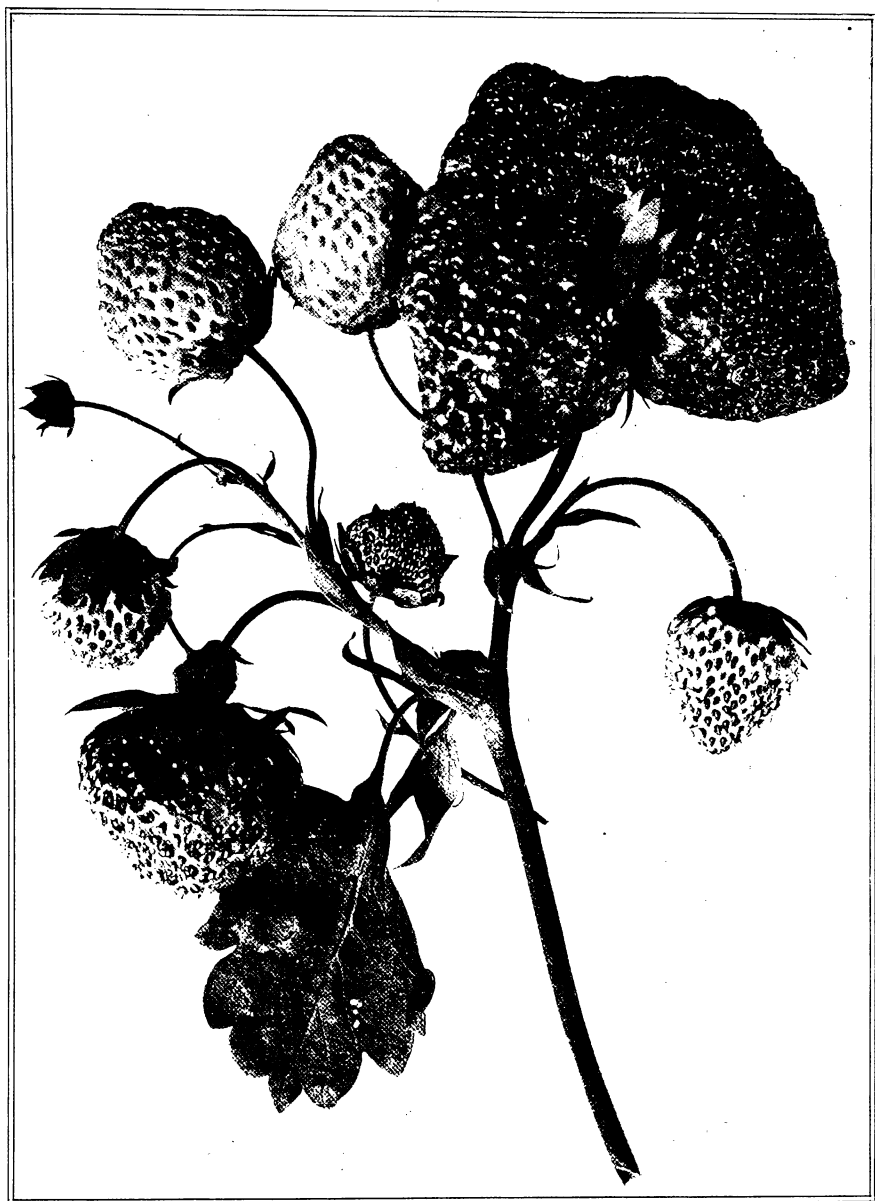
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The Bulletins published by the Station will be sent free to all farmer applying for them.

*Connected with Long Island Branch Station.

†Connected with Fertilizer Control.



William Bell—natural size.

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STRAWBERRIES.

WENDELL PADDOCK.

SUMMARY.

While strawberries vary in their behavior in different localities, yet variety tests are not without value as the results obtained can usually be regarded as indications of what the varieties will do in other parts of the state.

Strawberries were fruited in one- and two-year-old beds and contrary to the usual experience, some of the largest yields were obtained from beds that bore their second crop of fruit this season.

Of the varieties fruited for the first time this season the following are considered worthy of further testing: Bissel, Earliest, Enormous, Maple Bank, Omega, Robinson, *See No. 3, See No. 4, See No. 5*, Staples, *Thompson No. 101*, Tubbs and William Belt.

Among the varieties fruited in two-year-old beds and for the second time only, the following are considered

to be worthy of further testing: **Bostonian, Marshall, Marston and Tennessee.**

Among the early berries the following may be mentioned as being worthy of testing: **Earliest, Michel, Staples, Tubbs, Beder Wood and Marston.**

Where very late berries are desired the varieties **Hunn, Equinox, Wilder No. 7, Feicht No. 3, Princeton, Chief and Gandy** are recommended for trial.

An attempt has been made to sum up the data that has accumulated at the Station concerning the varieties now in the Station collection that have fruited more than two years. More complete descriptions of these berries or of other kinds that are not now in the Station collection may be had by consulting former bulletins and reports of this Station.

INTRODUCTION.

Strawberries are grown on the Station grounds in matted rows. Plants are set in either spring or fall, according as they are received. As soon as the ground freezes in the early winter the plants are covered with a few inches of straw or coarse manure. When growth starts in the spring the most of the covering is removed from the beds, enough being left to serve as a light mulch and to prevent the berries from becoming soiled.

In the following notes the imperfect or pistillate varieties are marked "P," while the perfect or staminate varieties are marked "S." The blossoms of the pistillate varieties produce no pollen, and on this account are unable to form any fruit when planted by themselves. The flowers of the staminate varieties produce pollen and so are able to form fruit of themselves. In any plantation where pistillate varieties are used, staminate varieties that blossom at the same time should be set in every third or fourth row in order that all may be well supplied with pollen. Too great stress cannot be laid on having a plenty of good pollen producers that blossom at the same time that the varieties do which they are to fertilize. For example we would not expect that Michels Early would make a good fertilizer for Bubach because the former is usually in full bloom by the time the first blossoms of the latter are open.

The yield of strawberries on the Station grounds as well as in many localities throughout the state was very unsatisfactory this season. This result was brought about by a variety of causes, among which may be mentioned the dry season of 1895, the severe winter following, and the very dry weather early this spring. Copious rains later brought on the crop in this locality much better than was at first anticipated. Though such seasons are discouraging from a financial point of view, yet they are not without value, as they aid in determining our reliable varieties.

But after all the value of a variety is entirely a local question and no grower should plant largely of any kind until it has first been tested in his locality, as the number of varieties that succeed

well in a large number of localities are very few. Yet variety tests are not without value as the results obtained in one locality may justly serve as an indication of what the variety will do in other portions of the state. While the results published in this bulletin cannot be regarded as being conclusive, they are an indication of what the berries are worth.

In the following pages the varieties that were fruited in one-year-old beds are discussed first, next those that fruited in spring-set two-year-old beds and last the varieties in fall set two-year-old beds.

NOTES ON VARIETIES.

Beecher, H. W., S.—*From Thompson's Son's, Rio Vista, Va.* Fruit large, roundish wedge shape, scarlet color, poor quality, firm; fruit stems short; foliage good; runners abundant. Not productive this season.

Bissell, P.—*From Thompson's Son's, Rio Vista, Va.* Blossoms with Sharpless. Fruit medium to large, round, inclined to conic, light scarlet color, firm, quality fair. Fruit stems long, prostrate; foliage good, runners abundant. It ranks first in productiveness among the varieties fruited here for the first time in 1896. Considered worthy of further testing.

Canada Wilson, S.—*From Birdseye & Son, Hopewell, N. Y.* Evidently a strain of the old Wilson. Fruit small to medium, good scarlet color, roundish conic, very firm, quality good. Foliage good, runners abundant, fruit stems long prostrate. Productive and firm, but too small to be profitable.

Champion of England, S.—*From R. S. Johnston, Shortsville, N. Y.* Fruit medium to large, irregular wedge shape, bright scarlet color, moderately firm, fair quality. Fruit stems medium length; runners abundant; foliage moderately good. A large and attractive berry when well grown but it has not done well on the Station grounds.

Columbian, S.—*From W. F. Allen, Salisbury, Md.* Plants vigorous, runners abundant, fruit stems medium; fruit small to medium, roundish, light scarlet color, firm, fair quality. Its rank as to yield cannot be given this season.

Earliest, S.—*From Thompson's Son's, Rio Vista, Va.* Among varieties fruited for the first time this season Earliest takes eighth place as to productiveness. This is a good showing when we take into account the fact that it produced a greater per cent of its crop early in the season than did any other variety. Fruit medium or below in size, roundish conic, light scarlet color, firm, fair quality. Foliage good, fruit stems short, runners abundant. Deserves further testing.

Eleanor, S.—*From Thompson's Son's, Rio Vista, Va.* Fruit medium or above, roundish, bright scarlet, firm, good quality; runners abundant, fruit stems medium, plants vigorous. Productiveness cannot be given this season. An early variety and worthy of further testing.

Enormous, P.—*From Thompson's Son's, Rio Vista, Va., and W. F. Allen, Salisbury, Md.* Runners abundant, fruit stems medium, foliage good. Fruit large to very large, irregular wedge shape, bright scarlet color, firm, quality fair. Though only moderately productive this season it should be tested further on account of its size and attractive appearance.

Hersey, S.—*From S. Hersey, Hingham, Mass.* Fruit small to medium in size, roundish with a slight neck, light scarlet color, firm, fair quality. Fruit stems medium, runners abundant, plants vigorous. Productiveness cannot be given this season.

Hull No. 3, S.—*From E. J. Hull, Olyphant, Pa.* Plants moderately vigorous, runners abundant, fruit stems medium. Fruit large roundish, light scarlet color, firm, good quality. Rank as to yield cannot be given this season.

Maple Bank, P.—*From E. B. Stevenson, Lowville, Canada.* Blossoms with Sharpless. Plants vigorous, runners abundant, fruit stems medium. Fruit medium to very large, roundish wedge shape, good dark scarlet color, firm, fair quality. Productiveness cannot be given this season, but on account of its size and attractive appearance it is considered worthy of further testing.

Margaret, S.—*From M. Crawford, Cuyahoga Falls, O.* Medium size, inclined to conic, dark scarlet color, firm, fair quality. Fruit stems short, runners abundant, foliage moderately vigorous. The plants have not done very well this season.

Mary, P.—*From Thompson's Son's, Rio Vista, Va.* Blossoms with Gandy. Very few runners, foliage good, plants strong and vigorous, fruit stems medium. Fruits large to very large, irregular in shape, many of them being coxcombed, firm, good quality. Its rank as to productiveness cannot be given this season.

Murray, P.—*From Thompson's Son's, Rio Vista, Va.* Foliage good, runners abundant, fruit stems medium length, productive. Fruit medium to large, dark scarlet color, roundish, firm, fair quality. Not productive this season in a one-year-old bed.

Omega, P.—*From Thompson's Son's, Rio Vista, Va.* Blossoms with Sharpless. Plants moderately vigorous, fruit stems short, runners abundant. Fruit large, irregular wedge shape, light scarlet color, firm, fair quality. Will probably be productive; on this account and because of its attractive appearance it is considered to be worthy of further testing.

Robinson, S.—*From Thompson's Son's, Rio Vista, Va.* Fruit medium to large, roundish conic in form, scarlet color, moderately firm, fair quality; fruit stems medium, runners abundant, foliage good. Yield cannot be given this season, but it will evidently be productive. Considered worthy of further testing.

See No. 3 P.—*From H. S. and A. J. See, Geneva, Pa.* Fruit stems medium, runners abundant, plants vigorous. Fruit medium to large, good light scarlet color, roundish, firm, quality fair. Will evidently prove to be productive. Worthy of further testing.

See No. 4. P.—*From H. S. and A. J. See, Geneva, Pa.* Fruit large to very large, good scarlet color, somewhat irregular in shape, quality poor, firm. Runners abundant, fruit stems long and prostrate; plants moderately vigorous. No. 4, stands second in productiveness among the varieties fruited for the first time this season. Considered worthy of further testing on account of size and productiveness.

See No. 5. P.—*From H. S. and A. J. See, Geneva, Pa.* Fruit medium to large, light scarlet color, long conic, firm, quality good. Plants moderately vigorous; fruit stems long and prostrate, runners abundant. Moderately productive this season. Considered worthy of further testing on account of size and productiveness.

Staples, S.—*From M. Crawford, Cuyahoga Falls, O.* Fruit medium size, roundish, dark scarlet color, firm, quality fair. Fruit stems short; runners abundant; plants moderately vigorous. It no doubt will prove to be of value as an early variety.

Thompson (Lady Thompson), S.—*From Slaymaker and Son, Dover, Del.* Fruit medium size, roundish, good scarlet color, firm, fair quality; fruit stems long prostrate, plants moderately vigorous, runners abundant. Productiveness cannot be given this season. Evidently not suited to this locality.

Thompson No. 100.—*From Thompson's Sons, Rio Vista, Va.* Plants moderately vigorous, fruit stems long, runners abundant. Fruit medium or above in size, conical with a slight neck, bright scarlet color, firm. Productiveness cannot be given this season.

Thompson No. 101. S.—*From Thompson's Sons, Rio Vista, Va.* Fruit above medium in size, round conic, scarlet, firm, good quality. Fruit stems long and prostrate, runners abundant, foliage good. Gives evidence of being productive. Considered worthy of further testing.

Tubbs, S.—*From R. S. Cole, Harmons, Md.* Season medium early. Foliage good, fruit stems medium, runners abundant. Fruit medium to large, round conic, dark scarlet color, firm, good quality. Stands fifth in productiveness among varieties fruited for the first time this season. Worthy of further testing.

Wilder No. 5. P.—*From H. A. Wilder, Akron, N. Y.* Fruit medium size, round conic, dark scarlet color, firm, quality fair. Fruit stems long prostrate, runners abundant, foliage fairly good. Only moderately productive this season.

Wilder No. 7. S.—*From H. A. Wilder, Akron, N. Y.* Fruit above medium size, roundish conic, good scarlet color, firm, good quality. Fruit stems medium, runners abundant, foliage good. Stands third in productiveness among varieties fruited here for the first time this season.

William Belt, S.—*From M. Crawford, Cuyahoga Falls, O.* Plants vigorous and healthy, fruit stems medium, runners abundant. Fruit medium to very large, many of the first berries to ripen being coxcombed and very large, the others are of a more regular conical form; fine scarlet color; moderately firm; good quality. Ranks second in productiveness among varieties fruited for the

first time this season. Considered worthy of further testing. (See plate.)

Williams, S.—*From Ellwanger and Barry, Rochester, N. Y.* Fruit medium to large, not uniform in shape, firm, fair quality; fruit stems medium, runners abundant. Plants moderately vigorous. Gives evidence of being productive.

Table I.—List of Strawberries fruited in One-Year-Old Beds, with a Comparative Statement of the Per Cent. of Early and Late Yield of Each Variety.

Rank as to yield 1896.	Name of variety.	Yield of 33 sq. ft. in Ounces.	Per cent. of crop picked before June 15.	Per cent. of crop picked after June 27
1	Bissel	296	7	6
2	<i>See No. 4</i>	185	2	5
3	<i>Wilder No. 7</i>	178	0	24
4	Tubbs	154	27	0
5	William Belt	145	0	13
6	Canada Wilson	129	12	3
7	<i>Wilder No. 5</i>	121	20	0
8	Staples	103	52	0
8	Earliest	103	63	0
9	Margaret	100	0	7
9	<i>See No. 5</i>	100	14	2
10	<i>Thompson No. 101</i>	97	2	2
11	Enormous	96	7	6
12	Murray	80½	23	0
13	Becker, H. W.	59	0	16
*	Columbian			
*	Eleanor			
*	Hersey			
*	Maple Bank			
*	Marv			
*	Omega			
*	Robinson			
*	<i>See No. 3</i>			
*	Robinson (Lady)			
*	<i>Thompson No. 100</i>			
*	<i>Thompson No. 101</i>			
*	Williams			

* Only a few plants were received or else a part died so that a full row was not obtained.

EARLY VARIETIES.

Table I shows that five varieties yielded a fifth or more of their crop before June 15th; these may be called early for this season. These are arranged in Table II in the order of their productiveness.

Table II.—Early varieties ranked according to yield before June 15th.

Name.	Date of first picking.	Yield before June 15. Ounces.	Total yield. 1896.	Rank as to yield 1896.
Earliest.....	June 6	65	103	9
Staples	June 6	54	103	9
Tubbs	June 8	41	154	5
Murray.....	June 6	18	80½	13

As is usual with very early varieties, Earliest does not take a high rank as to yield, yet where very early berries are desired, it is worthy of a trial. Its season is about the same as Michel, and in productiveness it ranks about the same as that variety. Staples takes the same rank as to yield and like Earliest it produced over half of its fruit before June 15, which date is taken this year as the beginning of "mid season." Tubbs is one of the promising new varieties, not quite as early as the two just mentioned but more productive. Murray was not productive this season.

LATE VARIETIES.

June 27th is taken this year as the end of "mid season." Those varieties that yielded a fifth or more of their crop after this date may be called late. Table I shows that of the berries fruited in one year old beds only the one variety, *Wilder No 7*, can be classed in this list. This berry stands third in productiveness among the varieties that fruited here for the first time this season and yielded 44 ounces of its crop after June 27th.

TWO-YEAR-OLD BEDS.

In the notes on varieties that were fruited in spring-set two-year-old beds we have attempted to sum up the data collected

during the two year's test, and give a brief statement of the value of the varieties as they appear to us on our soil. More complete descriptions may be found in bulletin No. 91, or in the annual report of this Station for 1895.

NOTES ON VARIETIES.

Aldridge No. 25. S.—From *Slaymaker and Son, Dover, Del.* Fruit medium to large, scarlet color. Too unproductive in this locality to be of any value.

Annie Laurie, S.—From *M. Crawford, Cuyahoga Falls, O.* Fruit medium size, bright scarlet color. Unproductive.

Blonde, S.—From *G. Cowing, Muncie, Ind.* Fruit medium to large, pale scarlet color. Moderately productive.

Bostonian, P.—From *B. F. Lincoln, West Hingham, Mass.* Blossoms with Sharpless. Attractive scarlet color, but soft and only fair in quality. Has been productive in both one and two-year-old beds. Worthy of further testing.

Brunette, S.—From *G. Cowing, Muncie, Ind.* Fruit medium size, dark scarlet color. Moderately productive.

Charlie, P.—From *Cleveland Nursery Co., Rio Vista, Va.* Fruit medium size, good scarlet color, firm, moderately productive.

Dew Drop, S.—From *B. F. Smith, Lawrence, Kansas.* Fruit scarlet color, good quality. Has been only moderately productive here as yet.

Eicholtz Seedling, S.—From the *U. S. Division of Pomology, Washington.* Fruit medium to large, light scarlet color. Unproductive this season in a two-year-old bed.

Equinox, S.—From *Cleveland Nursery Co., Rio Vista, Va.* Fruit medium to large, unattractive. Only moderately productive this season in two-year-old beds.

Giant, S.—From *W. Y. Velie, Marlboro, N. Y.* Fruit large, light color, soft.

Iowa Beauty, S.—From *E. J. Hull, Olyphant, Pa.* Unproductive this season in a two-year-old bed. Fruit medium to large, dark scarlet color.

Jay Gould, P.—From *C. A. Green, Rochester, N. Y.* Unpro-

ductive this season the same as last. Fruit medium or below in size, good scarlet color.

Marshall, S.—*From L. J. Farmer, Pulaski, N. Y.* Foliage large, plants vigorous. Fruit averages large, good scarlet color, firm, very good quality. It has been only moderately productive on our soil, but it is thought to be worthy of extended trial for a mid-season market berry on account of its fine appearance and firmness. One of the best for home use.

Marston, P.—*From C. S. Pratt, Reading, Mass.* Fruit medium size, conic, good scarlet color. Retains its reputation of last year for being productive. Worthy of further testing on account of its earliness and productiveness.

Nan, S.—*From T. J. Dwyer, Cornwall, N. Y.* Fruit medium to large, good scarlet color. Unproductive this season in a two-year-old bed.

Ona, P.—*From E. J. Hull, Olyphant, Pa.* Fruit medium or above in size, good scarlet color. Only moderately productive this season in a bed fruited for the second time.

Orange Co., P.—*From E. J. Hull, Olyphant, Pa.* Unproductive this season in a two year-old-bed. Fruit medium to large, light scarlet color.

Tennessee, S.—*From W. T. Wood and Co., Richmond, Va.* Fruit medium to large, bright scarlet color, attractive. It sustains its reputation of last season as being a productive variety. Will no doubt prove to be a valuable mid-season berry in many localities.

Young Seedling, S.—*From R. D. McGeehon, Atlantic, Iowa.* Fruit medium size, scarlet color. Unproductive this season in two year-old-bed.

Table III. List of varieties fruited in spring-set two-year-old beds with a comparative statement of the per cent. of early and late yield of each variety.

Rank as to yield 1896.	Name of variety.	Yield of 33 sq. ft. in Ounces.	Per cent. of crop picked before June 15.	Per cent. of crop picked after June 27.
1	Marston	266	24	1
2	Bostonian	260	2	19
3	Tennessee	236	8	2
4	Greenville	221	10	2
5	Hunn.	207	0	88
6	Crescent	197	18	2
7	Beder Wood	188	31	1
8	Beauty	169	0	32
9	Equinox	167	0	45
10	<i>Townsend No. 30.</i>	161	0	10
11	Blonde	159	0	20
12	Haverland	152½	35	3
13	Marshall	148	5	9
14	<i>Townsend No. 20.</i>	146½	2	14
15	Charlie	144	8	6
16	Sharpless	137	9	5
17	<i>Haynes No. 31.</i>	131	18	1
18	Brunette	129	0	8
19	Champion of England	119	3	8
20	Ona	117½	35	0
21	<i>Allens No. 14.</i>	107	5	3
22	Giant	96½	0	59
23	Michel	91½	53	0
24	<i>Eicholtz Seedling.</i>	86½	0	14
25	Orange County	79½	11	5
26	Youngs Seedling	77	23	1
27	Jay Gould	76½	11	0
28	Iowa Beauty	70½	4	6
29	<i>Allen No. 5.</i>	61	17	0
30	Sherman	59	20	3
31	Dew Drop	56	23	0
32	Nan	46	0	24
33	Annie Laurie	18½	0	11

EARLY VARIETIES.

Again observing June 15 as the beginning of mid-season, we find eight varieties that bore a fifth or more of their crop before that date, so they may be called early for this season..

Table IV. Early varieties ranked according to yield before June 15, 1896.

Name.	Date of first picking.	Yield before June 15. Ounces.	Total yield, 1896.	Rank as to yield, 1896.
Marston	June 6.....	64	266	1
Beder Wood.....	June 6.....	59	188	7
Haverland.....	June 8.....	53	152½	12
Ona	June 8.....	41	117½	20
Michel	June 6.....	49	91½	23
<i>Youngs Seedling</i>	June 8.....	18	77	26
Dew Drop	June 8.....	13	58	31
Sherman.....	June 8.....	12	59	30

Marston was very satisfactory in 1895 when fruited in a one-year-old bed. This year it heads the list among the varieties in two-year-old beds in both productiveness and the amount of fruit produced early. Beder Wood is usually rather under size but can be relied on for a full crop. Haverland is of good size and medium early. Michel is one of the best of the very early berries.

LATE VARIETIES.

Table III shows that six varieties may be called late for this season, having produced a fifth or more of their crop after June 27th. They are given below in

Table V.—Late varieties ranked according to yield after June 27.

Name.	Date of last picking.	Yield after June 27. Ounces.	Total yield 1896	Rank as to yield, 1896.
Hunn.....	July 21.....	182	207	5
Equinox	July 11.....	76	167	9
Giant.....	July 11.....	57	96½	22
Beauty	July 13.....	53	169	8
Blonde	July 7.....	32	159	11
Nan.....	July 7.....	11	46	32

Equinox, Giant, Blonde and Nan have not done as well on our soil as have some of the well known varieties. Beauty is an ex-

cellent berry for home use or for local market ; it is medium early and moderately productive.

This season's test of the Hunn only serves to confirm our good opinion of this berry. Not only was it by far the latest berry fruited on the Station grounds, but it ranks fifth in productiveness among the varieties fruited in two-year-old beds. Its first fruit ripened on June 24 and the last berries were picked on July 21st, eight days later than any other variety. In order that we might learn how this variety would thrive in another locality and on different soil, plants of the Hunn together with Station seedling No. 208 were sent to Mr. W. D. Barns, of Middle Hope, N. Y., to be tested on his farm. Mr. Barns is a fruit grower of wide experience and in whose judgment we place implicit confidence. His report which is self-explanatory is appended :

"I will now report concerning the Hunn, and Station seedling No. 208 strawberries which were sent to us for testing.

"The plants, one thousand of each variety were received in good order and set April 23d, 1895. They were put in a vineyard, the grape rows being ten and a half feet apart, and running nearly north and south. There was a low ridge extending across the plat from south-east to north-west, so that a part of each row had a southern and a part northern exposure. The soil is a sandy or gravelly loam, the top of the ridge being nearly clean slaty gravel.

"The runners of each variety started early in the season, and gave promise of large beds of well rooted plants. But the drought which commenced early in July and continued till late in the fall prevented most of the runners taking root, and weakened the plants of varieties so that the strawberry crop this season in the Hudson River valley was one of the lightest ever known. Doubtless the moisture absorbed by the grape roots aggravated the evil effects of the drought.

"On the same day that the plants from the station were set, plants of Lady Thompson, Bubach and Sharpless were set in the same vineyard, adjoining the Station berries. None of the plants of these varieties resisted the drought as well as those from the Station. They neither made as many good plants nor produced as much fruit this season.

"Last spring thirty-five hundred plants of the Hunn were sent to the Station for distribution among applicants for them. About

one thousand were taken for starting another field. This necessarily left the rows for fruiting very narrow.

"From the fact that the rows of No. 208 were so much wider than those of the Hunn, no plants having been taken from them, they should have yielded much more fruit. As it was the Hunn yielded one third more fruit. The first few pickings the fruit of No. 208 was nearly as large and firm as that of the Hunn, but of lighter color. The quality of each was excellent, some visitors giving the preference to one, and others to the other variety. After the first week No. 208 fell off in size and the berries were softer.

"On June 19th a sixteen-quart crate of each variety was shipped to a party in Gansevoort market, New York, and the same day a shipment was made to a firm in Washington street, near Washington market, New York. The former sold 208 at 15 cents per quart, and the Hunn at 18 cents. Good Sharpless berries were selling for 12 cents. He wrote, "Both varieties were received in good order but this is not a good place to get fancy prices." The down town firm sold 208 for 18 cents, and Hunn for 20 cents per quart. Concerning them they wrote: 'Both these varieties arrived in excellent order, but the Hunn is the better of the two, and a remarkable berry for which we predict a wonderful success, as it is superior to anything we have seen in color, shipping qualifications and delicacy of flavor.'

"The foliage of each variety is stronger, and seems to resist fungous diseases better than either Bubach, Sharpless or Lady Thompson.

"The following list will show the time of ripening of the several varieties :

Name.	First ripe.	First shipment	Last shipment
Michel.....	May 20	May 23	June 10
Beder Wood	" 24	" 27	" 15
Bubach.....	" 31	June 4	" 24
Sharpless.....	June 3	" 6	" 24
Hunn	" 9	" 13	July 8
No. 208.....	" 9	" 13	" 6

"The Lady Thompson plants had been heated when received, and made such feeble growth that no record was made of their shipping qualities. This season they have made a fine growth and now promise well for next season's crop.

"From this season's experience we are led to consider the Hunn a most promising berry for late market. The No. 208 seems hardly worth introducing. Still another season's test may be more favorable. It is remarkable for the number and perfection of its blossoms, as well as for the extreme length of time that it continues to put them out. This feature may render it extremely valuable for fertilizing late varieties that bear imperfect flowers. We have no Gandy on our place, but a neighbor on ground considered a few days later than ours commenced shipping them nearly a week before the Hunn was fit.

"All which is respectfully submitted by

Gives truly
W. D. Gano & Son

BEDS FRUITED FOR THE FIRST TIME BUT PLANTED IN THE FALL OF 1893.

In October of 1893 a few new varieties were received for testing. They were planted at once, together with a few of the standard berries for comparing with them. Such large yields were obtained this season from some of these varieties, as compared with varieties that were set in the spring of 1894, that it has been thought best to treat the two lots separately.

In the following discussion an attempt has been made to sum up the data that have been collected during the seasons that the varieties have been under test on our grounds.

Aldridge No. 25, S.—From Slaymaker & Son, Dover, Del. Of no value for this locality.

Beder Wood, P.—This variety has been fruited here since 1891 and has been very satisfactory as a mid-season local market berry. The berries are of medium size, conical, good scarlet color, too soft to ship long distances; plants very productive and produce runners abundantly.

Bubach, P.—A standard variety in many localities. Berries large, irregular, light scarlet color, soft. Valuable for local market, but rather soft for shipping long distances.

Crosby, S.—*From P. Crosby, Clinton, Wis.* Fruit medium size, firm, good quality, only moderately productive. Not as good for this locality as other well known varieties.

Crosby No. 10, S.—*From P. Crosby, Clinton, Wis.* Plants vigorous, producing runners freely. Fruit of medium size, good quality and firm, mid-season to late; ripens somewhat unevenly. More productive than Sharpless on our grounds.

Crosby No. 91, S.—*From P. Crosby, Clinton, Wis.* Fruit medium to large, good quality, firm; moderately productive. Not as good as other well known varieties for this locality.

Feicht No. 2, S.—*From D. Feicht, Dayton, O.* Plants very vigorous, producing runners freely; fruit stalks stiff and of medium length. Fruit large, scarlet color, good quality, firm. Not as productive as other well known sorts.

Feicht No. 3, P.—*From D. Feicht, Dayton, O.* The report of this Station for 1892 contains the following estimate of this variety: "Growth vigorous; foliage light green; leaves medium size on long slim leaf stalks; fruit stalks long and stiff, but not strong enough to hold fruit from the ground. Makes a moderate number of runners; fruits cubical, large specimens coxcombed, average large, bright red; flesh white, firm; quality fine." This variety has fruited here every season since and has proven to be quite satisfactory as a mid-season to late berry.

Gandy, S.—A standard late market berry in many localities, but it has never been very productive on our soil. During the time that this variety has been under test on our grounds it has been excelled by a number of kinds in both yield and the per cent of fruit produced late in the season.

Lovett, S.—Plants vigorous, runners abundant, moderately productive; berries medium to large, dark scarlet color, too soft

to ship long distances. Of especial value as a fertilizer as it produces an abundant supply of pollen, and has a long blossoming period.

Middlefield, P.—A well known variety, one of the best for home use. A vigorous grower producing many runners. Berries large, brilliantly colored, handsome; has been moderately productive on our grounds.

Phillips Seedling, S.—From *W. H. Phillips, Staunton, Ind.* Plants vigorous, producing large berries, firm and of good quality, moderately productive. Not as good as well known sorts.

Princeton Chief, P.—From *F. W. Poscharsky and Son, Princeton, Ills.* The report of this Station for 1893 contains the following account of this berry: "Blossoms about with Manchester. Foliage good; runners abundant; stems long; fruit mid-season to late, medium size, moderately firm, good quality and of good color, although rather dark when fully ripe. Among the strawberries fruited at this Station for the first time in 1893, Princeton Chief ranks fifth in productiveness. It was much more productive on our soil than Bubach and will probably ship as well as that variety." Only moderately productive in a two-year-old bed, but on the whole has been quite satisfactory.

Sadie, P.—Berries average small, but of good color and quality, firm. Plants strong and healthy, productive. The size of the fruit is against it.

Sunny Side, P.—From *C. S. Pratt, Reading, Mass.* This variety has received favorable notice in former reports of this Station. The plants are vigorous and productive; the berries are medium to large, fair quality, moderately firm, attractive, mid-season. Should be better known.

Townsend No. 2. S.—From *T. T. Lyon, South Haven, Mich.* Fruit medium to large, dark scarlet color, good quality, moderately productive. Not as good as other well known sorts for this locality.

Walton, P.—Not as good as well known varieties for this locality. Fruit small and soft; moderately productive.

Table VI. List of varieties fruited in two-year-old beds, but set in the fall of 1893, with a comparative statement of early and late yield of each variety.

Rank as to yield 1896.	Name of Variety.	Yield of 33 square feet in ounces.	Per cent. of crop picked before June 15.	Per cent. of crop picked after June 27.
1	Sadie.....	331	11	6
2	Beder Wood.....	320	20	3
3	Lovett.....	299	12	2
4	Sunny Side.....	290	2	16
5	<i>Feicht No. 3</i>	286	0	31
6	<i>Phillips Seedling</i>	285	4	9
7	<i>Crosby No. 10</i>	223	1	9
8	<i>Feicht No. 2</i>	219	20	3
9	Sharpless.....	194	4	7
10	Walton.....	190	5	19
11	Waldron.....	176½	1	16
12	Middlefield.....	171	12	6
13	Bubach.....	146	9	10
14	Princeton Chief.....	145	0	39
15	<i>Crosby No. 91</i>	124	0	16
16	<i>Townsend No. 2</i>	110	0	45
17	Gandy.....	101	0	50
18	Crosby.....	83	0	10
19	<i>Aldridge No. 25</i>	50	46	00

EARLY VARIETIES.

By consulting Table VI, we find three varieties that bore a fifth or more of their crop before June 15 and so may be classed with the early berries.

Beder Wood has been mentioned on a previous page as a standard variety. *Feicht No. 2* has been moderately productive; the plants are strong and vigorous and the fruit is of good size and quality. *Aldridge No. 25* is worthless in this locality.

LATE VARIETIES.

Again turning to Table VI, four varieties are found that may be called late for this season.

Table VII. Late varieties ranked according to yield after June 27.

Name.	Date of last picking.	Yield after June 27. Ounces.	Total yield 1896.	Rank as to yield 1896.
<i>Feicht No. 3</i>	July 9.....	89	286	5
Princeton Chief.....	July 9.....	57	145	14
Gandy.....	July 9.....	50	101	17
<i>Townsend No. 2</i>	July 9.....	49	110	16

Feicht No. 3 has been fairly productive, yielding nearly three times as much fruit this season as Gandy. Its season is somewhat longer than Gandy and it holds out to the end as well as does that variety. Princeton Chief is moderately productive. Gandy is one of the standard late berries. It has never been very productive on our soil. *Townsend No. 2* is no improvement on well known varieties.