

# New York Agricultural Experiment Station.

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BULLETIN No. 128.

NOVEMBER, 1897.

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VARIETY TESTS WITH RASPBERRIES, BLACK-  
BERRIES AND DEWBERRIES.

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WENDELL PADDOCK.

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GENEVA, N. Y.

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VARIETY TESTS WITH RASPBERRIES,  
BLACKBERRIES AND DEWBERRIES.

WENDELL PADDOCK.

**SUMMARY.**

*Poscharsky No. 15* takes first rank among black raspberries both as to total yield and the amount of fruit produced early in the season. *Palmer* has a long season as it is classed with both early and late berries. *Babcock No. 5* and *Mills* were the two most productive late berries.

Of red raspberries, *Pomona* gave the largest early yield and ranks second in productiveness. *Cline* ripens most of the crop in a few days and, as is usual with very early berries, is unproductive. *Kenyon* and *Olathe* were the most satisfactory late red raspberries. Of the mid-season varieties *Loudon*, *Cuthbert* and *King* deserve special mention.

*Shaffer* and *Columbian* are as yet the two standard varieties of purple raspberries.

Of blackberries, *Dorchester*, *Success*, *New Rochelle* and *Stone Hardy* were the most productive in 1897. *Dorchester* and *New Rochelle* have not always been hardy here. *Early King* produced the largest early yield.

*Lucretia* is as yet the only dewberry of importance in this section.

## INTRODUCTION.

The stiff clay loam of the Station gardens is not well adapted to small fruit culture, but raspberries and blackberries succeed much better than strawberries. Early in the season the ground between the rows was plowed to a depth of about three inches with a one-horse plow. This effectually loosened the surface soil as could be seen by comparison with adjacent land that had not been plowed. The influence of the plowing could be noticed as long as cultivation was continued. After plowing the ground was smoothed with the cultivator and an endeavor was made to keep the soil from becoming compact by giving frequent cultivation.

Nearly all varieties came through the winter in good condition and set a full crop of fruit. The dewberries alone received winter protection which was given them by throwing a few shovelfuls of earth on the prostrate vines. Abundant rains when the fruit was ripening brought all the berries to maturity and thus it happens that some of the varieties that have not usually done well on our grounds make a good showing in the following tables.

Descriptive notes are given of some of the newer kinds and the older sorts have in some cases been briefly mentioned. In all cases where the source from which the plants were obtained is not given it is supposed that such varieties may be had of any reliable dealer.

## BLACK RASPBERRIES.

### NOTES ON VARIETIES.

*Babcock No. 3.* From D. W. Babcock, Cromwell, Conn. An attractive, large berry but only moderately productive on our soil.

*Babcock No. 5.* From D. W. Babcock, Cromwell, Conn. While the fruit is not quite as large as No. 3, it has been much more productive. It takes second rank this season. Both of the Babcock seedlings make a good showing among the late varieties as may be seen by consulting Table I. For this reason both are considered worthy of testing.

**Black Diamond.** *From C. W. Stewart, Newark, N. Y.* Fruit large with medium grains, good black color, firm, good quality and will evidently be productive. Its season is about with Gregg. A promising variety.

**Eureka.** A standard variety in many localities. It has a long season which extends from medium early to medium late.

**Hopkins.** *From A. M. Purdy, Palmyra, N. Y.* An early berry of large size but only moderately productive here.

**Lawrence.** *From A. H. Griesa, Lawrence, Kansas.* Fruit very large, moderately firm, good color and quality; evidently productive. Season a little later than Eureka. Worthy of further testing.

**Mills.** *From C. Mills, Fairmount, N. Y.* This variety has been favorably reported on in former reports of this Station. The fruit is of medium size and good quality. It stands third in productiveness this season.

**Onondaga.** *From C. Mills, Fairmount, N. Y.* Fruit large, attractive, good quality. It was only moderately productive this season.

**Palmer.** *From C. Mills, Fairmount, N. Y.* A standard variety in many places.

**Progress.** *From D. B. Garvin & Son, Wheeling, W. Va.* Berries medium size, good black color and moderately firm. It ranks fourth in productiveness this season.

*Poscharsky Seedlings.* *From F. W. Poscharsky, Princeton, Ill.* Neither *No. 3* nor *No. 9* are any improvement over better known sorts. *No. 15* ranks first in productiveness and in the amount of fruit produced early. The fruit is medium to large, firm, somewhat seedy, sweet and of very good quality. Where very early berries are desired this variety will be worthy of a trial.

*Townsend No. 2.* *From G. Townsend, Gordon, O.* Fruit medium to large, very good quality. It ranks sixth in productiveness this season.

TABLE I.—LIST OF BLACK RASPBERRIES FRUITED IN 1897 WITH A COMPARATIVE STATEMENT OF THE PERCENTAGE OF EARLY AND LATE YIELD OF EACH VARIETY.

| Rank as to yield, 1897. | Name of variety.           | When set. | Yield of row 25 feet long. | Per cent of crop picked before July 17. | Per cent of crop picked after July 23. | Per cent of canes winter killed. |
|-------------------------|----------------------------|-----------|----------------------------|---|--|----------------------------------|
|                         |                            |           | Ounces.                    |   |  |                                  |
| 1                       | <i>Poscharsky No. 15.</i>  | 1894      | 466                        | 42                                      | 11                                     | 5                                |
| 2                       | <i>Babcock No. 5.</i>      | 1894      | 419                        | 3                                       | 35                                     | 10                               |
| 3                       | Mills                      | 1894      | 409                        | 00                                      | 33                                     | 5                                |
| 4                       | Pioneer                    | 1894      | 401                        | 24                                      | 26                                     | 3                                |
| 5                       | Eureka                     | 1894      | 390                        | 22                                      | 24                                     | 3                                |
| 6                       | <i>Townsend No. 2.</i>     | 1894      | 359                        | 10                                      | 16                                     | 5                                |
| 7                       | <i>Babcock No. 3.</i>      | 1894      | 335                        | 00                                      | 33                                     | 00                               |
| 8                       | { Palmer                   | 1894      | 285                        | 28                                      | 31                                     | 3                                |
|                         | { <i>Poscharsky No. 3.</i> | 1894      | 285                        | 35                                      | 15                                     | 5                                |
| 9                       | Onondaga                   | 1894      | 247                        | 3                                       | 33                                     | 10                               |
| 10                      | Hopkins                    | 1894      | 216                        | 32                                      | 20                                     | 10                               |
| 11                      | <i>Poscharsky No. 9.</i>   | 1894      | 186                        | 37                                      | 18                                     | 5                                |

#### EARLY BLACK RASPBERRIES.

The mid-season of black raspberries for 1897 may be regarded as extending from July 17 to July 23. Those varieties that ripened a fourth or more of their crop before July 17 may be called early for this season. Table I shows five such varieties. These are arranged below in Table II.

TABLE II.—EARLY BLACK RASPBERRIES ARRANGED ACCORDING TO THEIR YIELD BEFORE JULY 17.

| Name of variety.          | Date of first picking. | Yield before July 17. | Total yield. | Rank as to total yield. |
|---------------------------|------------------------|-----------------------|--------------|-------------------------|
|                           |                        | Ounces.               | Ounces.      |                         |
| <i>Poscharsky No. 15.</i> | July 8                 | 193                   | 466          | 1                       |
| <i>Poscharsky No. 3.</i>  | July 8                 | 100                   | 285          | 8                       |
| Palmer                    | July 8                 | 80                    | 285          | 8                       |
| Hopkins                   | July 13                | 69                    | 216          | 10                      |
| <i>Poscharsky No. 9.</i>  | July 8                 | 69                    | 186          | 11                      |

*Poscharsky No. 15* has made a good record this season. It is remarkable in that it gives the largest total yield as well as the largest early yield. *Poscharsky Nos. 3* and *9* are no improvement on better known sorts. *Palmer* is a well known early variety. *Hopkins* bears fruit of good size but is not productive enough on our soil to compare favorably with better known sorts.

## LATE BLACK RASPBERRIES.

Assuming that mid-season ended on July 23 all varieties that ripened a fourth or more of their crop after this date may be called late for this season. Table I shows six such varieties. These are arranged below in the order of their yield after July 23.

TABLE III. LATE BLACK RASPBERRIES ARRANGED ACCORDING TO THEIR YIELD AFTER JULY 23.

| Name of variety.           | Date of last picking. | Yield after July 23 | Total yield. | Rank as to total yield. |
|----------------------------|-----------------------|---------------------|--------------|-------------------------|
|                            |                       | Ounces.             | Ounces.      |                         |
| <i>Babcock No. 5</i> ..... | July 30               | 147                 | 419          | 2                       |
| <i>Mills</i> .....         | Aug. 4                | 135                 | 409          | 3                       |
| <i>Babcock No. 3</i> ..... | Aug. 4                | 110                 | 335          | 7                       |
| <i>Pioneer</i> .....       | July 30               | 104                 | 401          | 4                       |
| <i>Palmer</i> .....        | July 30               | 88                  | 285          | 8                       |
| <i>Onondaga</i> .....      | Aug. 2                | 82                  | 247          | 9                       |

*Babcock No. 5* and *Mills* can safely be recommended for trial. *Palmer* and *Onondaga* have not usually been as productive on our soil as they have elsewhere. However they are standard varieties in some localities.

## RED RASPBERRIES.

TABLE IV. LIST OF RED RASPBERRIES FRUITED IN 1897 WITH A COMPARATIVE STATEMENT OF THE PERCENTAGE OF EARLY AND LATE YIELD OF EACH VARIETY.

| Rank as to yield, 1897. | Name of variety.      | When set. | Yield of matted row 25 feet long. | Per cent of crop picked before July 16. | Per cent of crop picked after July 26. | Per cent of canes winter killed. |
|-------------------------|-----------------------|-----------|-----------------------------------|---|--|----------------------------------|
|                         |                       |           | <i>Ounces.</i>                    |   |  |                                  |
| 1                       | Loudon .....          | 1894      | 503                               | 7                                       | 22                                     | 0                                |
| 2                       | Pomona .....          | 1892      | 495                               | 30                                      | 9                                      | 0                                |
| 3                       | Cuthbert .....        | 1892      | 478                               | 0                                       | 22                                     | 3                                |
| 4                       | King .....            | 1894      | 471                               | 15                                      | 13                                     | 0                                |
| 5                       | Kenyon .....          | 1894      | 463                               | 5                                       | 27                                     | 0                                |
| 6                       | I. X. L. ....         | 1894      | 441                               | 21                                      | 20                                     | 0                                |
| 7                       | Pride of Kent .....   | 1893      | 401                               | 19                                      | 11                                     | 3                                |
| 8                       | Superb .....          | 1892      | 326                               | 13                                      | 20                                     | 0                                |
| 9                       | Royal Church .....    | 1892      | 322                               | 4                                       | 20                                     | 5                                |
| 10                      | Talbot .....          | 1894      | 306                               | 10                                      | 26                                     | 0                                |
| 11                      | Clarke .....          | 1894      | 288                               | 10                                      | 16                                     | 0                                |
| 12                      | Reder .....           | 1893      | 258                               | 19                                      | 12                                     | 0                                |
| 13                      | Olathe .....          | 1893      | 249                               | 0                                       | 25                                     | 3                                |
| 14                      | Turner .....          | 1892      | 233                               | 20                                      | 9                                      | 3                                |
| 15                      | Reliance .....        | 1893      | 228                               | 16                                      | 18                                     | 5                                |
| 16                      | Miller Woodland. .... | 1892      | 211                               | 8                                       | 28                                     | 5                                |
| 17                      | Cline .....           | 1893      | 180                               | 62                                      | 2                                      | 1                                |
| 18                      | Naomi .....           | 1893      | 179                               | 15                                      | 20                                     | 10                               |
| 19                      | Pride .....           | 1893      | 157                               | 37                                      | 6                                      | 1                                |
| 20                      | Superlative .....     | 1894      | 152                               | 40                                      | 4                                      | 5                                |
| 21                      | Brandywine .....      | 1892      | 146                               | 2                                       | 30                                     | 5                                |
| 22                      | Harris .....          | 1893      | 145                               | 30                                      | 15                                     | 10                               |

## EARLY RED RASPBERRIES.

Assuming that mid-season of red raspberries began on July 16 those varieties that ripened a fourth or more of their crops before this date may be called early for this season. Table IV shows that there were six in this class. They are given below in Table V.



TABLE V.—EARLY RED RASPBERRIES ARRANGED ACCORDING TO THEIR YIELD BEFORE JULY 16.

| Name of variety. | Date of first picking. | Yield before July 16. | Total yield.   | Rank as to total yield. |
|------------------|------------------------|-----------------------|----------------|-------------------------|
|                  |                        | <i>Ounces.</i>        | <i>Ounces.</i> |                         |
| Pomona.....      | July 7                 | 148                   | 495            | 2                       |
| Cline.....       | July 6                 | 111                   | 180            | 17                      |
| Superlative..... | July 8                 | 61                    | 152            | 20                      |
| Pride.....       | July 7                 | 58                    | 157            | 19                      |
| Harris.....      | July 10                | 43                    | 145            | 22                      |

Pomona, from Wm. Parry, Parry, N. J., has always been satisfactory on our grounds. It is not only early but productive as well, ranking second in yield in 1897 among all the varieties. Cline, from G. W. Cline, Winona, Ont., is very early and yields most of its fruit in a few days after beginning to ripen. Pomona was much more satisfactory as its early yield was not only larger but it has a long season as well. Superlative, from Ellwanger & Barry, Rochester, N. Y., has berries of the largest size and Idaeus type.

## LATE RED RASPBERRIES.

Again referring to Table IV we find that five varieties produced a fourth or more of their crop after July 26. These are given below in Table VI as late varieties.

TABLE VI.—LATE RED RASPBERRIES ARRANGED ACCORDING TO THEIR YIELD AFTER JULY 23.

| Name of variety.    | Date of last picking. | Yield after July 26. | Total yield.   | Rank as to total yield. |
|---------------------|-----------------------|----------------------|----------------|-------------------------|
|                     |                       | <i>Ounces.</i>       | <i>Ounces.</i> |                         |
| Kenyon.....         | Aug. 9                | 125                  | 463            | 5                       |
| Talbot.....         | Aug. 7                | 78                   | 306            | 10                      |
| Olathe.....         | Aug. 7                | 60                   | 249            | 14                      |
| Miller Woodland.... | Aug. 9                | 59                   | 211            | 17                      |
| Brandywine.....     | Aug. 2                | 44                   | 146            | 22                      |

Kenyon, from A. M. Kenyon, McGregor, Ia., has fruit of medium size, moderately firm, rather dark when fully ripe and only fair in quality. It ranks fifth in yield this season and produced the largest percentage of late yield of any variety. Of the

other berries included in the list of late varieties Olathe, from Stayman & Black, Lawrence, Kan., has been the most satisfactory.

#### MID SEASON VARIETIES.

Loudon, from C. A. Green, Rochester, N. Y., ranks first in yield this season among the red raspberries. It has a long fruiting season and gives a good late yield, though the percentage of late yield is not as large as some others. The fruit resembles the Marlboro; the plants are vigorous and have been perfectly hardy here thus far. Cuthbert is one of the standard red raspberries and is perhaps more grown than any other red variety. It is not firm enough to ship long distances.

King, from Cleveland Nursery Co., Rio Vista, Va., bears fruit of large, fine, bright color, firm, good quality; plants vigorous and hardy. It ranks fourth in productiveness among all the red raspberries that fruited this season.

#### PURPLE RASPBERRIES.

TABLE VII.—LIST OF PURPLE RASPBERRIES FRUITED IN 1897, WITH A COMPARATIVE STATEMENT OF THE PERCENTAGE OF EARLY AND LATE YIELD OF EACH VARIETY.

| Rank as to yield, 1897. | Name of variety.  | When set. | Yield of row 25 feet long. | Per cent of crop picked before July 16. | Per cent of crop picked after July 26. | Per cent of canes winter-killed. |
|-------------------------|-------------------|-----------|----------------------------|---|--|----------------------------------|
|                         |                   |           | <i>Ounces.</i>             |   |  |                                  |
| 1                       | Smith Purple..... | 1895      | 481                        | 20                                      | 16                                     | 3                                |
| 2                       | Shaffer.....      | 1895      | 414                        | 00                                      | 27                                     | 25                               |
| 3                       | Addison.....      | 1894      | 382                        | 50                                      | 1                                      | 5                                |
| 4                       | Columbian.....    | 1894      | 376                        | 00                                      | 30                                     | 3                                |
| 5                       | Teletaugh.....    | 1895      | 276                        | 14                                      | 4                                      | —                                |
| 6                       | Beckwith.....     | 1894      | 195                        | 00                                      | 51                                     | 3                                |
| 7                       | Redfield.....     | 1895      | 123                        | 00                                      | 26                                     | 3                                |

By referring to the above table it will be seen that only one variety, Addison, gave a large percentage of early yield. This berry is not worth growing in this locality as the berries are small and crumble badly.

Smith Purple, from B. F. Smith, Lawrence, Kan., was the most productive. This variety has all of the characteristics of the black raspberries aside from its purple color.

Shaffer and Columbian have been the most satisfactory purple berries. There seems to be but little difference in productiveness between the two.

Teletaugh, from J. F. Street, West Middletown, Ind., is a new comer and has not been sufficiently tested to decide as to its merits. The berries are large, dark purple with an abundance of bloom that gives them a mouldy appearance. The fruit is firm and rather tart. Its season is somewhat earlier than Shaffer or Columbian.

### BLACKBERRIES.

TABLE VIII.—YIELD OF BLACKBERRIES IN 1897.

| Rank as to yield, 1897. | Name of variety.        | When set. | Yield of row 25 feet long. | In marketable condition. | Per cent of canes winter-killed. |
|-------------------------|-------------------------|-----------|----------------------------|--------------------------|----------------------------------|
|                         |                         |           | <i>Ounces.</i>             |                          |                                  |
| 1                       | Dorchester.....         | 1893      | 755                        | July 26 to Sept. 2.      | 00                               |
| 2                       | Success.....            | 1892      | 606                        | July 30 to Sept. 7.      | 00                               |
| 3                       | New Rochelle.....       | 1893      | 589                        | July 26 to Sept. 2.      | 00                               |
| 4                       | Stone Hardy.....        | 1893      | 583                        | Aug. 9 to Sept. 2.       | 00                               |
| 5                       | Early Mammoth..         | 1892      | 528                        | July 28 to Aug. 30.      | 00                               |
| 6                       | Agawam.....             | 1893      | 467                        | July 28 to Aug. 30.      | 00                               |
| 7                       | Erie.....               | 1893      | 443                        | July 30 to Aug. 7.       | 3                                |
| 8                       | Western Triumph..       | 1995      | 438                        | Aug. 2 to Aug. 30.       | 00                               |
| 9                       | <i>Ford No. 1</i> ..... | 1892      | 408                        | Aug. 7 to Sept. 7.       | 00                               |
| 10                      | Woodland.....           | 1892      | 371                        | July 30 to Sept. 2.      | 00                               |
| 11                      | Aucieut Briton....      | 1893      | 352                        | Aug. 2 to Aug. 30.       | 00                               |
| 12                      | Early King.....         | 1892      | 330                        | July 30 to Sept. 7.      | 00                               |
| 13                      | Lovett.....             | 1893      | 317                        | Aug. 7 to Aug. 30.       | 00                               |
| 14                      | Wilson Jr.....          | 1893      | 211                        | July 23 to Aug. 30.      | 5                                |
| 15                      | Sandford.....           | 1894      | 195                        | Aug. 9 to Aug. 30.       | 00                               |
| 16                      | Black Chief.....        | 1893      | 187                        | Aug. 7 to Sept. 7.       | 00                               |
| 17                      | Early Harvest.....      | 1895      | 170                        | July 15 to Aug. 17.      | 00                               |
| 18                      | Child Tree.....         | 1894      | 122                        | July 26 to Aug. 21.      | 3                                |
| 19                      | Fruitland.....          | 1892      | 71                         | Aug. 12 to Aug. 30.      | 00                               |

Most of the blackberries came through the winter uninjured by the cold. On this account some of the varieties take a high rank in yield that have not heretofore been productive here.

Dorchester is a well known old variety. It has not always been hardy here.

Success, from L. W. Carr and Co., Erie, Pa., received favorable notice in our report for 1896 and this season it takes second rank in yield. The berries are of medium size with medium grains and small core ; quality good.

New Rochelle (*Lawton*), is a well known old sort. It is one of the finest of blackberries when grown at its best but the plants are not hardy enough to be reliable in this locality.

Stone Hardy ranked second in yield last season and takes fourth place this year. The fruit is of medium size and good quality.

Early Mammoth, from Cleveland Nursery Co., Rio Vista, Va. Is said to be a hybrid between the blackberry and dewberry. The fruit varies from the largest size to small, imperfect berries. The plants are not usually hardy here.

Agawam is a well known variety. The plants are quite hardy in this locality. The fruit is of medium size and good quality.

Erie is an old variety. It has not been as productive here as some others.

Ancient Briton took first rank in yield last year which may account in part for its low place this season. This has been regarded as one of the most reliable varieties. The fruit is of medium size.

Early King, from Ellwanger & Barry gave the largest early yield and its total yield was satisfactory for such an early sort. The canes are of medium size and the plants are vigorous. Fruit medium size, good quality.

Wilson Jr. belongs in the same class with Early Mammoth and resembles that variety in bush and fruit. They both need winter protection in this locality.

Early Harvest has been quite satisfactory in former years as an extra early variety. Last season fully established plants took third rank as to yield. The berries are of medium size and good quality.

## DEWBERRIES.

TABLE IX.—YIELD OF DEWBERRIES IN 1897.

| Rank as to yield, 1897. | Name of variety.     | Yield of row of 20 feet long. | In marketable condition. |
|-------------------------|----------------------|-------------------------------|--------------------------|
|                         |                      | <i>Ounces.</i>                |                          |
| 1                       | Lucretia.....        | 198                           | July 17 to Aug. 12       |
| 2                       | Bartel.....          | 102                           | July 15 to Aug. 2        |
| 3                       | Austin Improved..... | 68                            | July 17 to Aug. 2        |
| 4                       | Mammoth.....         | 38                            | July 15 to July 30.      |

So far as tested here Lucretia is the only satisfactory dewberry. Austin Improved did not come up to our expectations this season. The berries were imperfect and sour.

## LIST OF RASPBERRIES RECEIVED IN 1897.

Bishop. From B. F. Smith, Lawrence, Kansas.

Cumberland. From D. Miller, Camp Hill, Pa.

Egyptian. From B. F. Smith, Lawrence, Kansas.

Great American. From J. L. Childs, Floral Park, N. Y.

Highland Hardy. From S. D. Willard, Geneva, N. Y.

Munger. From W. N. Scarff, New Carlisle, Ohio.

New Cardinal. From A. H. Griesa, Lawrence, Kansas.

Perpetual King. From C. J. More, Jamestown, N. Y.

## LIST OF BLACKBERRIES RECEIVED IN 1897.

Clarke. From M. Crawford, Cuyahoga Falls, Ohio.

Rathbun. From Fred E. Young, Rochester, N. Y.