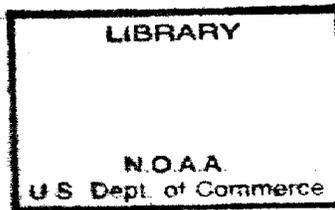


Rainfall 1917



REPORT

ON



THE DEPARTMENT

OF

AGRICULTURE,

BARBADOS.

1917-18.

ADVOCATE CO., LTD.

Printers to the Government of Barbados.

1920.

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REPORT

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1920.

REPORT ON  
THE DEPARTMENT OF AGRICULTURE,  
BARBADOS.  
FOR THE FINANCIAL YEAR 1917-1918.

STAFF.

|                                       |  |
|---------------------------------------|--|
| Superintendent of Agriculture.....    | JOHN R. BOVELL, I.S.O., F.L.S., F.C.S. |
| Assistant Superintendent.....         | J. SYDNEY DASH, B.S.A.                 |
| First Field Assistant.....            | MILTON S. GOODMAN.                     |
| Second Field Assistant.....           | ERNEST H. BARROW.                      |
| Assistant in Charge of Nurseries..... | G. C. LAURIE SPENCER.                  |
| Chief Clerk.....                      | HUGH O. RAMSAY.                        |
| Second Clerk.....                     | M. ESTELLE B. SHEPHERD.                |
| Third Clerk.....                      | C. HOLMAN B. WILLIAMS.                 |

ESTABLISHMENT.

During the period under review the Superintendent of Agriculture was absent from the colony on duty leave from April 23 to May 17, 1918. This leave was granted at the request of the Governor of Martinique who, on Mr. Bovell's return from Gaudeloupe, (Vide Annual Report, 1916-17) telegraphed the Governor of this Colony asking that Mr. Bovell be allowed to visit Martinique to investigate and report on the sugar industry there, which was causing the planters great anxiety owing to the low yields that were being obtained. The Superintendent was also absent from the colony on vacation leave during the following periods:—October 3 to 17, 1917; October 31 to November 14, 1917 and March 18 to April 3, 1918. On each occasion of the Superintendent's absence the Assistant Superintendent acted as Superintendent.

The Assistant Superintendent was also absent from the colony on vacation leave from February 1 to 15, 1918.

On April 30, Mr. J. R. Bailey, who had been appointed on probation as Assistant in Charge of the Nurseries, resigned and Mr. G. F. L. Spencer, the Third Clerk in the Department of Agriculture, was appointed on probation to the vacant post. On Mr. Spencer being appointed Assistant in Charge of the Nurseries, Mr. C. H. B. Williams, the Private Clerk to the Superintendent, was appointed to act as Third Clerk in the Department.

EXPENDITURE.

|  | £     | s. | d.  |
|--|-------|----|-----|
| Personal emoluments .....  | 1,778 | 14 | 6   |
| Incidentals for sugar cane, cotton and other experiments .....                   | 493   | 4  | 4½  |
| Upkeep of Botanic Station .....  | 138   | 13 | 0½  |
| Fumigation of plants .....   | 7     | 2  | 6   |
| Purchase of goats .....  | 4     | 8  | 10½ |
| Pay and travelling expenses in connection with sugar-cane experiment plots ..... | 5     | 2  | 11  |
| Purchase of apparatus, books, etc., .....  | 18    | 3  | 10  |
| Exhibition (local) .....   | 51    | 11 | 5½  |
| New Iron safe .....  | 12    | 18 | 9   |
| Total .....  | 2,510 | 0  | 3   |

RECEIPTS.

|   |     |    |    |
|---|-----|----|----|
| Plants in pots .....  | £35 | 16 | 10 |
| Canes, cotton, cassava, yams, etc., grown on lands rented from Waterford Plantation .....   | 35  | 7  | 8  |
| Sundries:—Collecting and drying mahogany seeds, tamarinds sold from trees at Pavilion ..... | 8   | 15 | 3  |
| Total .....   | £79 | 10 | 9  |

*Document laid at Meeting of Assembly of 29th October 1918.*

### REPAIRS TO BUILDINGS, ETC.

During the year under review minor repairs were executed to Codrington House and the out buildings there, where the nurseries for the seedling sugar-canes and other plants are situated. The two plant houses, which were badly in need of repainting, were painted and the floor of one of them was concreted. Repairs were also executed to the office and out buildings in Bridgetown.

### DISTRIBUTION OF ECONOMIC PLANTS.

The receipts for the sale of plants, etc., for the year 1917-18 amounted to £79 19. 9.

The plants and seeds distributed locally and abroad for the year are as follows:—

|  |     |     |     |     |                  |
|--|-----|-----|-----|-----|------------------|
| Breadfruit   | ... | ... | ... | ... | 6 plants         |
| Banana   | ... | ... | ... | ... | 12 suckers       |
| Cane plants (of these 142 barrels, twenty tin cylinders and one box, containing approximately 30,883 cuttings were packed in damp powdered charcoal) | ... | ... | ... | ... | 523,083 cuttings |
| Cactus—spineless   | ... | ... | ... | ... | 16 "             |
| Cherry   | ... | ... | ... | ... | 2 plants         |
| Ficus Benjamina  | ... | ... | ... | ... | 24 "             |
| Ficus nitida   | ... | ... | ... | ... | 1 "              |
| Fig  | ... | ... | ... | ... | 11 "             |
| Lemon  | ... | ... | ... | ... | 6 "              |
| Lime   | ... | ... | ... | ... | 118 "            |
| Mango (grafted)  | ... | ... | ... | ... | 143 "            |
| Miscellaneous  | ... | ... | ... | ... | 39 "             |
| Palms and ornamentals  | ... | ... | ... | ... | 459 "            |
| Papaw  | ... | ... | ... | ... | 10 "             |
| Pear   | ... | ... | ... | ... | 9 "              |
| Plants for Arbor Day   | ... | ... | ... | ... | 1,977 "          |
| Sapodilla  | ... | ... | ... | ... | 8 "              |
| Shaddock   | ... | ... | ... | ... | 1 "              |

### SEEDS.

|               |     |     |     |     |            |
|---------------|-----|-----|-----|-----|------------|
| Cane          | ... | ... | ... | ... | 2 packets  |
| Guinea corn   | ... | ... | ... | ... | 25 lb.     |
| Miscellaneous | ... | ... | ... | ... | 17 packets |
| Mahogany      | ... | ... | ... | ... | 2 barrels  |
| Woolly pyrol  | ... | ... | ... | ... | 14 gallons |

### PLANTS, ETC., IMPORTED AND DISTRIBUTED LOCALLY.

|                           |     |     |     |     |            |
|---------------------------|-----|-----|-----|-----|------------|
| Grape fruit               | ... | ... | ... | ... | 3 plants   |
| Orange                    | ... | ... | ... | ... | 33 "       |
| Palms                     | ... | ... | ... | ... | 16 "       |
| Seeds of flowering plants | ... | ... | ... | ... | 11 packets |
| Turks Head Cactus         | ... | ... | ... | ... | 14 plants  |
| Vegetable seeds           | ... | ... | ... | ... | 23 packets |
| Juno Peas                 | ... | ... | ... | ... | 5½ quarts  |
| Onion seeds,              | ... | ... | ... | ... | 2¼ lb.     |

### EXPERIMENTS WITH SUGAR CANES.

The results obtained at the various experiment stations with the different varieties of the sugar-cane as well as with the different chemical fertilizers are given in detail in a separate report. It is therefore unnecessary to do more than briefly refer to them here.

During the period under review, experiments were conducted at sixteen estates with the better of the different varieties of the sugar-cane obtained from seed produced locally and from cuttings of seedling and other varieties of the sugar-cane obtained from other countries and grown in comparison with the White Transparent and the B. 6450, as the two standards. These experiments were carried out in duplicate at Cerrington, Coverley, Pine, Waterford and Pickering's plantations in the black soil districts; at Clifton, Clifton Hall, Henley

*Document laid at Meeting of Assembly of 29th October 1918.*

and Lemon Arbor plantations in the red soil districts and at Walkers in the Scotland district. Single experiments were carried out with the two standard sugar-canes and some of the newer varieties at Dodds, Sunbury, Rampton, Hannays, Brighton and Vancluse plantations. At Dodds about eight acres of the most level of the cultivable land are occupied with seedlings in various stages of experimentation. At Summervale canes are grown chess-board fashion to enable natural hybrids to be obtained, and some special varieties are grown in rows for the purpose of obtaining, if possible, artificial hybrids. The new seedling varieties are first grown on lands rented from Waterford plantation and when about two years old the best of them are sent to Dodds and cultivated for some time. As any of these newer varieties prove worthy of extended cultivation they are sent to the various plantations mentioned above to be grown under normal sugar estate conditions. If the results of these latter experiments justify it, the planters are recommended to grow them in small quantities in comparison with the varieties found to do best on their plantations and to gradually extend their cultivation if the results warrant it.

Occasionally when any of the newer seedlings give promise of being of exceptional value, certain of the planters who have from time to time assisted the Department with the sugar-cane experimental work, are asked to take a few cuttings and plant them so as to obtain cuttings for extending their cultivation. In some instances the varieties have proved to be worthy of cultivation but the reverse has also happened. In these latter cases the planters have lost a little financially, but on the whole I think they have benefited.

Sometimes owing to the fact that sugar-canes obtained during one season have to be grown in fields of different fertility, owing to the difficulty of finding sufficient level land in the fields at Dodds, the tables given in the Report do not always bring out clearly the results of the better seedlings when compared with the White Transparent and the B. 6450, the two standards. Further, owing to various reasons, seedling sugar-canes often give returns at first which are not borne out by subsequent results. I have, therefore, been rather chary in the past in calling special attention to any seedlings unless the average results for five years warranted my doing so. In the Report on the Department of Agriculture last year I called special attention to three of the newer seedlings which had given satisfactory results when compared with the two standards. These seedlings are B.H. 10 (12), Ba. 6032 and Ba. 7924. As it may be of interest I give the results obtained with them (in the case of the B.H. 10 (12) and Ba. 7924 for the past five years, and in the case of the Ba. 6032 for the past four years), in Tables I—III. As will be seen therefrom the B.H. 10 (12) grown in the same fields under the same conditions for five years from thirty-six plots gave on the average 2,358lb. of saccharose per acre more than the B. 6450 and 4,113lb. more than the White Transparent; Ba. 6032, grown under similar conditions for four years from sixty-three plots, gave on the average 903lb. of saccharose per acre more than the B. 6450 and 2,892lb. more than the White Transparent; Ba. 7924, grown under similar conditions for five years from thirty plots, gave on the average 765lb. of saccharose per acre more than the B. 6450 and 2,541lb. more than the White Transparent.

There are also four varieties, seedlings of the B. 6450, which have been cultivated for the past three years in comparison with the White Transparent and B. 6450, and which appear worthy of their cultivation being extended. These varieties are B.S.F. 12 (45), B.S.F. 12(34), B.S.F. 12 (27) and B.S.F. 12 (24). The results of these four varieties, as well as the results obtained with the White Transparent and B. 6450, are given in Table IV. As will be seen, B. 6450 gave on the average 2,057lb. of saccharose per acre more than the White Transparent; B.S.F. 12(45) 1,061lb. more than the B. 6450 and 3,118lb. more than the White Transparent; B.S.F. 12(34) 1,291lb. more than the B. 6450 and 3,343lb. more than the White Transparent; B.S.F. 12(27) 2,683lb. more than the B. 6450 and 4,740lb. more than the White Transparent; and B.S.F. 12(24) 3,415lb. more than the B. 6450 and 5,462lb. more than the White Transparent.

Document laid at Meeting of Assembly of 29th October 1918.

**TABLE I.**  
 WHITE TRANSPARENT AND B. 6450 COMPARED WITH B.H. 10 (12) GROWN IN THE SAME FIELDS DURING THE SEASONS  
 1912-14, 1913-15, 1914-16, 1915-17, AND 1916-18.

| Name or No. of cane. | Years.  | No. of experi-<br>ments. | Cases, tons per<br>acre. | Per cent. juice<br>by mill. | NORMAL JUICE.    |          |                        |                   | Increase in sac-<br>charose lb. per<br>acre over<br>V. Transparent. | Increase in sac-<br>charose lb. per<br>acre over B. 6450. |       |
|----------------------|---------|--------------------------|--------------------------|-----------------------------|------------------|----------|------------------------|-------------------|---|---|-------|
|                      |         |                          |                          |                             | Saccha-<br>rose. | Glucose. | Quotient of<br>purity. | Glucose<br>rat o. |   |   |       |
| White Transparent    | 1912-14 | 1                        | 23.59                    | 66.25                       | 2.13             | .040     | 91.81                  | 1.88              | 6,571   |   |       |
|                      | 1913-15 | 1                        | 25.21                    | 65.60                       | 2.01             | .090     | 87.77                  | 4.78              | 6,806   |   |       |
|                      | 1914-16 | 5                        | 34.79                    | 65.01                       | 2.03             | .075     | 89.53                  | 3.09              | 9,469   |   |       |
|                      | 1915-17 | 14                       | 26.14                    | 59.64                       | 2.03             | .065     | 86.88                  | 3.20              | 6,519   |   |       |
|                      | 1916-18 | 15                       | 21.72                    | 58.85                       | 2.04             | .075     | 89.50                  | 3.75              | 5,835   |   |       |
| Mean ...             |         |                          | 26.29                    | 62.85                       | 2.05             | .069     | 89.71                  | 3.46              | 7,000   |   |       |
| B. 6450              | 1912-14 | 1                        | 29.55                    | 68.00                       | 2.16             | .057     | 92.70                  | 2.04              | 8,055   |   |       |
|                      | 1913-15 | 1                        | 25.30                    | 65.09                       | 2.04             | .076     | 89.03                  | 3.73              | 6,932   |   |       |
|                      | 1914-16 | 5                        | 43.04                    | 65.05                       | 1.99             | .064     | 88.82                  | 3.22              | 11,618  |   |       |
|                      | 1915-17 | 14                       | 35.00                    | 61.78                       | 2.05             | .061     | 88.66                  | 2.99              | 9,131   |   |       |
|                      | 1916-18 | 15                       | 27.50                    | 59.82                       | 2.10             | .057     | 89.57                  | 2.91              | 7,069   |   |       |
| Mean ...             |         |                          | 32.08                    | 61.01                       | 2.07             | .063     | 89.77                  | 3.10              | 8,755   |   |       |
| B.H. 10 (12)         | 1912-14 | 1                        | 34.14                    | 67.00                       | 2.33             | .068     | 92.83                  | 2.70              | 10,930  |   |       |
|                      | 1913-15 | 1                        | 30.22                    | 64.30                       | 2.30             | .109     | 88.46                  | 4.74              | 10,987  |   |       |
|                      | 1914-16 | 5                        | 45.26                    | 64.50                       | 2.32             | .054     | 91.70                  | 2.34              | 13,805  |   |       |
|                      | 1915-17 | 14                       | 37.43                    | 61.23                       | 2.33             | .045     | 91.66                  | 1.98              | 10,897  |   |       |
|                      | 1916-18 | 15                       | 31.10                    | 59.15                       | 2.37             | .040     | 92.21                  | 1.72              | 8,915   |   |       |
| Mean ...             |         |                          | 36.83                    | 63.28                       | 2.33             | .062     | 91.37                  | 2.60              | 11,113  |   |       |
|                      |         |                          |                          |                             |                  |          |                        |                   | 1,755   | 4,113   | 2,358 |

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TABLE II.

WHITE TRANSPARENT AND B. 6032 GROWN IN THE SAME FIELDS DURING THE SEASONS 1913-15, 1914-16, 1915-17 AND 1916-18.

| Name or No. of cane. | Years.  | No of experi-<br>ments. | Canes, tons per<br>acre. | Per cent. juice<br>by mill. | NORMAL JUICE.    |                               |                        |                   | Increase in sac-<br>charose lb. per<br>acre over B. 6450. | Increase in sac-<br>charose lb. per<br>acre over White<br>Transparent. |
|----------------------|---------|-------------------------|--------------------------|-----------------------------|------------------|-------------------------------|------------------------|-------------------|---|--|
|                      |         |                         |                          |                             | Saccha-<br>rose. | Lb. per gallon of<br>Glucose. | Quotient of<br>purity. | Glucose<br>ratio. |   |  |
| White Transparent    | 1913-15 | 15                      | 20.44                    | 58.71                       | 1.88             | .074                          | 88.76                  | 3.94              | 4,680   | 903  |
|                      | 1914-16 | 18                      | 30.46                    | 63.51                       | 1.99             | .061                          | 89.84                  | 3.11              | 8,619   |  |
|                      | 1915-17 | 15                      | 26.45                    | 59.73                       | 1.90             | .064                          | 90.12                  | 3.16              | 6,611   |  |
|                      | 1916-18 | 15                      | 21.72                    | 58.85                       | 2.04             | .075                          | 89.50                  | 3.75              | 5,335   |  |
| Mean                 | ...     | ...                     | 24.77                    | 60.08                       | 1.95             | .069                          | 89.56                  | 3.50              | 6,172   | ...  |
| B. 6450              | 1913-15 | 15                      | 26.20                    | 62.51                       | 1.88             | .070                          | 88.54                  | 3.89              | 6,417   | 1,689  |
|                      | 1914-16 | 18                      | 37.67                    | 65.56                       | 1.99             | .057                          | 89.00                  | 2.96              | 10,081  |  |
|                      | 1915-17 | 15                      | 34.07                    | 61.77                       | 2.06             | .060                          | 88.71                  | 2.46              | 9,076   |  |
|                      | 1916-18 | 15                      | 27.50                    | 59.82                       | 2.10             | .057                          | 89.57                  | 2.91              | 7,069   |  |
| Mean                 | ...     | ...                     | 31.51                    | 62.22                       | 2.01             | .061                          | 88.96                  | 3.21              | 8,161   | ...  |
| B. 6032              | 1913-15 | 15                      | 31.77                    | 62.63                       | 1.87             | .071                          | 88.74                  | 3.77              | 7,751   | 2,802  |
|                      | 1914-16 | 18                      | 42.60                    | 64.06                       | 1.92             | .063                          | 89.02                  | 3.55              | 10,992  |  |
|                      | 1915-17 | 15                      | 39.36                    | 61.52                       | 2.00             | .060                          | 89.02                  | 3.02              | 10,001  |  |
|                      | 1916-18 | 15                      | 31.10                    | 57.08                       | 2.05             | .057                          | 90.08                  | 2.81              | 7,501   |  |
| Mean                 | ...     | ...                     | 36.23                    | 61.17                       | 1.93             | .063                          | 89.22                  | 3.24              | 9,064   | ...  |





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TABLE IV (Concluded.)

WHITE TRANSPARENT AND B. 6450 COMPARED WITH B.S.F. 12 (24), B.S.F. 12 (27), B.S.F. 12 (34) AND R.S.F. 12 (45), GROWN AT DODDS IN THE SAME FIELDS DURING THE SEASONS 1914-16, 1915-17, AND 1916-18.

| Name or No. of cane. | Years.  | No of experi-<br>ments. | Cane, tons per<br>acre. | Per cent. juice<br>by mill. | NORMAL JUICE.              |          |                        |                   | Increase in sac-<br>charose lb. per<br>acre over B.<br>6450. |  |
|----------------------|---------|-------------------------|-------------------------|-----------------------------|----------------------------|----------|------------------------|-------------------|--|--|
|                      |         |                         |                         |                             | Lb. per gallon of<br>rose. | Glucose. | Quotient of<br>purity. | Glucose<br>ratio. |  |  |
| B.S.F. 12 (27) ...   | 1914-16 | 1                       | 58.84                   | 65.80                       | 1.82                       | .104     | 88.11                  | 5.71              | 13,370   | Increase in sac-<br>charose lb. per<br>acre over White<br>Transparent. |
|                      | 1915-17 | 1                       | 44.88                   | 58.50                       | 2.05                       | .089     | 86.86                  | 4.84              | 10,094   |  |
|                      | 1916-18 | 1                       | 34.81                   | 59.00                       | 1.97                       | .088     | 87.17                  | 4.21              | 8,267  |  |
| Mean                 |         |                         | 44.49                   | 61.10                       | 1.95                       | .092     | 85.71                  | 4.75              | 10,610   | 4,740  |
| B.S.F. 12 (24) ...   | 1914-16 | 1                       | 49.90                   | 66.75                       | 1.93                       | .098     | 88.13                  | 4.82              | 13,319   | Increase in sac-<br>charose lb. per<br>acre over B.<br>6450.           |
|                      | 1915-17 | 1                       | 44.98                   | 64.25                       | 2.08                       | .071     | 88.65                  | 3.50              | 12,128   |  |
|                      | 1916-18 | 1                       | 36.85                   | 61.25                       | 1.83                       | .109     | 84.72                  | 5.96              | 8,574  |  |
| Mean                 |         |                         | 43.91                   | 64.08                       | 1.93                       | .091     | 87.17                  | 4.76              | 11,342   | 5,172  |

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### MANURIAL EXPERIMENTS.

In addition to the experiments carried out at Dodds with different varieties of the sugar cane, experiments were carried out with different chemical fertilizers; the same fertilizers having now been applied each year for the past twenty-five years, i.e., thirteen times in Bay Tree Field and twelve times in Summervale Field, and the results were becoming more and more valuable as each year went by, up to five years ago, and were indicative of the lines on which sugar canes grown under similar conditions to those obtaining at Dodds should be manured. Unfortunately, however, during the past five years the sugar canes on the manurial plots have been attacked by the larvae of the root borer, *Diaprepes abbreviatus*, L., and the brown hard back, *Phytalus smithi*, Arrow, to such an extent that it is impossible to draw any definite conclusions from the results obtained. Even before the canes were fully matured some were seen to be withering, and these clumps, amounting altogether to forty-five, had to be reaped or they would have died and been lost. From around and in the basal portions of these clumps 238 larvae of the root borer and 160 larvae of the brown hard-back were obtained. As soon as the remainder of the canes were mature they were reaped in the usual manner, and the basal portions of each clump were dug up, cut into pieces, and the larvae, where present in or around such basal portions, were killed. At the same time the old cane holes were dug out two feet square and where possible a foot deep, and all the larvae found in the soil, killed. The following table shows the number of larvae of the root borer and the brown hard-back found in each plot. As will be seen from this table 1,851 root borers and 1,111 brown hard backs were killed.

As will also be seen from the table the number of larvae of root borer and brown hard-back attacking the sugar canes in each plot varied from 130 in the case of Plot B.2 to 475 in the case of Plot A.1. It will thus be understood how impossible it is to compare the results of these experiments for the year under review.

TABLE V.

TABLE SHOWING THE NUMBER OF LARVAE OF THE ROOT BORER, AND THE BROWN HARD-BACK FOUND IN EACH MANURIAL PLOT.

| Plots.           | Root Borer. | Brown hard-back. | Total. | Plots.   | Root borer. | Brown hard-back. | Total. |
|------------------|-------------|------------------|--------|----------|-------------|------------------|--------|
| A. 1             | 181         | 294              | 475    | B. 1...  | 77          | 122              | 199    |
| A. 2             | 80          | 185              | 265    | B. 2...  | 36          | 94               | 130    |
| A. 3             | 75          | 241              | 316    | B. 3...  | 62          | 150              | 212    |
| A. 4             | 90          | 186              | 276    | B. 4...  | 75          | 144              | 219    |
| A. 5             | 83          | 157              | 240    | B. 5...  | 56          | 154              | 210    |
| A. 6             | 106         | 199              | 305    | B. 6...  | 62          | 97               | 159    |
| A. 7             | 76          | 156              | 232    | B. 7...  | 59          | 91               | 150    |
| A. 8             | 50          | 148              | 228    | B. 8...  | 24          | 127              | 151    |
| A. 9             | 59          | 131              | 190    | B. 9...  | 33          | 131              | 164    |
| A. 10            | 92          | 153              | 245    | B. 10... | 59          | 121              | 180    |
| A. 11            | 91          | 167              | 258    | B. 11... | 44          | 152              | 196    |
| A. 12            | 73          | 249              | 322    | B. 12... | 160         | 208              | 308    |
| A. 13 Upper half | 28          | 128              | 156    | ...      | ...         | ...              | ...    |
| A. 13 Lower half | 50          | 126              | 176    | ...      | ...         | ...              | ...    |
|                  | 1,164       | 2,520            | 3,684  |          | 687         | 1,591            | 2,278  |

The monetary loss sustained from the attacks of these pests at present, although the injury is not as great as in some other countries where the same and similar beetle larvae are attacking the sugar canes, is still considerable. To give some idea of what this loss is, as mentioned above, before the sugar canes on the manurial plots at Dodds were fully matured this year, forty-five clumps attacked by 467 larvae of these two pests, had to be reaped as the tops commenced to wither. The average weight of each cane in the withered clumps was 3.75lb. and in spite of the fact that 5,555 larvae were found in the remaining plots

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the average weight of each cane was 4.27 lb. In other words, although a large number of canes in the remaining plots had also been attacked by the two pests, still as a smaller percentage was attacked they weighed on the average 52 lb. per cane more than those in the forty-five clumps, cut first. The loss, therefore, at this rate was 4.42 tons of canes per acre. As the average price received per ton of sugar canes for those sold from the lands of the Government Industrial Schools during 1918 was \$7.63, the minimum loss sustained from the attacks of these pests was \$33.72 per acre.

That these two pests are increasing, it may be stated that in spite of the fact that 2,805 larvae of the root borer and brown hard-back had been destroyed in 1916, when the 1,500 clumps comprising the manurial plots were dug out, cut into pieces, and the old cane holes dug out two feet square and, where possible, one foot deep, yet when the manurial plots were reaped in 1918, 5,962 larvae of the same two pests were similarly dug out and destroyed.

Although the brown hard-back is now known to exist in all the parishes of the island, except one, still very little effort has been made up to the present time by the majority of the planters to collect either this pest or the root borer (both of which are doing so much injury to the sugar canes) during the egg-laying period, or to dig up the stumps and destroy the grubs contained therein. The matter was brought to the notice of the Agricultural Society towards the beginning of this year and a Leaflet, containing recommendations for keeping them in check, was published and distributed to all the planters in the island. Judging from certain information I have received, it would appear that where the beetles are systematically collected, particularly during the egg-laying period, there is a diminution in the number collected the following year. As an example, I may mention that on three estates where the mature insects of both pests were regularly collected during previous years, fewer beetles were found this year than last year, except on the out-kirts of two of the estates which adjoin others, where sufficient attention has not been paid to the matter. On the other hand, the manager of two estates has collected more this year than he did last year, owing, in my opinion, to the fact that he did not have them collected during the whole of the egg-laying period last year.

**SUMMARY OF THE RESULTS OF CERTAIN VARIETIES OF THE SUGAR-CANE AS COMPARED WITH THE WHITE TRANSPARENT.**

As it is most important to the sugar-cane growers as a whole that the results obtained with the better seedling varieties should be compared with the White Transparent, the standard cane, so as to obtain some idea of their comparative values, forms were sent to seventy-one out of the 320 estates in the island, asking for a return of the results obtained with the seedling and other sugar-canes grown for the crop of 1918. Replies this year were received from forty-two estates. Of these, for various reasons, one was of no value, so that the comparative results could only be compiled from forty-one estates. Of these twenty-four were from the black, and seventeen from the red, soil districts. The number of forms sent out this year was considerably less than in previous years, which at one time was over 300. This was due to the fact that so few replies were received in the past in comparison with the number of forms sent out, that this year forms were sent only to those planters who in the past had returned them filled in, together with others who it was thought might possibly this year supply the information asked for.

Owing to the fact that one estate supplying the information did not have scales for weighing the canes, the results have had to be given in gallons of juice per acre.

Before comparing the results it might be as well if attention is called to the fact that the root borer and the brown hard-back are found on a number of estates supplying the information. It is, therefore, probable that the yields per acre of some of the different varieties of sugar-canes have been affected, and so they must be accepted with a certain amount of reserve. As has been already pointed out, the injury caused by these two pests on the manurial plots at Dodds was considerable, and the loss was about 4.42 tons of canes per acre.

**PLANT CANES.**

As will be seen from Table VI-VIII, in the black soil districts, the average yields of the plant canes were as follows, viz., Ba. 6032, from 328.61 acres, 28.51 tons of canes per acre; B.H. 10 (12), from 79.81 acres, 28.20 tons; Ba. 7924, from 8 acres, 26.86 tons; W. No. 2, from 19 acres, 26.5 tons; B.8308, from 21.5 acres, 25.5 tons; B. 6160, from 1643.24 acres, 24.92 tons; White Transparent, from 64

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acres, 24.15 tons; B. 376, from 158.56 acres, 23.98 tons and B. 147, from 10.5 acres 23.67 tons of canes per acre; differences in favour of the Ba. 6032, B.H. 10 (12), Ba. 7924, W. No. 2, B. 6308 and B. 6450 over the White Transparent of 4.36, 4.05, 2.71, 2.35, 1.35 and 0.77 tons of canes per acre respectively. The B. 376 and B. 147 yielded less than the White Transparent by 0.17 and 0.48 tons per acre respectively.

In the red soil districts the average yields of the plant canes were as follows, viz., Ba. 6032, from 31 acres, 32.09 tons of canes per acre; B.H. 10 (12), from 2 acres, 31 tons; B. 6450, from 412.72 acres, 26.85 tons; B. 6308, from 8 acres, 26.47 tons; B. 376, from 254.49 acres, 25.16 tons and the White Transparent, from 9 acres, 16.97 tons of canes per acre; differences in favour of the Ba. 6032, B.H. 10 (12), B. 6450, B. 6308 and B. 376 over the White Transparent of 15.12, 14.03, 9.88, 9.50 and 8.19 tons per acre respectively. On the estate where the juice was measured the average yields were as follows, viz., B.H. 10 (12) from 1 acre, 5,625 gallons of juice. B. 6450, from 3.5 acres, 3,892 gallons; B. 3922, from 5 acres, 3,160 gallons and the White Transparent, from 9.5 acres, 3,029 gallons of juice per acre; differences in yield over the White Transparent of 2,596, 863 and 131 gallons of juice per acre respectively.

**FIRST RATOONS.**

On the black soils the average yields of the first ratoons were as follows, viz., B. 6308, from 10.48 acres, 25.16 tons of canes per acre; Ba. 6032 from 27.49 acres, 21.96 tons; B. 376, from 114.84 acres, 19.31 tons; B. H. 10 (12) from four acres, 18.85 tons; W. No. 2, from 18 acres, 18.8 tons; B. 6450, from 303.34 acres, 17.94 tons and the White Transparent, from 83.5 acres, 14.70 tons of canes per acre; differences in favour of the B. 6308, Ba. 6032, B. 376, B. H. 10 (12), W. No. 2 and B. 6450, when compared with the White Transparent, of 10.46, 7.26, 4.61, 4.15, 4.10 and 3.24 tons per acre respectively.

On the red soils the average yields were as follows, viz., Ba. 6032, from 9 acres, 28.5 tons of canes per acre; B. 376 from 453.65 acres, 23.10 tons; B. 6450, from 283.21 acres, 22.18 tons and the White Transparent, from 6 acres, 13.74 tons of canes per acre; differences in yield over the White Transparent of 12.76, 9.36 and 8.44 tons of canes per acre respectively. In the case where the juice was measured the average yields were as follows, viz., B. 6450, from 3 acres, 5,180 gallons of juice per acre; Ba. 6032, from 7.7 acres, 5,040 gallons; White Transparent, from 4.5 acres, 4,000 gallons and B. 376, from 5 acres, 3,654 gallons of juice per acre; differences in favour of the B. 6450 and Ba. 6032, when compared with the White Transparent, of 1,180 and 1,040 gallons of juice per acre respectively. The B. 376 yielded less than the White Transparent by 346 gallons of juice per acre.

**SECOND RATOONS.**

On the red soils the average yields of the second ratoons were as follows, viz., B. 6450, from 126.53 acres, 20.13 tons of canes per acre; B. 376, from 199.91 acres, 19.63 tons; W. No. 2, from 5.5 acres, 16.73 tons and White Transparent from 3.75 acres, 15.77 tons of canes per acre; differences in yield over the White Transparent of 4.36, 3.86 and 0.96 tons of canes per acre respectively. In the case where the juice was measured the average yields were as follows, viz., B. 376, from 1.75 acres, 3,692 gallons of juice per acre; White Transparent from 3.5 acres, 3,670 gallons and B. 6450, from 10.75 acres, 3,314 gallons of juice per acre; a difference in favour of the B. 376 when compared with the White Transparent of 22 gallons of juice per acre, and in the case of B. 6450, 356 gallons of juice per acre less than the White Transparent.

Although the above gives the results as obtained from the returns sent in from the different estates of each of the varieties grown either in the black or red soil districts as compared with the White Transparent, it would perhaps be fairer in the interest of each variety if it was compared with the White Transparent or B. 6450 where those canes were grown on the same estates and under the same conditions. Take the case of the results of the White Transparent and the B. 6450 in the black soil districts as plant canes. The White Transparent and B. 6450 were grown together on three estates. The average weight of the former from 64 acres was 24.15 tons per acre, and of the latter from 38.5 acres 23.23 tons per acre, a difference in favour of the White Transparent for the three estates of 0.92 tons of canes per acre. If, however, the results are compared on each estate the B. 6450 gave the higher yield. On No. 1 estate the three acres of White Transparent gave an average yield of 18 tons of canes per acre and the three acres of B. 6450, 20 tons of canes per acre. On No. 2 estate the five acres of White Transparent gave an average yield of 17.2 tons of canes per

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acre and the 19 acres of B. 6450, 19.16 tons of canes per acre. On No. 3 estate the 56 acres of White Transparent gave an average yield of 25.1 tons of canes per acre, and the 16.5 acres of B. 6450, 28.5 tons of canes per acre, differences in favour of the B. 6450 of 2, 1.96 and 3.4 tons of canes per acre respectively.

On the two estates reporting the results obtained with the White Transparent and the Ba. 6032, the average yield of the White Transparent from 61 acres was 24.45 tons of canes per acre and the Ba. 6032 from 30.75 acres 28.88 tons of canes per acre, a difference in favour of the Ba. 6032 of 4.43 tons of canes per acre. If, however, the results of each estate are considered separately it will be found that on No. 1 estate from five acres of White Transparent the yield was 17.2 tons of canes per acre while the yield of the Ba. 6032 from 17.75 acres was 24.39 tons of canes per acre. On No. 2 estate from the 56 acres of White Transparent the yield was 25.1 tons of canes per acre, while the yield of the Ba. 6032 from 18 acres was 35 tons of canes per acre; differences in favour of the Ba. 6032 of 7.19 and 9.9 tons of canes per acre respectively.

In the reports for the five previous years estimates were made as to the value to the island of the B.6450, which has for the past several years given such satisfactory results as compared with the White Transparent, the standard cane, and it may not be without interest if a similar estimate is made again this year. Owing to the increase in the price of sugar due to the war, on a great deal of the land on which cotton was cultivated, canes are now grown, therefore the area of canes reaped in 1918 would probably be about 35,000 acres. On comparing the yields of the plants and ratoons in the black and red soil districts, as given in Tables VI and VII, it will be seen that the yields on the average of the B. 6450 over the White Transparent amount to 5.40 tons of canes per acre. The seedling canes B.H.10 (12) and Ba. 6032 have given even greater increases over the White Transparent, therefore I think it may be fairly said that the increased yields of the seedling canes over the White Transparent amount to about five tons of canes per acre. As no factory has this year, so far as I know taken ten tons of canes to make a ton of dark crystal sugar, and as several have taken less, it may be assumed that the increased yield of the seedling sugar-canes over the White Transparent is equal to about half a ton of dark crystal sugar per acre. This would, if the 35,000 acres were all planted in B. 6450 and other of the better seedling sugar-canes, be an increase to the crop of the island of about 17,500 tons of dark crystal sugar. In previous years it has been customary to calculate the increased yield at the average price at which dark crystal sugar sold for the previous twenty years, and at that price, viz., £12 1s. 9d. per ton, the monetary value of the increased yield would not be less than £211,531. If, however, the increase was calculated at the price obtained for dark crystal sugar this year, viz., £19 17s. 7d. per ton, the monetary value of the increased yield would not be less than £347,585.

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TABLE VI.

SUMMARY OF THE RESULTS OF CERTAIN VARIETIES OF THE SUGAR-CANE AS COMPARED WITH THE WHITE TRANSPARENT.

| Name or No. of cane. | No. of estates | Number of acres.    | Total number tons canes. | Average tons canes per acre. | Increase or decrease compared with W. Transparent |
|----------------------|----------------|---------------------|--------------------------|------------------------------|---|
|                      |                | <i>Black Soils—</i> | <i>Plant Canes.</i>      |                              |   |
| Ba. 6032 ...         | 23             | 323.61              | 9224.92                  | 28.51                        | + 4.36  |
| B.H. 10 (12) ...     | 11             | 79.31               | 2236.57                  | 28.20                        | + 4.05  |
| Ba. 7924 ...         | 5              | 8.00                | 214.87                   | 26.86                        | + 2.71  |
| W. No. 2 ...         | 1              | 19.00               | 503.50                   | 26.50                        | + 2.35  |
| B. 6308 ...          | 3              | 21.56               | 548.35                   | 25.50                        | + 1.35  |
| B. 6450 ...          | 22             | 1643.24             | 40953.52                 | 24.92                        | + .77   |
| W. Transparent ...   | 3              | 64.90               | 1545.60                  | 24.15                        | ...   |
| B. 376 ...           | 11             | 158.56              | 3802.38                  | 23.98                        | - .17   |
| B. 147 ...           | 1              | 10.50               | 248.50                   | 23.67                        | - .18   |
|                      |                | <i>Black Soils—</i> | <i>First Ratoons.</i>    |                              |   |
| B. 6308 ...          | 3              | 10.48               | 263.69                   | 25.16                        | + 10.46   |
| Ba. 6032 ...         | 8              | 27.49               | 603.79                   | 21.96                        | + 7.26  |
| B. 376 ...           | 6              | 114.84              | 2217.50                  | 19.31                        | + 4.61  |
| B.H. 10 (12) ...     | 2              | 4.00                | 75.39                    | 18.85                        | + 4.15  |
| W. No. 2 ...         | 1              | 18.00               | 338.40                   | 18.80                        | + 4.10  |
| B. 6450 ...          | 13             | 303.34              | 5441.49                  | 17.94                        | + 3.24  |
| W. Transparent ...   | 1              | 82.50               | 1227.45                  | 14.70                        | ...   |

TABLE VII.

SUMMARY OF THE RESULTS OF CERTAIN VARIETIES OF THE SUGAR-CANE AS COMPARED WITH THE WHITE TRANSPARENT.

| Name or No. of cane. | No. of estates. | No. of acres.     | Total number tons canes. | Average tons canes per acre. | Increase or decrease compared with W. Transparent |
|----------------------|-----------------|-------------------|--------------------------|------------------------------|---|
|                      |                 | <i>Red Soils—</i> | <i>Plant Canes.</i>      |                              |   |
| Ba. 6032 ...         | 6               | 31.00             | 994.84                   | 32.09                        | + 15.12   |
| B. H. 10(12) ...     | 1               | 2.00              | 62.30                    | 31.00                        | + 14.03   |
| B. 6450 ...          | 16              | 412.72            | 11082.54                 | 26.85                        | + 9.88  |
| B. 6308 ...          | 3               | 8.00              | 211.74                   | 26.47                        | + 9.50  |
| B. 376 ...           | 14              | 354.49            | 3919.31                  | 25.16                        | + 8.19  |
| W. Transparent ...   | 2               | 9.00              | 152.74                   | 16.97                        | ...   |
|                      |                 | <i>Red Soils—</i> | <i>First Ratoons.</i>    |                              |   |
| Ba. 6032 ...         | 3               | 9.00              | 238.50                   | 26.50                        | + 12.76   |
| B. 376 ...           | 14              | 453.65            | 10480.02                 | 23.10                        | + 9.36  |
| B. 6450 ...          | 16              | 283.11            | 6281.53                  | 22.18                        | + 8.44  |
| W. Transparent ...   | 1               | 6.00              | 82.46                    | 13.74                        | ...   |
|                      |                 | <i>Red Soils—</i> | <i>Second Ratoons.</i>   |                              |   |
| B. 6450 ...          | 11              | 125.53            | 2526.50                  | 20.13                        | + 4.36  |
| B. 376 ...           | 11              | 199.91            | 3923.52                  | 19.63                        | + 3.86  |
| W. No. 2 ...         | 1               | 5.50              | 92.00                    | 16.73                        | + .96   |
| W. Transparent ...   | 1               | 3.75              | 59.14                    | 15.77                        | ...   |

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**TABLE VIII.**

SUMMARY OF THE RESULTS OF CERTAIN VARIETIES OF THE SUGAR-CANE AS COMPARED WITH THE WHITE TRANSPARENT.

| Name or No. of cane. | No. of estates. | No. of acres. | Total number gallons of juice. | Average number gallons of juice per acre. | Increase or decrease compared with W. Transparent |
|----------------------|-----------------|---------------|--------------------------------|---|---|
|                      | <i>Red</i>      | <i>Soils—</i> | <i>Plant Canes.</i>            |   |   |
| B. H. 10(12) ...     | 1               | 1.00          | 5,625                          | 5,625                                     | + 2,596   |
| B. 6450 ...          | 1               | 3.50          | 13,620                         | 3,892                                     | + 863   |
| B. 8922 ...          | 1               | 5.00          | 15,800                         | 3,160                                     | + 131   |
| W. Transparent ...   | 1               | 9.50          | 28,776                         | 3,029                                     | ...   |
|                      | <i>Red</i>      | <i>Soils—</i> | <i>First Ratoons.</i>          |   |   |
| B. 6450 ...          | 1               | 3.00          | 15,540                         | 5,180                                     | + 1,180   |
| Ba. 6082... ..       | 1               | .77           | 3,281                          | 5,040                                     | + 1,040   |
| W. Transparent ...   | 1               | 4.50          | 18,000                         | 4,000                                     | ...   |
| B. 376 ...           | 1               | .50           | 1,827                          | 3,654                                     | - 346   |
|                      | <i>Red</i>      | <i>Soils—</i> | <i>Second Ratoons.</i>         |   |   |
| B. 376 ...           | 1               | 1.75          | 6,161                          | 3,692                                     | + 22  |
| W. Transparent ...   | 1               | 3.50          | 12,845                         | 3,670                                     | ...   |
| B. 6450 ...          | 1               | 19.75         | 35,625                         | 3,314                                     | - 356   |

EXPERIMENTS WITH BA. 6082, B.H. 10 (12) W. NO. 2, B. 6450, AND WHITE TRANSPARENT AT WATERFORD PLANTATION.

During the year under review an experiment on a somewhat larger scale than those usually carried out by the Department was carried out by Messrs. F. A. O. Collymore and E. W. Mahon at Waterford plantation with four seedling sugar-canes in comparison with the White Transparent. As the results obtained are exceedingly interesting, these gentlemen have been good enough to allow me to publish them. The experiments consisted of four half-acre plots each of Ba. 6082, B. H. 10(12), W. No. 2 and B. 6450 and were grown under similar conditions to four half-acre plots of the White Transparent. Owing to the size of the factory it was impossible to measure the juice of each lot of sugar-canes separately, consequently the quantity of juice obtained per acre could not be ascertained. The results obtained are shown in Table IX.

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**TABLE IX.**

EXPERIMENTS WITH BA. 6032, B.H. 10 (12), W. NO. 2, B. 6450 AND W. TRANSPARENT AT WATERFORD PLANTATION.

| Name or No. of cane.        | Cane, tons per acre. | 30° C.  |        | Lb. per gallon of |          |                   | Quotient of purity. | Glucose ratio. | Increase over W. Transparent in tons canes per acre. |
|-----------------------------|----------------------|---------|--------|-------------------|----------|-------------------|---------------------|----------------|--|
|                             |                      | Sp. Gr. | 16° C. | Saccharose.       | Glucose. | Solids not sugar. |                     |                |  |
| Ba. 6032 Mean of four plots | 39.75                | 1.0749  |        | 1.81              | .071     | .175              | 88.07               | 3.91           | 13.57  |
| B.H. 10 (12) " " ...        | 37.15                | 1.0817  |        | 2.01              | .057     | .166              | 90.03               | 2.84           | 10.97  |
| W. No. 2 " " ...            | 33.05                | 1.0752  |        | 1.85              | .047     | .158              | 90.03               | 2.53           | 6.87   |
| B. 6450 " " ...             | 30.95                | 1.0755  |        | 1.83              | .056     | .176              | 88.71               | 3.09           | 4.77   |
| W. Transparent " " ...      | 26.18                | 1.0721  |        | 1.74              | .067     | .171              | 87.98               | 3.87           | ...  |

As will be seen from the table the Ba. 6032, B. H. 10(12), W. No. 2 and B. 6450 gave increased yields over the White Transparent of 13.57, 10.97, 6.87 and 4.77 tons of canes per acre respectively. As about nine tons of these sugar canes would be sufficient to produce a ton of sugar, the increases over the White Transparent would be equivalent to 1.5, 1.22, 0.76 and 0.53 tons of sugar per acre respectively. At \$4.40, the average price at which dark crystal sugar sold in 1918, the value of the increased yields from the Ba. 6032, B.H. 10 (12), W. No. 2 and B. 6450 over the White Transparent would be \$147.84, \$120.12, \$75.24, and \$52.23 per acre respectively.

**EXPERIMENTAL ERROR.**

The experiments started during the reaping season of 1912 for the purpose of ascertaining what is the probable error incident to carrying out the sugar-cane experiments in Barbados were continued this year. For this purpose the two centre rows of four four-row plots of Ba. 6032 alongside one another in Lower Garden field at Summervale plantation, where the whole field had been treated in the same manner, were reaped separately, the juice analysed, and the results calculated to the acre like all the seedling variety experiment plots. The results are given in Table X.

Owing to the experiment mill at the Government Laboratory breaking after the plots were reaped, the sugar canes from these plots had to be crushed at Wildey and it was impossible owing to the delay that would have occurred to measure the juice from each sample of sugar-cane. It has therefore been necessary this year to calculate the difference in the yield from the weight of the sugar-canes per acre. As will be seen from the table the difference in the yields of the plot which was highest and that which was lowest amounted this year to 7.62 tons, or 20.4 per cent. Further, the difference between the highest yield and the average of the four plots was 5.05 tons, or +1.65 per cent., and between the lowest yield and the average of the four plots was 2.57 tons or -6.44 per cent.

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**TABLE X.**

RESULTS OF THE EXPERIMENTS STARTED TO ASCERTAIN THE PROBABLE ERROR INCIDENT TO CARRYING OUT THE SUGAR-CANE EXPERIMENTS FOR THE SEASONS 1916-1918.

| Name or No. of cane. |      |     |     | Canes, tons per acre. | Saccharose lb. per gallon. | Glucose lb. per gallon. | Per cent. above or below the average which is 39.93 tons canes per acre. |
|----------------------|------|-----|-----|-----------------------|----------------------------|-------------------------|--|
| Ba. 6032             | Plot | I   | ... | 38.73                 | 1.98                       | .093                    | - 3.01   |
| Ba. 6032             | Plot | II  | ... | 38.65                 | 1.95                       | .081                    | - 3.21   |
| Ba. 6032             | Plot | III | ... | 44.98                 | 1.98                       | .074                    | + 12.65  |
| Ba. 6032             | Plot | IV  | ... | 37.36                 | 2.00                       | .068                    | - 6.44   |

As the experiments have now been carried on for seven years, it may not be without interest if the mean results obtained for the seven years are given. These results are given in Table XI.

As will be seen from the table, the difference for the seven years between the mean yields of the plots which were highest and those which were lowest amounted to 1.56 tons of canes per acre, a difference of 5.30 per cent; further, that the difference between the highest and the average of the four plots for the seven years was 0.49 tons, or 1.58 per cent., and between the lowest and the average 1.07 tons, or 3.63 per cent. During the seven years Plots II which have given the highest yield in three years out of the seven, in one year (1915) gave the lowest yield.

**TABLE XI.**

MEAN RESULTS OF THE EXPERIMENTS STARTED TO ASCERTAIN THE PROBABLE ERROR INCIDENT TO CARRYING OUT THE SUGAR-CANE EXPERIMENTS IN BARBADOS FOR THE SEVEN YEARS 1912-1918.

|       |     |     |     | Canes, tons per acre. | Saccharose lb. per gallon. | Glucose, lb. per gallon. | Per cent. above or below the average which is 30.51 tons canes per acre. |
|-------|-----|-----|-----|-----------------------|----------------------------|--------------------------|--|
| Plots | I   | ... | ... | 30.89                 | 1.97                       | .069                     | 1.23   |
| Plots | II  | ... | ... | 31.00                 | 1.97                       | .063                     | 1.58   |
| Plots | III | ... | ... | 30.70                 | 1.98                       | .065                     | 0.62   |
| Plots | IV  | ... | ... | 29.44                 | 1.97                       | .063                     | 3.63   |

### THE COTTON INDUSTRY.

The cotton experiments for improving the quality and increasing the quantity of lint from the varieties of Sea Island cotton grown in Barbados were continued this year. These experiments were carried out in two series. In the first series an effort is being made by a selection of the best formed plants giving heavy yields of good quality lint to improve the Sea Island, certain indigenous and other varieties of cotton. In the second series an effort is being made in the same manner to improve a number of hybrid cottons that have been obtained by crossing some of the improved varieties with some of the indigenous cottons. The methods by which these selections are carried out have been given in previous reports, and it is, therefore, unnecessary to include them here. The method by which the lint is examined has also been given in previous reports so there is no need to reproduce it in this one. The experiments in the first series, of which there were 122, were carried out on lands rented from Waterford

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plantation, and at Dodds and Summervale; and are given in Tables XII—XIV. To give some idea of the value of each variety as a crop producer, the quantity is calculated to the acre. Any variety that fails to give satisfactory results is discarded; and during the past season twenty-six varieties have been discarded.

In the report for last year it is mentioned that seed of cotton grown from specially selected seed was distributed to certain growers and that three bales containing 1,706 lb. of lint free from admixture with other strains of cotton were to be sent to the British Cotton Growing Association for sale, and that Mr. J. W. McConnel, a Member of the Fine Cotton Spinners' and Doublers' Association, Ltd., who had reported very favourably on a sample of the cotton from which the seeds were used for growing the three bales of cotton, (vide report for 1915-16) was to be asked to purchase it, if possible, and to report on it after it was worked up. Owing, however, to the fact that the cotton was commandeered for the use of the Admiralty the proposed arrangement fell through.

The small quantity of seed of five lock cotton that was presented by Mr. J. L. Fonda in 1915 is still being grown with the object of trying to improve the quality of the lint and for the purpose of ascertaining whether greater yields can be obtained than from the ordinary three lock cottons under experiment.

## COTTON HYBRIDS.

In the second series of experiments the cotton hybrids were regrown from seeds of the best plants obtained in previous years.

As will be seen from Table XV showing the results obtained with the hybrids, both H. 6944 and H. 131 have given higher yields than they did the previous year.

## INDIGENOUS COTTONS.

Owing to the deterioration that has taken place in the varieties of exotic cottons introduced during recent years, it was decided to try and improve some of the best of the cottons that have survived from by-gone years when cotton was grown on a commercial scale. The 131 lots that were first planted in 1912 have been gradually reduced, and for the season under review only fifteen lots were planted. The improvement of these cottons, as has been mentioned before, is a slow process and it will be some time before a really good variety of cotton giving heavy yields of good quality lint will be obtained. It may, however, be mentioned that the average length of these cottons last year was 38.2 mm. while the average length this year was 45.8 mm. The length of the longest sample last year was 41.9 mm. and this year 49.3 mm. In addition to the above there was half an acre of a variety of cotton grown from seed of an indigenous cotton plant obtained in 1908.

## NATIVE COTTON.

The native cotton mentioned in last year's report which was obtained from Dr. C. E. Gooding, M.C.P., who had grown it from a "wild" cotton, is still keeping true to type and is, so far, free from the attacks of all insect pests and fungoid diseases, with the exception of the cotton caterpillar, the attacks of which are very slight. Half an acre of land at Dodds was planted this year with seed obtained from last year's picking, and the yield was 904 lb. of seed cotton per acre, a greater weight than was obtained from any of the other cottons. A sample of this cotton was submitted last year to Mr. C. M. Wolstenholme, of the firm of Messrs. Wolstenholme and Holland, to whom the Department is greatly indebted for his kindness in examining and reporting on the various samples that are sent him every year. This gentleman stated that "the colour and grade is extremely good, staple regular, rather rough. Fairly strong."

TABLE XII.

REPORT ON THE EXAMINATION OF COTTON FROM THE SELECTION EXPERIMENT PLOTS OF THE DEPARTMENT OF AGRICULTURE, BARBADOS, 1918.

| Name or No. of cotton.      | Description of plant, habit, height, &c.   | Prevalence of insect attack.                              | Prevalence of fungoid disease.                 | Lint per acre, lb. | Average length of staple, mm. | Week lbs. per acre. | Per cent. of lint. | Average diameter of fibres. | Strength of fibres. |
|-----------------------------|--|---|--|--------------------|-------------------------------|---------------------|--------------------|-----------------------------|---------------------|
| Stirling S.I. (S.S. 1 a 11) | Reclining; height, 5' 6"; stem, medium size; basal laterals, 3; bolls, medium size, long, round, and pointed; distribution, fairly general.      | Cotton caterpillar very slight.                           | Angular leaf-spot very slight.                 | 218                | 46.9                          | 10.8                | 27.7               | .0161                       | Str.                |
| Fonda (five lock A.)        | Slightly reclining; height, 5'; stem, medium size; basal laterals, 1; bolls, medium size, long, round and pointed; distribution, fairly general. | Cotton caterpillar slight.                                | Angular leaf-spot moderate; round spot slight. | 90                 | 47.2                          | 12.8                | 25.0               | .0161                       | Str.                |
| Fonda (five lock B.)        | Upright; height, 5' 6"; stem, medium size; basal laterals, 3; bolls, medium size, round and pointed; distribution, fairly general.               | Leaf blister mite slight; cotton caterpillar very slight. | Angular leaf-spot slight.                      | 218                | 45.9                          | 13.6                | 26.8               | .0167                       | Str.                |
| Dodds Sea Island            | Upright; stem, medium size; basal laterals, 2 to 4; bolls, medium size, long, round, and pointed; distribution, general.                         | Cotton caterpillar slight.                                | Round spot and mildew slight.                  | 405                | 49.1                          | 9.6                 | 25.2               | .0162                       | Str.                |

TABLE XIII.

REPORT ON THE EXAMINATION OF INDIGENOUS COTTON FROM THE SELECTION EXPERIMENT PLOTS OF THE DEPARTMENT OF AGRICULTURE, BARBADOS, 1918.

| Name or No. of variety. | Description of plant, habit, height, &c.   | Prevalence of insect attack. | Prevalence of fungoid disease. | Lint per acre, lb. | Average length of staple, mm. | Weak fibres, per cent. | Per cent. of lint. | Average diameter of fibres. | Strength of fibres. |
|-------------------------|--|------------------------------|--------------------------------|--------------------|-------------------------------|------------------------|--------------------|-----------------------------|---------------------|
| I.C. 12                 | Upright; height, 6'; stem, medium size; basal laterals, 3; bolls, medium size, round and pointed; distribution, general.                                 | Cotton caterpillar slight.   | Free.                          | 116                | 41.0                          | 19.6                   | 25.0               | 0.167                       | F. str.             |
| I.C. 85 (a)             | Slightly reclining; height, 6'; stem, large; basal laterals, 8; bolls, medium size, round and pointed; distribution, fairly general.                     | Free.                        | Free.                          | 384                | 47.2                          | 8.5                    | 23.4               | 0.160                       | Str.                |
| I.C. 85 (b)             | Slightly reclining; height, 7' 8"; stem, large; basal laterals, 3 and several small; bolls, medium size, long and pointed; distribution, fairly general. | Free.                        | Free.                          | 649                | 45.9                          | 12.2                   | 26.7               | 0.168                       | F. str.             |
| I.C. 85 (c)             | Slightly reclining; height, 6' 5"; stem, large; basal laterals, 1 and several small; bolls, medium size, long and pointed; distribution, fairly general. | Free.                        | Free.                          | 380                | 45.7                          | 12.8                   | 26.4               | 0.162                       | F. str.             |
| I.C. 85 (d)             | Slightly reclining; height, 5' 5"; stem, medium size; basal laterals, 2; bolls, medium size, long and pointed; distribution, general.                    | Free.                        | Free.                          | 566                | 49.3                          | 8.5                    | 28.0               | 0.161                       | Str.                |

TABLE XIV.

REPORT ON THE EXAMINATION OF NATIVE COTTON FROM THE SELECTION EXPERIMENT PLOTS OF THE DEPARTMENT OF AGRICULTURE, BARBADOS, 1918.

| Name or No. of variety. | Description of plant, habit, height, &c.  | Prevalence of insect attack.    | Prevalence of fungoid disease. | Lint per acre, lb. | Average length of staple, m.m. | Weak fibres, per cent. | Per cent. of lint. | Average diameter of fibres. | Strength of fibres. |
|-------------------------|---|---------------------------------|--------------------------------|--------------------|--------------------------------|------------------------|--------------------|-----------------------------|---------------------|
| P.N. 1...               | Upright; height, 7'; stem, large; basal laterals, 4; bolls, medium size, round and pointed; distribution, general.    | Free.                           | Free.                          | 270                | 39.4                           | 19.9                   | 19.7               | .0187                       | F. 11               |
| P.N. 2...               | Upright; height, 6' 6"; stem, large; basal laterals, 2; bolls, medium size, round and pointed; distribution, general. | Cotton caterpillar very slight. | Free.                          | 158                | 37.7                           | 21.4                   | 17.1               | .0153                       | F. 5 1/2            |
| P.N. 3...               | Upright; height 7'; stem, large; basal laterals, 3; bolls, medium size, round and pointed; distribution, general.     | Free.                           | Free.                          | 135                | 34.4                           | 19.6                   | 15.4               | .0163                       | F. 5 1/2            |
| P.N. 6...               | Upright; height, 7' 3"; stem, large; basal laterals, 3; bolls, medium size, round and pointed; distribution, general. | Free.                           | Free.                          | 248                | 39.3                           | 20.6                   | 17.5               | .0165                       | F. 5 1/2            |
| P.N. 7...               | Upright; height, 7'; stem, large; basal laterals, 4; bolls, medium size, round and pointed; distribution, general.    | Free.                           | Free.                          | 180                | 39.0                           | 21.5                   | 17.0               | .0159                       | F. 5 1/2            |
| P.N. 8...               | Upright; height, 6' 8"; stem, large; basal laterals, 2; bolls, medium size, round and pointed; distribution, general. | Cotton caterpillar very slight. | Free.                          | 315                | 30.7                           | 21.8                   | 17.1               | .0165                       | F. 5 1/2            |
| P.N. 9...               | Upright; height, 7'; stem, large; basal laterals, 2; bolls, medium size, round and pointed; distribution, general.    | Free.                           | Free.                          | 225                | 37.8                           | 19.4                   | 21.2               | .0160                       | F. 5 1/2            |

TABLE XV.

TABLE SHOWING THE CHARACTER, FREEDOM FROM DISEASE, YIELD &amp;c., OF THE COTTON HYBRIDS NOW UNDER CULTIVATION.

| Names or No. of plant. | Generation. | Year. | Insect pests.  | Fungoid and bacterial diseases.                     | Seed cotton per acre, lb. | Lint per acre, lb. | Average length of staple, mm. | Per cent. of weak fibre. | Per cent. of lint. | Strength. |
|------------------------|-------------|-------|--|---|---------------------------|--------------------|-------------------------------|--------------------------|--------------------|-----------|
| H. 0944                | F1          | 1910  | Free, ...  | Angular leaf spot, slight.                          | 2,894                     | 645                | 488                           | 20.2                     | 22.8               | Str.      |
| H. 0944                | F2          | 1911  | Free, ...  | Angular leaf spot, slight.                          | 2,006                     | 584                | 44.9                          | 24.8                     | 22.4               | Str.      |
| H. 0944                | F3          | 1912  | Aphis and cotton caterpillar.                                | Angular leaf spot and round spot, slight.           | 4,115                     | 944                | 38.9                          | 18.5                     | 22.8               | Str.      |
| H. 0944                | F4          | 1913  | Leaf-bliester mite, bad.                                     | Angular leaf spot and round spot, moderate.         | 2,889                     | 945                | 39.1                          | 25.8                     | 32.8               | Str.      |
| H. 0944                | F5          | 1914  | Leaf-bliester mite, moderate.                                | Angular leaf spot, slight; round spot, moderate.    | 1,808                     | 518                | 44.2                          | 16.9                     | 27.7               | Str.      |
| H. 0944                | F6          | 1915  | Leaf-bliester mite, very slight; cotton caterpillar, slight. | Mildew, slight; round spot, very slight.            | 1,617                     | 419                | 45.1                          | 22.7                     | 25.8               | Str.      |
| H. 0944                | F7          | 1916  | Cotton caterpillar, slight.                                  | Angular leaf spot, very slight; round spot, slight. | 2,914                     | 765                | 46.8                          | 18.2                     | 26.6               | F. str.   |
| H. 0944                | F8          | 1917  | Free, ...  | Angular leaf spot and round spot, slight.           | 1,283                     | 338                | 44.5                          | 8.4                      | 27.6               | F. str.   |
| H. 0944                | F9          | 1918  | Cotton caterpillar, very slight.                             | Angular leaf spot and round spot, slight.           | 1,719                     | 465                | 44.4                          | 14.4                     | 26.9               | Str.      |
| H. 131                 | F1          | 1915  | Free, ...  | Mildew and round spot, slight.                      | 1,493                     | 386                | 47.9                          | 13.1                     | 25.9               | F. str.   |
| H. 131                 | F2          | 1916  | Free, ...  | Mildew and round spot, slight.                      | 1,598                     | 398                | 46.9                          | 14.4                     | 24.5               | F. str.   |
| H. 131                 | F3          | 1917  | Cotton caterpillar, very slight.                             | Angular leaf spot, slight; round spot, very slight. | 810                       | 74                 | 48.6                          | 12.5                     | 24.1               | Str.      |
| H. 131                 | F4          | 1918  | Cotton caterpillar and aphis, very slight.                   | Angular leaf spot and round spot, moderate.         | 1,051                     | 815                | 46.8                          | 11.3                     | 30.1               | Str.      |

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### CASSAVA EXPERIMENTS.

The experiments with the different varieties of cassava obtained from other countries, as well as those grown from seed obtained locally, were continued during the year under review. The average weights per acre of those which were considered worthy of further trial are given in Table XVI. As will be seen therefrom, the three varieties obtained from seed in 1910, viz., B. 101, B. 1010 and B. 1012, still continue to give satisfactory results.

TABLE XVI.

RESULTS OF EXPERIMENTS WITH CASSAVA.

| Variety.   | Mean results per acre for five years,<br>1911-15 and 1916-17.<br>lb. | Results per acre<br>for 1917-18.<br>lb. |
|--|--|---|
| <b>Sweet Varieties.</b>  |  |   |
| Special ... ..   | *7,566   | 6,060                                   |
| Trinidad No. 2 ... ..  | 7,038  | 6,146                                   |
| Panama ... ..  | 6,050  | 1,708                                   |
| Trinidad No. 1 ... ..  | 5,348  | 5,598                                   |
| Helada ... ..  | 4,902  | 2,988                                   |
| <b>Bitter Varieties.</b>   |  |   |
| White Greenaway ... ..   | 12,238   | 8,550                                   |
| Blue Top ... ..  | 11,007   | 8,248                                   |
| <b>Barbados Seedlings.<br/>Mean results for five years,<br/>1911-15 and 1916-17.</b> |  |   |
| Barbados No. 101 ... ..  | 11,026   | 9,281                                   |
| Barbados No. 1010 ... ..   | 9,399  | 9,309                                   |
| Barbados No. 1012 ... ..   | 9,155  | 5,779                                   |
| <b>Mean results per acre for<br/>1914-15 and 1916-17.</b>                            |  |   |
| Barbados No. 1224 ... ..   | 9,618  | 8,180                                   |
| Barbados No. 124 ... ..  | 8,460  | 1,485                                   |
| Barbados No. 129 ... ..  | 8,400  | 1,962                                   |

\* For one year only 1916-17.

### EXPERIMENTS WITH ECONOMIC COLOCASIAE.

The experiments with the varieties of Xanthosomas and Colocasias that have given the best results in the past, were continued during the season under review. Table XVII shows the results obtained with the Colocasias and Table XVIII the results obtained with the Xanthosomas. As will be seen from these tables, the best results were obtained when the Xanthosomas were grown from corms, but in the case of the Colocasias the best results were obtained when cormels were used for planting purposes.

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TABLE XVII.

RESULTS OF EXPERIMENTS WITH ECONOMIC COLICASIARAE 1911-18.

| Name.              | Weight per acre,<br>lb. corms.       |          | Weight per acre,<br>lb. cormels.     |          | Mean weight per<br>acre for 7 years.<br>lb. |          |
|--------------------|--------------------------------------|----------|--------------------------------------|----------|---|----------|
|                    | Total<br>for<br>6 years,<br>1911-17. | 1917-18. | Total<br>for<br>6 years,<br>1911-17. | 1917-18. | Corms.                                      | Cormels. |
| China Eddoe ...    | 5,847                                | 1,407    | 13,803                               | 4,599    | 965   | 2,129    |
| White Seal Top ... | *2,777                               | 2,139    | *8,558                               | 5,102    | †1,639                                      | †4,553   |

\* Total for two years only 1915-17.  
† Mean for three years only 1915-18.

TABLE XVIII.

RESULTS OF EXPERIMENTS WITH ECONOMIC XANTHOSOMAS, 1911-1918.

| Name.                   | Weight per acre,<br>lb. corms.       |          | Weight per acre,<br>lb. cormels.     |          | Mean weight per<br>acre for 7 years.<br>lb. |          |
|-------------------------|--------------------------------------|----------|--------------------------------------|----------|---|----------|
|                         | Total<br>for<br>6 years,<br>1911-17. | 1917-18. | Total<br>for<br>6 years,<br>1911-17. | 1917-18. | Corms.                                      | Cormels. |
| Blanco ...              | 17,798                               | 3,648    | 17,677                               | 3,643    | 3,574                                       | 3,553    |
| Nut Eddoe ...           | 8,374                                | 2,709    | 11,835                               | 3,634    | 2,771                                       | 3,867    |
| Grey Jack ...           | 21,985                               | 3,212    | 21,439                               | 3,967    | 3,587                                       | 3,629    |
| Banana Tannia ...       | 23,329                               | 3,165    | 17,954                               | 3,070    | 3,785                                       | 3,003    |
| Rolliza ...             | 23,396                               | 3,882    | 22,240                               | 3,475    | 3,925                                       | 3,674    |
| Barbados Roasting Eddoe | 22,251                               | 4,195    | 14,618                               | 3,318    | 4,408                                       | 3,587    |
| Mistletoe Tannia ...    | 24,465                               | 3,946    | 15,263                               | 2,633    | 4,059                                       | 2,983    |
| Genebrilla ...          | 21,112                               | 3,788    | 11,402                               | 3,913    | 3,557                                       | 3,053    |

1 Total for 5 years only 1911-12 and 1913-17.  
2 " " 3 " " 1914-17.  
3 " " 5 " " 1911-14 and 1915-17.  
4 " " 5 " " 1912-17.  
5 " " 4 " " 1912-13 and 1914-17.  
6 Mean " 6 " " 1911-12 and 1913-18.  
7 " " 4 " " 1914-18.  
8 " " 6 " " 1911-14 and 1915-18.  
9 " " 6 " " 1912-18.  
10 " " 5 " " 1912-13 and 1914-18.

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### EXPERIMENTS WITH VARIOUS LEGUMINOSAE.

A number of beans and peas, etc., were grown again this year of both those suitable for green manuring and for edible purposes, with the object of ascertaining, in the case of the edible varieties, if the yield per acre justified their being cultivated on a large scale by planters. A number of seeds of some of the best varieties were distributed during the period under review. The results of the experiments are shown in Table XIX. I regret, however, to state that again this year the returns are not strictly accurate, owing to the depredations of the prædial thief. During the year under review one was caught and a conviction obtained against her. It is greatly to be regretted that owing to the prædial larcenist, the experiments with the various leguminosae cannot be carried out to a satisfactory conclusion.

TABLE XIX.

RESULTS OF EXPERIMENTS WITH LEGUMINOUS CROPS, 1911-18.

| Name.                | Weight per acre, unshelled, lb. |          | Weight per acre, shelled, lb. |          | Mean weight per acre, unshelled, for seven years, lb. | Mean weight per acre, shelled, for seven years, lb. |
|----------------------|---------------------------------|----------|-------------------------------|----------|---|---|
|                      | Total for 6 years 1911-17.      | 1917-18. | Total for 6 years 1911-17.    | 1917-18. |   |   |
| Canada No. 1 ...     | 4,785                           | 295      | 2,034                         | 180      | 719   | 316   |
| Canada No. 2 ...     | 4,252                           | 66       | 2,205                         | 45       | 617   | 321   |
| Cocal Pea ...        | *1,528                          | 1,377    | *728                          | 657      | †726  | †346  |
| Porto Rico No. 4 ... | 5,496                           | 2,258    | 2,586                         | 1,276    | 1,108   | 552   |
| Increase Pea ...     | 5,021                           | 789      | 2,264                         | 404      | 823   | 381   |
| Velvet Bean ...      | ‡2,802                          | 896      | ‡1,713                        | 554      | ‡925  | ‡567  |
| Clay Pea ...         | ...                             | 2,774    | ...                           | 1,497    | §2,774  | §1,497  |
| Iron Pea ...         | ...                             | 2,423    | ...                           | 1,211    | §2,423  | §1,211  |
| Whipperwill Pea ...  | ...                             | 1,882    | ...                           | 1,105    | §1,882  | §1,105  |
| Red Tipper ...       | ...                             | 1,244    | ...                           | 712      | §1,244  | §712  |
| Black Pea ...        | ...                             | 1,211    | ...                           | 720      | §1,211  | §720  |
| Martinique Pea ...   | ...                             | 777      | ...                           | 503      | §777  | §503  |
| New Era Pea ...      | ...                             | 623      | ...                           | 390      | §623  | §90   |
| Taylor Pea ...       | ...                             | 548      | ...                           | 335      | §548  | §335  |
| Black Bean ...       | ...                             | 425      | ...                           | 290      | §425  | §290  |
| Dolichos sp. ...     | ...                             | 267      | ...                           | 158      | §267  | §158  |

\* Total for three years only, 1914-17.

† Mean for four " " 1914-18.

‡ Total for three " " 1913-16.

§ One year only 1917-18.

|| Mean for four " " 1913-16 and 1917-18.

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### YAMS.

The results of the experiments with the different varieties of yams cultivated during the year under review are given in Table XX.

A number were distributed for planting purposes, on the same conditions as those mentioned in last year's report, to persons interested, and it is hoped that before long the cultivation of the better varieties will be fairly well established throughout the island. As will be seen from the table, Bottle Neck Lisbon gave the highest yield per acre this year, followed closely by the Femelle.

TABLE XX.

RESULTS OF EXPERIMENTS WITH YAMS.

| Name.                     | Weight per acre, lb.        |          | Mean weight per acre for 7 years, lb. |
|---------------------------|-----------------------------|----------|---------------------------------------|
|                           | Total for 6 years, 1911-17. | 1917-18. |                                       |
| Femelle ... ..            | 54,220                      | 12,640   | 9,551                                 |
| Blanche Femelle ... ..    | 57,609                      | 9,168    | 5,540                                 |
| Bottle Neck Lisbon ... .. | 35,090                      | 12,960   | 6,864                                 |
| Grenada ... ..            | 28,443                      | 4,744    | 4,741                                 |
| Lisbon ... ..             | 29,354                      | 9,191    | 12,848                                |
| Red Yam ... ..            | 38,479                      | 10,629   | 12,277                                |
| Crop ... ..               | 31,036                      | 6,110    | 8,191                                 |
| White Yam ... ..          | 8,585                       | 6,488    | 5,018                                 |
| Antigua ... ..            | 18,820                      | 7,632    | 4,410                                 |
| Oriental ... ..           | 15,382                      | 7,167    | 11,275                                |
| Seal Top ... ..           | 8,509                       | 5,124    | 6,817                                 |
| Pale Red Yam ... ..       | 6,757                       | 4,879    | 3,879                                 |

|    |                         |                      |
|----|-------------------------|----------------------|
| 1  | Total for one year only | 1916-17.             |
| 2  | " " two "               | 1915-17.             |
| 3  | " " three "             | 1914-17.             |
| 4  | " " five "              | 1912-17.             |
| 5  | " " five "              | 1911-15 and 1916-17. |
| 6  | Mean " two "            | 1916-18.             |
| 7  | " " three "             | 1915-18.             |
| 8  | " " four "              | 1914-18.             |
| 9  | " " six "               | 1912-18.             |
| 10 | " " six "               | 1911-15 and 1916-18. |

### SWEET POTATOES.

During the year under review experiments were carried out with the object of ascertaining whether it was possible to preserve sweet potatoes from decay for any length of time, but so far without satisfactory results.

### FODDERS.

During the year under review an experiment was carried out with two grasses, viz., Soudan grass and *Panicum divaricatissimum*, and a variety of Sorghum. Two cuttings were obtained from each plot. The results are shown in Table XXI. As will be seen, the Soudan grass gave a very satisfactory yield of about 7½ tons per acre, and was followed closely by *Panicum divaricatissimum*. This latter grass has been under cultivation now for about three years, during which time it has consistently given satisfactory yields. It may therefore be now tried tentatively on the sugar estates for feeding the animals.

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**TABLE XXI.**

**RESULTS OF EXPERIMENTS WITH FODDERS.**

| Name.                    | No. of times cut during 1917-8. | Weight per acre, lb. |
|--------------------------|---------------------------------|----------------------|
| Soudan Grass             | 2                               | 16,352               |
| Panicum divaricatissimum | 2                               | 15,040               |
| Sorghum shallu           | 2                               | 10,624               |

**ONIONS.**

An offer was made again this year through the press to import onion seed for persons desirous of obtaining it, and orders were received for 1½ lb. of white and 4½ lb. of red onion seed. The delivery of the seed was again delayed, owing to the very unsettled conditions prevailing in the sailing of the various steamships due to the war, and it did not arrive until about the middle of January. The germination of the seed which was tested, proved, however, to be very satisfactory, that of the red being 92 per cent. and that of the white 96 per cent. It is therefore probable that had the seed been received at the proper time the yield would have been good and as the price at which onions sold was high during 1917-18, being at one time as much as 36 cents per pound, the results would have been satisfactory.

**MANGOES.**

During the period under review 143 grafted mango plants were distributed. At the time of writing a number of orders have already been received for more of these plants.

**LIVE STOCK.**

I regret to have to report that the larger donkey sire, El Rey, which the Governor-in-Executive Committee presented to the Barbados General Agricultural Society, died during the year under review.

The smaller donkey sire, Don Cavalero, which belongs to a syndicate of planters, continues on service and a number of foals have been born, not only to this sire, but also to the one that belonged to the Barbados General Agricultural Society. It is, however, impossible to obtain an accurate account of their number.

With regard to the Holstein and Jersey bulls and cows which were imported in 1910 through the auspices of the Department of Agriculture, it may be stated that while a large number of cows and a few bulls of the Holstein strain especially are to be seen, it is impossible to state the number of descendants of the imported animals.

As has been mentioned in previous reports, owing to the high infantile mortality of the peasants, an effort has been made to reduce it by stationing bucks of improved breeds of goats in different districts of the Island, with the object of giving them an opportunity to breed their does to strains of higher milk-producing capabilities. At the present time there are seven such bucks stationed, one each, at Bourbon, St. Lucy; Castle, St. Peter; Bissex Hill, St. Joseph; Seawell, Christ Church; Bayleys, St. Philip; and Pine and Codrington, St. Michael.

**ARBOR DAY.**

This year Arbor Day was observed on August 6, the August Bank Holiday, and 1,977 plants were distributed for planting on that day. As is customary a list of the plants available for distribution was published in the Official Gazette, and the Editors of some of the local newspapers were good enough to call atten-

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tion to the fact that any one desirous of observing Arbor Day could obtain plants for that purpose, by applying to the Superintendent of Agriculture. The following is a list of the plants that were offered for distribution :—

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Achras Sapote, Linn.              | Ficus nitida, Blume.                 |
| Adenantha pavonina, Linn.         | Garcia nutans, Rohr.                 |
| Andira inermis, H.B. & K.         | Gliricidia maculata, H. B. & K.      |
| Anona squamosa, Linn.             | Grevillea robusta, A. Cunn.          |
| Anona muricata, Linn.             | Guaiacum officinale, Linn.           |
| Bauhinia sp.                      | Guaiacum sanctum, Linn.              |
| Bahunia malabarica, Roxb.         | Haematoxylon campechianum, Linn.     |
| Blighia sapida, Kon.              | Jacaranda Caerulea, Jues.            |
| Caesalpinia pulcherrima, Sw.      | Lonchocarpus violaceus, H. B. & K.   |
| Calliandra haematocephala, Hassk. | Malpighia glabra, Linn.              |
| Carapa guianensis, Aubl.          | Melicocca bijuga, Linn.              |
| Cassia bacillaris, Linn.          | Mimusops Elengi, Linn.               |
| Cassia Fistula, Linn.             | Pandanus utilis, Bory.               |
| Cassia grandis, Linn.             | Parmentiera cereifera, Seem.         |
| Cassia sp.                        | Paullinia barbadensis, Jacq.         |
| Cassia sp. (yellow flowers).      | Peltophorum Vogelianum, Walp.        |
| Cassia marginata, Roxb.           | Peltophorum Linnaei, Benth.          |
| Cassia multijuga, Rich.           | Piscidia Erythrina, Linn.            |
| Cassia siamea, Lam.               | Pithecolobium latifolium, Benth.     |
| Casuarina equisetifolia, Forst.   | Pithecolobium saman, Benth.          |
| Casuarina stricta, Dryand.        | Platymiscium polystachyum, Benth.    |
| Cedrela odorata, Linn.            | Prosopis juliflora, DC.              |
| Chrysophyllum Cainito, Linn.      | Poinciana regis, Boj.                |
| Cochlospermum Gossypium, DC.      | Pterocarpus indicus, Willd.          |
| Colvillea racemosa, Boj.          | Putranjiva Roxburghii, Wall.         |
| Coffea liberica, Hiern.           | Sesbania grandiflora, Boir.          |
| Copaifera officinalis, Linn.      | Sterculia carthaginensis, Cav.       |
| Cordia Sebestena, Linn.           | Sterculia fulgens, Wall.             |
| Cordia sulcata, DC.               | Swietenia macrophylla, King in Hook. |
| Gupressus glauca, Lam.            | Swietenia Mahagoni, Jacq.            |
| Eperua grandiflora, Benth & Hook. | Tecoma chrysantha, DC.               |
| Eriodendron anfractuosum, DC.     | Terminalia arjuna, Wight & Arn.      |
| Ficus Benjamin, Linn.             | Wrightia coccinea, Sims.             |
| Ficus elastica, Roxb.             |                                      |

**HERBARIUM.**

During this year a number of specimens of indigenous plants were collected and placed in the herbarium. As the specimens now to be added to the collection are mainly those that grow in the gullies in the central parts of the island it has been impossible, owing to press of more important work, to undertake their collection during the year under review.

**LOCAL AGRICULTURAL SHOW.**

This year the Local Agricultural Show for peasant proprietors and others was held on Wednesday, December 5, at Lancaster Plantation, St. James, kindly lent for the occasion by Mr. J. H. Wilkinson, the proprietor, and Mr. G. C. Edghill, the attorney. Two hundred and eighty-nine prizes, amounting to £32 2s. 1d. were offered for exhibits of young oxen, milch cows, small stock, vegetables, fruit, starches, Sea Island cotton, budded and grafted citrus and mango plants, etc. Ninety prizes were offered to the children of the elementary schools for plants grown by them in half-barrels, tubs, pots, and boxes and for collections of articles grown in their school gardens. Seeds of the various vegetables cultivated in Barbados such as beet, carrots, cabbages, lettuce, tomatoes, beans, etc., were as usual imported and distributed (with the kind assistance of the Committee of management and others), free of cost to the peasants, small proprietors, and to teachers for the children of the elementary schools. The Education Board again contributed to the purchase of the seed, the amount given by them this year being £2 2s. 11½d. Four hundred and nine exhibits were sent in from the elementary schools competing, and from these eighty-eight were awarded prizes from the following eleven schools, viz., Holy Innocents nineteen, St. Joseph Church Boys' thirteen, Hilloby twelve, St. Thomas Church nine, Southborough eight, Mount Tabor seven, St. James Church six, St. Bernard six, St. Georges Church three, St. Matthias three, Greenwich Infant two. Eighteen prizes were offered in Class VIII the for



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In the afternoon the Governor, Sir Leslie Probyn, K.C.M.G., accompanied by Lady Probyn, visited the Show, and after inspecting the exhibits, His Excellency was good enough to distribute the prizes. After the prizes had been distributed the Superintendent of Agriculture asked those present to join with him in thanking the Governor and Lady Probyn for their presence and His Excellency for being so good as to distribute the prizes. Referring to the exhibits he said that he was very glad to be in a position that afternoon to say that they were on the whole very creditable and he congratulated the masters of the elementary schools on the increase in the number of exhibits sent in by the children of their schools, and the manner in which they had been prepared and staged. He also commented on the interest shown by them as well as the children in agricultural work. He then asked those present to join with him in giving three cheers to the Governor and Lady Probyn for the interest they always took in these Shows, which was heartily responded to.

The Reverend J. R. Nichols seconded the vote of thanks to His Excellency and supported what had been said by the Superintendent of Agriculture. He also drew attention to the fact that the Education Board also supported any efforts made in the cause of agriculture, and had this year awarded five prizes for exhibits of practical agricultural work performed by the children of the elementary schools.

The Governor in acknowledging the vote of thanks that was accorded him, mentioned that it was the seventh occasion on which he had given away the prizes and that the Show was the best he had so far attended. He availed himself of the opportunity of calling attention to the fact that the best way of trying to defeat the Kaiser, who was trying to starve them, was for everyone to grow as much food as possible because if even they got a great deal of money for cane grown on their land it would not be of much value if there were no foodstuffs to be bought. He also said that he was very glad to see that such progress had been made by the school children, and he believed that this was but the beginning of a great change in the present educational system.

**CANADIAN EXHIBITION.**

The Permanent Exhibition Committee having decided in 1916 that it was not desirable, owing to the very unsettled conditions prevailing due to the war, for the Colony to take part in the National Exhibition that is held annually at Toronto, Canada, no exhibits were forwarded during the year under review. It may, however, be mentioned that a number of framed photographs of views of the island, bottles and other containers of a number of exhibits were loaned the Royal Mail Steam Packet Company for their stall at that Exhibition by the Permanent Exhibition Committee.

**FUMIGATION OF PLANTS.**

From April 1, 1917 to March 31, 1918, 220 consignments of plants and seeds other than cotton seed were examined. Of these five were either fumigated or disinfected and twelve consignments which had been imported in contravention of the order promulgated by the Governor-in-Executive Committee were destroyed. During the period under review sixty consignments of cotton seed amounting to 68,741 bags were fumigated by the Hygeia. In addition there were twenty-eight bags which were imported for planting purposes, fumigated at the Department of Agriculture.

**INSECT PESTS AND FUNGOID DISEASES, ETC.**

As has been mentioned in previous reports of the Department, special attention is given to the various insect pests and fungoid diseases that attack the crops of the island. After an Assistant Superintendent of Agriculture was appointed, this officer, who usually carries out the entomological and mycological work of the Department, prepared a special report on these two branches of the activities of the Department every year. As Mr. J. S. Dash, the late Assistant Superintendent, resigned at the end of the last financial year the duty of dealing with these two branches of work this year has devolved on the Superintendent of Agriculture.

It is with great regret that I have to report that the injuries caused to the sugar cane by the root borer, *Diaprepes abbreviatus*, Linn. and the brown hard-back, *Phytalus smithi*, Arrow, are increasing in intensity in certain districts of the island where little or no effort has been made in the past to destroy the egg batches and mature insects of the former and the mature insects of the latter.

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In other districts of the island where the injury done by these two pests was hardly noticeable a few years ago, the damage done by them now is quite appreciable and the areas attacked are being gradually extended. As the matter is one of very great importance to the sugar growers, the increase in the injuries done by these two pests was brought to the notice of the Barbados General Agricultural Society by the Superintendent of Agriculture and the late Governor wrote, through the Colonial Secretary, to the Agricultural Society asking whether it was not desirable that the Legislature should be asked to pass an Act making it compulsory for the owners of land on which the root borers and brown hard backs are found to collect and destroy them. As, however, a leaflet containing a resumé of the life histories of these two pests, with recommendations for keeping them in check had, at the request of the Society, been recently prepared and distributed by the Superintendent of Agriculture to all the planters in the island, the Society decided that it was undesirable at that time for any legislative action to be taken in the matter, but to wait and see whether the leaflet would have the effect of inducing sugar growers to collect and destroy the pests. That the injury done by the two pests is rendering the results of the manurial experiments, carried on for the benefit of the sugar industry, practically valueless may be seen by the following table.

TABLE XXII.

TABLE SHOWING THE NUMBER OF THE LARVAE OF THE ROOT BORER AND BROWN HARD-BACKS COLLECTED FROM THE BASAL PORTIONS OF THE SUGAR-CANES ON THE MANURIAL EXPERIMENT PLOTS IN BAY TREE FIELD AT DODDS FOR THE SEASON 1916-18.

| No. of Plot.         | No. of holes dug. | No. of Diaprepes abbreviatus per plot. | No. of Phytalus smithi per plot. | No. of Diaprepes abbreviatus per acre. | No. of Phytalus smithi per acre. | Total.  |
|----------------------|-------------------|--|----------------------------------|--|----------------------------------|---------|
| A. 1 ...             | 60                | 181                                    | 294                              | 3,651                                  | 5,930                            | 9,581   |
| A. 2 ...             | 60                | 80                                     | 185                              | 1,014                                  | 3,731                            | 5,345   |
| A. 3 ...             | 60                | 75                                     | 241                              | 1,513                                  | 4,861                            | 6,374   |
| A. 4 ...             | 60                | 90                                     | 186                              | 1,815                                  | 3,752                            | 5,567   |
| A. 5 ...             | 60                | 83                                     | 157                              | 1,674                                  | 3,167                            | 4,841   |
| A. 6 ...             | 60                | 106                                    | 199                              | 2,138                                  | 4,014                            | 6,152   |
| A. 7 ...             | 60                | 76                                     | 156                              | 1,333                                  | 3,147                            | 4,680   |
| A. 8 ...             | 60                | 80                                     | 148                              | 1,614                                  | 2,985                            | 4,599   |
| A. 9 ...             | 60                | 59                                     | 131                              | 1,190                                  | 2,642                            | 3,832   |
| A. 10 ...            | 60                | 92                                     | 153                              | 1,856                                  | 3,086                            | 4,942   |
| A. 11 ...            | 60                | 91                                     | 167                              | 1,885                                  | 3,368                            | 5,208   |
| A. 12 ...            | 60                | 73                                     | 249                              | 1,472                                  | 5,022                            | 6,494   |
| A. 13 Upper half ... | 30                | 28                                     | 128                              | 1,129                                  | 5,162                            | 6,291   |
| A. 13 Lower half ... | 30                | 50                                     | 126                              | 2,017                                  | 5,082                            | 7,099   |
| H. 1 ...             | 60                | 77                                     | 122                              | 1,553                                  | 2,461                            | 4,014   |
| B. 2 ...             | 60                | 36                                     | 94                               | 726                                    | 1,896                            | 2,622   |
| B. 3 ...             | 60                | 62                                     | 150                              | 1,251                                  | 3,026                            | 4,277   |
| B. 4 ...             | 60                | 75                                     | 144                              | 1,513                                  | 2,904                            | 4,417   |
| B. 5 ...             | 60                | 56                                     | 154                              | 1,186                                  | 3,166                            | 4,236   |
| B. 6 ...             | 60                | 62                                     | 97                               | 1,251                                  | 1,956                            | 3,207   |
| B. 7 ...             | 60                | 59                                     | 91                               | 1,190                                  | 1,835                            | 3,025   |
| B. 8 ...             | 60                | 24                                     | 127                              | 484                                    | 2,562                            | 3,046   |
| B. 9 ...             | 60                | 33                                     | 131                              | 666                                    | 2,642                            | 3,308   |
| B. 10 ...            | 60                | 59                                     | 121                              | 1,190                                  | 2,441                            | 3,631   |
| B. 11 ...            | 30                | 44                                     | 152                              | 837                                    | 3,066                            | 3,953   |
| B. 12 ...            | 60                | 100                                    | 208                              | 2,017                                  | 4,195                            | 6,212   |
| Total ...            | 1,500             | 1,851                                  | 4,111                            | 38,909                                 | 88,039                           | 126,948 |
| Average ...          | ...               | 71.20                                  | 158.12                           | 1,497                                  | 3,386                            | 4,883   |

As will be seen from the above table there was an average of 1,497 root-borers and 3,386 brown hard-backs collected per acre from the manurial plots. In the case of the root borer, these varied when calculated to the acre from 484 in Plot B. 8 to 3,651 in Plot A.1 and in the case of the brown hard-back from 1,885 per acre in Plot B. 7 to 5,980 in Plot A. 1. On the last occasion that the canes in this field (Lower Bay Tree) were reaped there were collected on the average 1,338 root borers and 967 brown hard-backs per acre. In the case of the root borer these varied from 222 in Plot A. 8 to 2,924 in Plot A. 1, and in the case of the brown hard-backs from 121 in Plot B. 2, to 2,902 in Plot A. 1. It will be observed that the number of the larvae of the root borer and brown hard-back collected from the bases of the sugar-canes and from the soil immediately surrounding them was 2,333 on the previous occasion when sugar-canes were grown in Bay Tree field and 4,883 for this year (1918), that is, an increase of over 100 per cent. This is probably due to the fact that the mature insects were not collected at Dodds from July 10 to October 22, 1917, nearly three and a half months. The estimated loss caused by the two pests has already been given in the first part of this Report so there is no need to refer in detail to it again, but it may be mentioned that in the case of the manurial plots it amounted to about \$33.72 per acre. Not only are the sugar canes about the island nearing maturity injured by the attacks of these two pests, but in some instances where the latter are numerous the young sugar canes are also badly attacked. To give an instance, it may be mentioned that on one estate eighty per cent. of the young canes were killed, while almost as fast as the supply cuttings were put in they were, for some time, attacked.

The collection of the root borers and brown hard-backs was as usual carried out on the lands rented from Waterford plantation for use in connection with the growth of the First Year Seedling sugar-canes, but in spite of the fact that every effort is made to reduce their numbers by systematically collecting the mature insects and by digging out the old cane holes two feet square and one foot deep and killing all the larvae found in the soil, the numbers are increasing, owing to the fact that the pests come in from the adjoining lands. To such an extent were some of the clumps of the new seedlings attacked that a number of them were killed before reaching maturity. This is greatly to be regretted as the attacks of these pests are seriously handicapping the work of the Department of Agriculture in obtaining new varieties of the sugar cane.

### PLANT INSPECTION AND FUMIGATION.

The usual examination, fumigation and, where necessary, the destruction of plants imported into the island was carried out by the Assistant Superintendent of Agriculture, and in his unavoidable absence, by other members of the staff. All cotton seed imported for the extraction of oil and for the manufacture of cotton seed meal was as usual fumigated with sulphur dioxide. That the fumigation of cotton seed by this gas is not effective, it may be mentioned that on more than one occasion during the year under review, live moths and beetles were found on cotton seed after it was fumigated in the holds of the vessels bringing it to the island. Reports were made at the time to the Honourable the Colonial Secretary for the information of His Excellency the Governor.

In addition to the above, a number of plants attacked by insect pests and fungoid diseases were sent in for examination and report. Among these was a specimen of the White Transparent sugar cane, which proved to be attacked by the fungus, *Colletotrichum falcatum*. It will be remembered that it was the White Transparent that took the place of the Bourbon when that cane succumbed to the attacks of this fungus, and which was for many years apparently immune to its attacks. Indeed on many occasions, when they were growing together in the same hole, the Bourbon cane was badly attacked while the White Transparent was free from the fungus. Several stools of dying sugar canes sent in by planters, were found to be badly attacked by the moth borer, *Diatraea saccharalis* and the leaf sheath fungus, *Cercospera vaginæ*. As it has been observed that a number of the planters use cuttings attacked by the leaf sheath fungus for planting purposes, it is hardly to be wondered at that a great many sugar canes attacked by this disease are seen about the island. Other stools of dying sugar canes sent in were found to be attacked by the root fungus, *Marasmius sacchari*. As in many instances cuttings of sugar canes with the mycelium of the fungus adhering to them are used for planting purposes, it is to be expected that clumps

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of canes killed by the fungus will occur. Clumps of sugar canes attacked by the larvae of the root borer were also sent in. On one estate caterpillars of a moth were found to be eating the leaves of about three acres of young canes. A number of the caterpillars were collected and bred out in the insectary, when some were found to be parasitized by a Tachinid fly. Specimens of both the moth and the fly were sent to Dr. G. A. K. Marshall of the Imperial Bureau of Entomology for identification and he has been good enough to inform the writer that the moth is *Cirphis microgonia*, Hamp., and the fly, *Peleteria robusta*, Wied. The parasitism of the Tachinid fly, combined with dusting the young canes with Paris green, soon checked the attacks of the caterpillars.

At the country residence of a gentleman a number of trees attacked by scale insects were sprayed with spores of *Cephalosporium lecanii* suspended in water. A subsequent examination of the trees proved that a large number of the green scale *Coccus viridis* were attacked by the fungus.

**UPKEEP OF COLLECTIONS.**

A number of specimens have been added to the collection of insects, etc. during the year, and the thanks of the Department are due to Dr. Marshall for his kindness in identifying those sent him. Among the Coleopterous specimens was one new to science which he has named *Germariella boveli*, Marshall, after John C. Bovell, the son of the writer, who was the first person to collect a specimen.

In July 1916 Mr. H. A. Ballou, M. Sc., Entomologist to the Imperial Department of Agriculture, who was leaving for Egypt, forwarded to the Superintendent of Agriculture a letter he had received from Professor A. Berlese, Entomologia Agraria Di Firenze, Italy, asking that specimens of *Chrysomphalus dictyospermi* be sent him as he was of the opinion that in all probability a parasite was keeping it in check. As this Coccid is rather difficult to find it was not until July 1917 that specimens were obtained. These were found to be parasitized and after some of the parasites had been bred out specimens were sent to Dr. Berlese, who has informed the writer that as the parasite is new to science it had been named *Aphelinus boveli*, Melen., in remembrance of the finder.

The following is a list of the other specimens sent to Dr. Marshall:—

**ORDER—COLEOPTERA.****FAMILY—TENEBRIONIDAE.**

*Alphitobius piceus*, Oliv.

From cotton seed, a cosmopolitan species, not infrequently found in flour.

**FAMILY—CURCULIONIDAE.**

*Artipus corycaeus*, Sahlb.

Eating leaves of lime.

**FAMILY—SCOLYTIDAE.**

*Cryphalus* sp. (not in B.M.)

Boring in twigs of mango.

**FAMILY—LAMIIDAE.**

*Lepturgus guadeloupensis*, Fl. & S.

Boring in twigs of mango.

**FAMILY—BRUCHIDAE.**

*Bruchus incarnatus*, Bob.

In Bonavist beans from Egypt.

*Bruchus* sp.

Too much damaged for identification.

*Bruchus analis*, F.

In imported peas.

*Caryoborus gonager*, F.

An introduced Asiatic species.

**FAMILY—DYNASTIDAE.**

*Cyclocephala signata*, Drury.

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FAMILY—EUMOLPIDAE.

*Myochrous armatus*, Baly.

From Trinidad; previously recorded as eating leaves of sugar-cane, both in Trinidad and Barbados.

FAMILY—CURCULIONIDAE.

*Germariella bovelli*, Marshall.

ORDER—DIPTERA.

FAMILY—TACHINIDAE.

*Peleteria robusta*, Wied.

Parasitic on *Cirphis Mycrogonia*, Hmp.

FAMILY—SAPROMYZIDAE.

*Sapromyza maculosa*, Will.

ORDER—HYMENOPTERA.

FAMILY—APIDAE.

*Megachile concinna*, Smith.

ORDER—LEPIDOPTERA.

FAMILY—NOCTUIDAE.

*Cirphis mocragonia*, Hmp.

Larvae attacking leaves of sugar-cane.

FAMILY—PYRALIDAE.

*Galleria mellonella*, L.

The wax moth; a cosmopolitan pest.

ORDER—RHYNCHOTA.

FAMILY—COCCIDAE.

*Diaspis echinocacti opuntiae*, Ckll.

On cactus,

*Aspidiotus cydoniae*, Comst.

On oleander.

*Lepidosaphes alba*, Ckll.

On cassava.

FAMILY—LYGAEIDAE.

*Oncopeltus fasciatus*, Dail.

**INFORMATION ON VARIOUS AGRICULTURAL MATTERS  
SUPPLIED TO THE PRESS.**

Through the courtesy of the Editors of the local newspapers the following subjects were brought to the notice of agriculturists.

On June 6, advising the sugar planters that steps should be taken for the efficient collection of the beetles of *Phytalus smithi* throughout the island.

On July 17, informing the public that the Governor had appointed August 6 to be observed as Arbor Day, and inviting applications for young trees grown at the Nurseries of the Department of Agriculture for planting on that day.

On August 21, calling the attention of the planters to seaweed as a source of potash.

On November 30, calling attention to the Peasants' Local Agricultural Exhibition to be held at Lancaster Plantation, St. James, on Wednesday, December 5.

On March 12, 1918, informing the public that the Superintendent of Agriculture was willing to import onion seed from Tenerife for those desirous of obtaining it for planting purposes.

**SUGAR AND MOLASSES CROPS.**

For the sugar and molasses crops of 1917 there were exported, according to the Customs Returns, 34,770 tons of vacuum pan crystals, 17,190 tons of musco-

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vado sugar and 9,400,166 wine gallons of molasses, equal at 110 gallons per puncheon, to 85,456 puncheons of molasses of all grades, of the total value of £1,579,275, made up as follows:

|                      |                       |   |            |
|----------------------|-----------------------|---|------------|
| Yellow crystal sugar | 859 tons valued at    | £ | 7,180      |
| White " "            | 8 " " "               |   | 200        |
| Dark " "             | 84,403 " " "          |   | 688,060    |
| Muscovado " "        | 17,190 " " "          |   | 360,990    |
|                      | 51,960                |   | £1,056,430 |
| Fancy molasses       | 6,604,410 gallons " " | £ | 385,257    |
| Choice " "           | 2,167,170 " " "       |   | 112,873    |
| Vacuum Pan " "       | 828,586 " " "         |   | 15,715     |
|                      | 9,400,166             |   | £ 518,845  |

Fancy molasses is concentrated cane juice from which most of the impurities have been removed, and owing to the impossibility in the ordinary muscovado sugar factories of concentrating each bayche or panful of Fancy molasses to the same density, it is difficult to say how many gallons of this molasses are equivalent to a ton of muscovado sugar. However from data obtained from various sources it would appear that 880 wine gallons of Fancy molasses at 41° Baumé are equivalent to one ton (2240lb.) of centrifugal muscovado sugar and 115 wine gallons of Choice molasses. At this rate the Fancy molasses manufactured in 1917 is equivalent to 17,380 tons of sugar. The total sugar crop, therefore, if no Fancy molasses had been made, would have been 69,340 tons, 4,241 tons less than the previous year.

**COTTON CROP.**

During the "Cotton Year," i.e. from October 1st 1916 to September 30th 1917, there were exported from 980 acres 142 bales of lint and 3 bales and three bags of "Linters," weighing 76,296lb. of the estimated value of £8,213. In addition there were 187,704lb. of seed of the estimated value of £700, all of which was, with the exception of that used for planting purposes, manufactured locally into oil and undecorticated cotton seed meal. It may be mentioned that for the previous year there were 1,078 acres of cotton which yielded 244 bales of lint, weighing 182,733lb. of the estimated value of £8,889. The yield of lint per acre for the season 1916-17 was 78lb. as compared with 123lb. for 1915-16.

**METEOROLOGY.**

The following are summaries of the observations recorded at the Government Meteorological Station for the year 1917, the details of which are given in Appendix I.

*Barometric pressure.* During 1917 the mean pressure, corrected for temperature and gravity and reduced to sea level, was at 9 a.m. 29.979 inches and at 3 p.m. 29.906 inches; the highest recorded being 30.098 inches on February 5, and the lowest 29.730 inches on September 14. In 1911 for the first time the barometric pressure was corrected for gravity. For the ten years 1907-1916 the average barometric pressure was at 9 a.m. 29.936 inches and at 3 p.m. 29.872 inches. The highest pressure at 9 a.m. during the ten years was on February 16, 1908, when it was 30.088 inches, and the lowest at 3 p.m. on November 2, 1914 when it was 29.675 inches.

*Temperature.* The mean maximum temperature for the year 1917 was 84.7°F. and the mean minimum 71.1°F. The maximum extreme for the year which was 96.7°F was registered on May 1, 5, 12 and 21, and June 18, and the minimum extreme, which was 61.8°F., was registered on March 28. The mean average temperature was 77.8°F.; the highest monthly range for the year was 21.0°F., the lowest was 15.9°F., and the mean monthly range 18.9°F. For the ten years 1907-1916 the average maximum temperature was 84.2°F. and the average minimum 75.3°F. The average maximum extreme during the ten years was 87.1°F., the average minimum extreme 68.0°F., the average mean temperature was 79.8°F., and the average range 19.1°F. During the ten years the maximum extreme was 90.1°F., on September 28, 1912, and the minimum extreme 61.0°F. on February 29, 1911.

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*Tension of Vapour and Relative Humidity.* The mean tension of vapour for the year 1917 was at 9 a.m. '688 and at 3 p.m. '669. For the ten years 1907-1916 the average tension of vapour was at 9 a.m. '726 and at 3 p.m. '716. The mean relative humidity for the year 1917 was at 9 a.m. 66 and at 3 p.m. 63. For the ten years 1907-1916 the average relative humidity was at 9 a.m. 66 and at 3 p.m. 66.

*Wind.* The mean velocity of the wind during 1917 was 11.5 miles per hour, the maximum average for a twenty-four hour day being 22.7 miles per hour on March 1 and 3 and the minimum 2.8 miles per hour on September 1st. The average velocity for the ten years ended 1916 was 11.4 miles per hour.

*Rainfall.* The rainfall measured at the Government Meteorological Station during 1917 amounted to 50.58 inches. This fell on 172 days, the greatest fall being 2.49 inches on December 25, and the lowest .01 of an inch on February 13, 14, 16, 22, and 25, May 22, 31, June 27 and 30, October 27, November 15 and 23, and December 7. For the ten years 1907-1916 the average rainfall was 45.65 inches and the average number of days on which rain fell was 169.

*Rainfall of the Island.* The total mean rainfall for the year 1917 from 140 stations was 66.61 inches which fell on 162 days and was 4.98 inches above the average for the sixty-six years ended December 31, 1916, which was 61.63 inches. The details with respect to the number of days on which rain fell at each of the stations during each month of the year, the total rainfall for each month, and, in a number of instances, the height of the rain-gauge above sea-level, are given in Appendix II.

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**APPENDIX I.**  
**METEOROLOGICAL REPORT FOR 1917.**  
 DEPARTMENT OF AGRICULTURE, BARBADOS.  
 HEIGHT ABOVE SEA-LEVEL, 181 FEET.

| Months.       | Barometric pressure reduced to sea-level, 82° Fahrenheit, and corrected for gravity. |         |         |         | Temperatures. |               |               |                  |                  |   |                 |                  |                  |                  | Tension of vapour. |        |       | Humidity. |        | Wind. |        | Rainfall for 1917. |       | Number of days on which rain fell. |        |        |       |        |
|---------------|--|---------|---------|---------|---------------|---------------|---------------|------------------|------------------|---|-----------------|------------------|------------------|------------------|--------------------|--------|-------|-----------|--------|-------|--------|--------------------|-------|------------------------------------|--------|--------|-------|--------|
|               | 9 a.m.   | 3 p.m.  | Mean.   | Lowest. | Highest.      | Maximum Mean. | Minimum Mean. | Maximum Extreme. | Minimum Extreme. | Maximum bar-<br>ometer bulb & ft. from ground in vacuo. | Mean for month. | Range for month. | Dew point 9 a.m. | Dew point 3 p.m. | 9 a.m.             | 3 p.m. | Mean. | 9 a.m.    | 3 p.m. | Mean. | 9 a.m. | 3 p.m.             | Mean. |                                    | 9 a.m. | 3 p.m. | Mean. | 9 a.m. |
| January ...   | 29-980   | 29-971  | 29-975  | 29-960  | 29-980        | 82.8          | 68.7          | 88.5             | 64.9             | 119.6   | 75.5            | 19.5             | 64.9             | 63.4             | 916                | 588    | 602   | 66        | 59     | 68    | 13.8   | 1.64               | 16    |                                    |        |        |       |        |
| February ...  | 29-970   | 29-966  | 29-970  | 29-958  | 29-968        | 82.6          | 68.0          | 84.1             | 64.4             | 145.9   | 75.8            | 20.7             | 62.8             | 62.5             | 574                | 570    | 572   | 61        | 57     | 59    | 13.0   | 1.46               | 15    |                                    |        |        |       |        |
| March ...     | 29-964   | 29-964  | 29-964  | 29-951  | 29-964        | 82.5          | 68.9          | 89.7             | 61.8             | 150.6   | 75.7            | 21.5             | 63.8             | 63.5             | 595                | 594    | 595   | 63        | 59     | 61    | 14.9   | 2.89               | 12    |                                    |        |        |       |        |
| April ...     | 29-958   | 29-957  | 29-957  | 29-946  | 29-957        | 85.0          | 69.6          | 87.8             | 66.6             | 150.6   | 77.3            | 20.7             | 60.1             | 34.5             | 613                | 608    | 626   | 62        | 55     | 59    | 11.7   | 1.49               | 4     |                                    |        |        |       |        |
| May ...       | 29-958   | 29-957  | 29-957  | 29-946  | 29-957        | 87.2          | 71.5          | 88.7             | 68.8             | 150.8   | 79.4            | 19.9             | 67.3             | 66.1             | 672                | 610    | 658   | 61        | 56     | 58    | 10.8   | 2.69               | 18    |                                    |        |        |       |        |
| June ...      | 29-955   | 29-954  | 29-954  | 29-943  | 29-954        | 86.6          | 73.0          | 88.7             | 70.0             | 118.5   | 79.8            | 18.7             | 69.8             | 68.4             | 732                | 704    | 715   | 67        | 62     | 65    | 12.2   | 5.94               | 14    |                                    |        |        |       |        |
| July ...      | 29-955   | 29-954  | 29-954  | 29-943  | 29-954        | 85.4          | 73.8          | 88.9             | 71.0             | 148.5   | 79.6            | 15.9             | 71.4             | 70.8             | 771                | 758    | 765   | 78        | 69     | 71    | 14.4   | 11.94              | 22    |                                    |        |        |       |        |
| August ...    | 29-952   | 29-951  | 29-951  | 29-940  | 29-951        | 85.5          | 73.0          | 89.9             | 70.6             | 149.1   | 79.6            | 16.8             | 70.9             | 70.3             | 756                | 742    | 749   | 70        | 68     | 69    | 11.8   | 4.77               | 16    |                                    |        |        |       |        |
| September ... | 29-952   | 29-951  | 29-951  | 29-940  | 29-951        | 85.4          | 73.0          | 87.7             | 69.6             | 148.5   | 79.2            | 18.1             | 70.8             | 70.6             | 755                | 748    | 752   | 70        | 73     | 72    | 8.9    | 6.69               | 20    |                                    |        |        |       |        |
| October ...   | 29-952   | 29-951  | 29-951  | 29-940  | 29-951        | 85.2          | 72.2          | 86.7             | 68.6             | 140.6   | 78.7            | 18.1             | 70.5             | 69.9             | 748                | 735    | 742   | 68        | 67     | 68    | 9.1    | 4.44               | 19    |                                    |        |        |       |        |
| November ...  | 29-952   | 29-951  | 29-951  | 29-940  | 29-951        | 84.7          | 71.0          | 86.8             | 68.6             | 150.2   | 77.0            | 17.7             | 68.9             | 67.7             | 711                | 681    | 696   | 67        | 63     | 65    | 9.1    | 2.41               | 11    |                                    |        |        |       |        |
| December ...  | 29-952   | 29-951  | 29-951  | 29-940  | 29-951        | 83.6          | 70.4          | 86.3             | 67.0             | 153.8   | 77.0            | 19.3             | 67.4             | 66.7             | 678                | 656    | 667   | 68        | 64     | 66    | 9.6    | 5.22               | 10    |                                    |        |        |       |        |
| 359-712       | 358-876  | 359-812 | 359-812 | 357-909 | 359-812       | 101.0         | 85.7          | 103.8            | 81.0             | 179.5   | 93.0            | 26.8             | 81.6             | 80.4             | 825.1              | 802.4  | 814.0 | 796       | 752    | 776   | 188.8  | 50.58              | 172   |                                    |        |        |       |        |
| 29-970        | 29-965   | 29-965  | 29-954  | 29-943  | 29-965        | 84.7          | 71.1          | 86.4             | 67.5             | 149.0   | 77.8            | 18.9             | 67.9             | 67.0             | 688                | 669    | 678   | 66        | 63     | 65    | 11.5   | 50.58              | 172   |                                    |        |        |       |        |

**BARBADOS RAINFALL**

**FROM**

**JANUARY TO DECEMBER**

**1917.**

**APPEN**  
**BARBADOS RAINFALL FROM**

| Name of Station.            | Elevation.<br>Feet. | January. |         | February. |         | March. |         | April. |         | May.  |         | June. |         |
|-----------------------------|---------------------|----------|---------|-----------|---------|--------|---------|--------|---------|-------|---------|-------|---------|
|                             |                     | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days. | Inches. | Days. | Inches. |
|                             |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <b>I. DISTRICT "A"</b>      |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| ST. MICHAEL.<br>Lowlands.   |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Bank Hall                   | ...                 | 21       | 2.38    | 13        | 1.50    | 12     | 2.61    | 5      | .69     | 14    | 2.95    | 19    | 6.14    |
| Strathmore                  | ...                 | 8        | 1.87    | 10        | 1.29    | 12     | 2.80    | 5      | .65     | 9     | 2.81    | 10    | 5.96    |
| Lower Estate                | 237                 | 16       | 2.66    | 11        | 2.17    | 14     | 4.29    | 5      | 1.01    | 11    | 2.65    | 12    | 7.17    |
| Clapham                     | 216                 | 11       | 1.94    | 5         | 1.00    | 6      | 2.25    | 3      | .45     | 11    | 2.51    | 13    | 5.27    |
| Government House            | 90                  | 17       | 2.05    | 11        | 1.57    | 12     | 3.11    | 6      | .67     | 10    | 2.56    | 18    | 7.09    |
| District "A"                | 97                  | 17       | 1.91    | 11        | 1.55    | 14     | 2.52    | 7      | .63     | 12    | 2.87    | 16    | 6.68    |
| Central Police Station      | ...                 | 11       | 1.68    | 9         | 1.35    | 14     | 2.59    | 3      | .56     | 8     | 2.84    | 10    | 5.62    |
| Bush Hall                   | 110                 | 16       | 2.48    | 9         | 1.80    | 8      | 3.20    | 5      | .68     | 7     | 3.36    | 11    | 8.04    |
| Waterford                   | ...                 | 15       | 1.81    | 10        | 1.36    | 10     | 2.55    | 5      | .71     | 13    | 2.88    | 12    | 5.68    |
| Windsor Cot                 | ...                 | 14       | 1.89    | 10        | 1.22    | 17     | 2.78    | 5      | .53     | 12    | 2.40    | 13    | 5.33    |
| Warrens                     | ...                 | 12       | 3.93    | 8         | 2.29    | 9      | 4.82    | 3      | .70     | 8     | 1.77    | 10    | 6.40    |
| Neils                       | ...                 | 15       | 2.59    | 9         | 2.37    | 7      | 3.78    | 4      | 1.03    | 7     | 3.47    | 12    | 6.81    |
| Pine                        | ...                 | 10       | 1.14    | 10        | 1.36    | 10     | 2.55    | 5      | .71     | 12    | 2.88    | 12    | 5.73    |
| Canewood                    | ...                 | 17       | 4.27    | 9         | 2.61    | 15     | 5.25    | 7      | .73     | 10    | 2.45    | 15    | 6.79    |
| Codrington House            | ...                 | 16       | 1.64    | 15        | 1.46    | 12     | 2.89    | 4      | .49     | 13    | 2.69    | 14    | 5.94    |
| Goodland                    | ...                 | 15       | 2.01    | 9         | 1.28    | 11     | 2.27    | 5      | .83     | 12    | 3.07    | 15    | 6.42    |
| Penlee                      | ...                 | 12       | 1.64    | 8         | 1.09    | 13     | 2.48    | 5      | 1.24    | 13    | 2.85    | 12    | 5.41    |
|                             |                     | 244      | 37.84   | 167       | 27.27   | 196    | 52.65   | 82     | 11.86   | 182   | 47.01   | 224   | 105.64  |
|                             |                     | 14.85    | 2.23    | 9.82      | 1.60    | 11.53  | 3.10    | 4.82   | .70     | 10.71 | 2.77    | 13.18 | 6.21    |
| <b>II. DISTRICT "B"</b>     |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| CHRIST CHURCH.<br>Lowlands. |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Woodbourne                  | 150                 | 15       | 2.49    | 15        | .88     | 17     | 4.53    | 5      | 1.09    | 10    | 2.75    | 15    | 5.44    |
| Seawall                     | ...                 | 19       | 1.95    | 10        | 1.12    | 12     | 2.44    | 5      | .57     | 11    | 3.03    | 18    | 5.31    |
| Hanways                     | ...                 | 13       | 2.36    | 9         | 1.09    | 10     | 3.84    | 5      | 1.12    | 5     | 2.30    | 11    | 5.08    |
| Coverley                    | 254                 | 10       | 1.77    | 7         | 1.23    | 12     | 3.58    | 3      | .81     | 10    | 2.99    | 16    | 5.82    |
| Searles                     | 283                 | 21       | 2.98    | 11        | 1.19    | 17     | 4.33    | 7      | 1.10    | 17    | 3.48    | 20    | 6.55    |
| Lower Greys                 | ...                 | 11       | 2.23    | 9         | 1.02    | 11     | 3.83    | 5      | 1.00    | 5     | 2.50    | 11    | 5.95    |
| Newton                      | ...                 | 14       | 2.59    | 8         | 1.44    | 15     | 4.45    | 4      | .95     | 11    | 2.76    | 14    | 6.18    |
| Maxwell's                   | 20                  | 14       | 2.04    | 7         | 1.70    | 10     | 2.37    | 6      | .85     | 13    | 2.35    | 17    | 4.82    |
| Bentley                     | 169                 | 16       | 2.82    | 14        | 1.39    | 18     | 4.23    | 6      | .65     | 14    | 2.33    | 16    | 5.09    |
| Spencers                    | ...                 | 9        | 1.48    | 9         | 1.25    | 11     | 2.26    | 5      | .71     | 5     | 1.88    | 13    | 4.26    |
| Hope                        | ...                 | 13       | 2.26    | 8         | .96     | 13     | 3.57    | 4      | .51     | 14    | 2.46    | 15    | 5.97    |
| Isleworth (Hastings)        | ...                 | 13       | 1.59    | 10        | .64     | 12     | 2.49    | 5      | .61     | 15    | 2.24    | 16    | 4.88    |
| Pilgrim Place               | ...                 | 16       | 2.31    | 9         | 2.54    | 13     | 3.68    | 7      | 1.73    | 12    | 3.54    | 15    | 6.97    |
| Frere Pilgrim               | ...                 | 15       | 2.61    | 10        | 1.50    | 13     | 3.38    | 6      | 1.00    | 11    | 2.93    | 16    | 7.47    |
| Græme Hall                  | ...                 | 13       | 1.91    | 12        | 1.24    | 13     | 3.40    | 6      | .89     | 10    | 2.50    | 10    | 5.07    |
| Yo. kshire                  | ...                 | 13       | 1.90    | 11        | 1.08    | 13     | 4.10    | 10     | .95     | 13    | 2.60    | 19    | 6.16    |
|                             |                     | 225      | 35.29   | 159       | 20.27   | 210    | 56.78   | 89     | 14.54   | 176   | 42.64   | 242   | 91.55   |
|                             |                     | 14.06    | 2.21    | 9.94      | 1.27    | 13.13  | 3.53    | 5.56   | .91     | 11.00 | 2.67    | 15.13 | 5.72    |

**DIX II.**

**JANUARY TO DECEMBER 1917.**

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Totals. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|---------|---------|
| Days. | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.   | Inches. |
| 24    | 10.91   | 19      | 6.57    | 20         | 6.38    | 17       | 5.68    | 13        | 2.84    | 12        | 4.67    | 189     | 53.32   |
| 18    | 12.61   | 14      | 7.03    | 12         | 6.59    | 11       | 5.15    | 4         | 2.58    | 9         | 4.32    | 122     | 53.67   |
| 22    | 13.87   | 14      | 6.01    | 13         | 8.77    | 13       | 7.46    | 3         | 4.57    | 12        | 5.63    | 151     | 66.17   |
| 16    | 11.47   | 10      | 5.08    | 8          | 7.80    | 8        | 4.10    | 2         | 2.10    | 2         | 2.60    | 95      | 46.47   |
| 21    | 11.90   | 16      | 6.90    | 14         | 6.09    | 15       | 5.19    | 11        | 2.96    | 14        | 4.77    | 165     | 54.77   |
| 23    | 11.31   | 19      | 6.87    | 17         | 7.02    | 13       | 5.50    | 10        | 2.65    | 10        | 4.32    | 169     | 52.73   |
| 20    | 10.43   | 14      | 6.33    | 14         | 5.73    | 11       | 5.09    | 5         | 2.16    | 7         | 3.85    | 126     | 48.23   |
| 17    | 11.70   | 12      | 7.13    | 8          | 6.59    | 5        | 5.37    | 5         | 2.57    | 1         | 5.24    | 107     | 58.11   |
| 23    | 10.33   | 17      | 4.93    | 16         | 7.14    | 11       | 5.04    | 10        | 2.74    | 9         | 4.03    | 151     | 49.20   |
| 25    | 10.29   | 19      | 6.21    | 20         | 6.31    | 16       | 5.37    | 18        | 3.26    | 14        | 4.13    | 178     | 49.72   |
| 22    | 15.05   | 16      | 5.79    | 15         | 8.79    | 14       | 5.86    | 7         | 3.23    | 11        | 9.03    | 185     | 67.62   |
| 19    | 11.99   | 14      | 5.86    | 12         | 7.36    | 10       | 7.07    | 7         | 4.32    | 5         | 4.42    | 121     | 61.12   |
| 17    | 11.40   | 14      | 5.32    | ...        | ...     | ...      | ...     | ...       | ...     | ...       | ...     | 90      | 31.09   |
| 19    | 11.37   | 12      | 5.72    | 10         | 6.07    | 10       | 6.71    | 6         | 2.79    | 13        | 7.12    | 143     | 61.88   |
| 22    | 11.94   | 16      | 4.77    | 21         | 6.69    | 19       | 4.44    | 11        | 2.41    | 10        | 5.22    | 172     | 50.58   |
| 21    | 10.81   | 15      | 6.18    | 12         | 5.43    | 14       | 5.76    | 8         | 2.37    | 7         | 3.62    | 145     | 49.55   |
| 20    | 12.17   | 18      | 7.08    | 16         | 6.17    | 14       | 3.93    | 6         | 2.24    | 11        | 3.70    | 148     | 50.00   |
| 349   | 199.60  | 259     | 103.28  | 227        | 108.84  | 201      | 87.72   | 126       | 45.79   | 150       | 76.73   | 2407    | 901.23  |
| 20.53 | 11.74   | 15.24   | 6.08    | 14.19      | 6.80    | 12.50    | 5.48    | 7.88      | 2.86    | 9.38      | 4.80    | 141.59  | 53.19   |
| 20    | 10.60   | 17      | 6.37    | 15         | 5.54    | 16       | 6.86    | 10        | 4.03    | 14        | 4.94    | 169     | 55.52   |
| 22    | 10.27   | 15      | 5.44    | 15         | 4.80    | 12       | 5.53    | 7         | 2.28    | 11        | 4.35    | 157     | 47.29   |
| 17    | 10.34   | 12      | 6.69    | 11         | 3.97    | 14       | 8.10    | 7         | 5.64    | 9         | 4.60    | 123     | 55.18   |
| 21    | 10.50   | 12      | 8.21    | 12         | 4.83    | 9        | 3.46    | 7         | 3.07    | 9         | 3.47    | 128     | 49.74   |
| 27    | 12.45   | 23      | 7.40    | 17         | 6.10    | 18       | 5.35    | 9         | 5.00    | 14        | 4.21    | 201     | 60.14   |
| 16    | 11.32   | 15      | 8.46    | 12         | 4.36    | 15       | 10.62   | 6         | 5.23    | 7         | 4.38    | 123     | 60.34   |
| 22    | 11.67   | 14      | 6.50    | 12         | 7.35    | 15       | 6.25    | 9         | 4.11    | 10        | 3.95    | 143     | 58.20   |
| 23    | 12.34   | 16      | 6.01    | 15         | 7.39    | 12       | 4.56    | 6         | 2.84    | 9         | 2.70    | 148     | 49.97   |
| 23    | 11.25   | 13      | 7.46    | 19         | 5.64    | 20       | 8.59    | 9         | 4.98    | 11        | 4.74    | 181     | 60.07   |
| 17    | 9.70    | 12      | 4.70    | 7          | 3.79    | 6        | 3.50    | 4         | 2.83    | 4         | 1.95    | 102     | 38.31   |
| 23    | 13.22   | 13      | 5.37    | 12         | 7.32    | 15       | 7.20    | 9         | 3.85    | 6         | 3.27    | 145     | 56.22   |
| 25    | 10.60   | 20      | 5.96    | 17         | 5.91    | 16       | 3.09    | 11        | 2.30    | 11        | 2.81    | 171     | 43.12   |
| 24    | 11.99   | 19      | 7.84    | 15         | 6.86    | 17       | 5.59    | 8         | 4.11    | 13        | 3.96    | 163     | 61.12   |
| 21    | 13.05   | 14      | 7.29    | 15         | 5.93    | 19       | 8.00    | 9         | 4.39    | 12        | 4.36    | 161     | 62.21   |
| 20    | 11.95   | 12      | 4.52    | 10         | 6.94    | 7        | 4.00    | 4         | 2.55    | 5         | 2.83    | 122     | 47.80   |
| 21    | 11.36   | 17      | 8.42    | 17         | 5.07    | 16       | 7.81    | 6         | 5.50    | 13        | 4.86    | 169     | 60.11   |
| 342   | 182.62  | 249     | 106.64  | 221        | 92.08   | 227      | 98.51   | 121       | 62.71   | 158       | 61.38   | 2410    | 855.29  |
| 21.39 | 11.41   | 15.53   | 6.67    | 13.81      | 5.75    | 14.19    | 6.16    | 7.56      | 3.92    | 9.88      | 3.86    | 151.19  | 53.46   |

BARBADOS RAINFALL FROM

| Name of Station.                                | Elevation. |       | January. |       | February. |       | March.  |       | April.  |       | May.    |       | June.   |       |
|---|------------|-------|----------|-------|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
|   | Feet.      | Days. | Inches.  | Days. | Inches.   | Days. | Inches. | Days. | Inches. | Days. | Inches. | Days. | Inches. |       |
|   |            |       |          |       |           |       |         |       |         |       |         |       |         | Days. |
| <b>ST. GEORGE, Highlands.</b>                   |            |       |          |       |           |       |         |       |         |       |         |       |         |       |
| Ashbury ...                                     | ...        | 15    | 3.88     | 10    | 1.91      | 10    | 5.20    | 6     | 1.12    | 14    | 1.77    | 16    | 5.4     | ...   |
| Cottage ...                                     | 720        | 20    | 3.65     | 18    | 2.63      | 16    | 4.93    | 7     | 1.03    | 14    | 3.12    | 20    | 7.4     | ...   |
| Woodland ...                                    | ...        | 17    | 3.18     | 11    | 2.09      | 12    | 5.16    | 6     | .73     | 16    | 2.95    | 16    | 3.6     | ...   |
| Ellesmere ...                                   | ...        | 13    | 3.06     | 15    | 3.08      | 14    | 4.74    | 8     | 1.12    | 13    | 2.54    | 22    | 0.3     | ...   |
|   |            | 65    | 13.77    | 52    | 9.71      | 52    | 20.03   | 27    | 4.00    | 57    | 10.38   | 74    | 23.4    | ...   |
|   |            | 10.25 | 5.44     | 13.00 | 2.43      | 13.00 | 5.01    | 6.75  | 1.00    | 14.25 | 2.60    | 18.50 | 4.4     | ...   |
| <b>ST. GEORGE, Lowlands.</b>                    |            |       |          |       |           |       |         |       |         |       |         |       |         |       |
| Windsor ...                                     | 162        | 8     | 1.92     | 6     | 1.22      | 10    | 3.64    | 5     | .57     | 8     | 2.19    | 13    | 0.7     | ...   |
| Salters ...                                     | ...        | 14    | 2.85     | 9     | 2.11      | 10    | 3.84    | 5     | .95     | 17    | 3.78    | 16    | 7.5     | ...   |
| Byde Mill ...                                   | ...        | 16    | 1.82     | 13    | 1.23      | 15    | 4.27    | 5     | .71     | 15    | 2.36    | 15    | 3.2     | ...   |
| Brighton ...                                    | ...        | 13    | 1.79     | 10    | 1.62      | 12    | 4.15    | 6     | .58     | 13    | 2.82    | 14    | 0.4     | ...   |
| District "B" ...                                | ...        | 16    | 3.07     | 14    | 1.36      | 18    | 4.64    | 9     | 1.19    | 16    | 3.25    | 21    | 1.4     | ...   |
|   |            | 67    | 11.45    | 52    | 7.54      | 65    | 20.54   | 30    | 4.00    | 69    | 14.40   | 79    | 35.0    | ...   |
|   |            | 13.40 | 2.29     | 10.40 | 1.51      | 15.00 | 4.11    | 6.00  | .80     | 13.80 | 2.88    | 15.80 | 7.1     | ...   |
| <b>III. DISTRICT "C" ST. PHILIP, Highlands.</b> |            |       |          |       |           |       |         |       |         |       |         |       |         |       |
| District "C" ...                                | 505        | 15    | 2.24     | 15    | 1.80      | 11    | 4.13    | 7     | .67     | 14    | 1.84    | 16    | 4.2     | ...   |
| Hill View ...                                   | 507        | 10    | 2.72     | 10    | 1.84      | 11    | 5.01    | 5     | .83     | 14    | 2.65    | 14    | 5.6     | ...   |
| Mount Pleasant ...                              | 562        | 12    | 2.39     | 7     | 1.55      | 11    | 4.35    | 4     | 1.08    | 9     | 2.18    | 10    | 5.3     | ...   |
|   |            | 37    | 7.55     | 22    | 5.19      | 33    | 13.49   | 16    | 2.58    | 37    | 6.62    | 40    | 15.7    | ...   |
|   |            | 12.33 | 2.45     | 10.67 | 1.73      | 11.00 | 4.50    | 5.33  | .86     | 12.33 | 2.21    | 18.33 | 5.23    | ...   |

**JANUARY TO DECEMBER, 1917.**

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Totals. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|---------|---------|
| Days. | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.   | Inches. |
| 23    | 12.10   | 21      | 7.28    | 18         | 7.79    | 18       | 8.80    | 10        | 4.67    | 19        | 11.81   | 180     | 72.07   |
| 25    | 14.97   | 24      | 8.83    | 21         | 8.63    | 23       | 9.96    | 15        | 5.64    | 24        | 8.73    | 225     | 79.92   |
| 22    | 11.69   | 17      | 6.56    | 21         | 6.89    | 19       | 7.38    | 13        | 5.61    | 15        | 8.81    | 185     | 66.91   |
| 26    | 11.92   | 20      | 7.89    | 22         | 7.98    | 19       | 8.09    | 14        | 5.54    | 18        | 9.56    | 264     | 71.66   |
| 96    | 50.68   | 82      | 30.56   | 82         | 31.29   | 79       | 34.23   | 52        | 21.46   | 76        | 38.91   | 794     | 290.56  |
| 24.00 | 12.67   | 20.50   | 7.64    | 20.50      | 7.82    | 19.75    | 8.56    | 13.00     | 5.37    | 19.00     | 9.73    | 198.50  | 72.64   |
| 19    | 10.86   | 15      | 7.76    | 13         | 6.78    | 9        | 9.70    | 7         | 5.73    | 8         | 4.67    | 121     | 61.77   |
| 27    | 14.58   | 16      | 6.51    | 21         | 8.11    | 13       | 7.31    | 13        | 4.69    | 7         | 4.73    | 168     | 66.98   |
| 23    | 9.14    | 21      | 7.00    | 20         | 6.76    | 22       | 7.86    | 16        | 5.51    | 20        | 6.67    | 201     | 68.58   |
| 22    | 11.90   | 14      | 8.44    | 13         | 7.28    | 12       | 8.98    | 8         | 6.30    | 8         | 4.27    | 145     | 64.59   |
| 23    | 11.23   | 20      | 8.15    | 18         | 6.09    | 22       | 8.43    | 12        | 5.15    | 15        | 5.48    | 204     | 70.68   |
| 114   | 60.71   | 86      | 37.86   | 85         | 35.02   | 78       | 42.28   | 56        | 27.38   | 58        | 25.82   | 839     | 322.60  |
| 22.80 | 12.14   | 17.29   | 7.57    | 17.00      | 7.09    | 15.60    | 8.46    | 11.20     | 5.48    | 11.60     | 5.16    | 167.80  | 64.52   |
| 24    | 10.12   | 18      | 7.74    | 19         | 7.76    | 16       | 6.86    | 11        | 3.48    | 13        | 8.79    | 179     | 69.17   |
| 21    | 10.68   | 17      | 7.44    | 18         | 7.61    | 14       | 8.18    | 8         | 4.25    | 15        | 8.26    | 157     | 65.13   |
| 20    | 11.32   | 16      | 7.29    | 16         | 8.60    | 12       | 5.77    | 10        | 2.84    | 10        | 11.59   | 137     | 64.16   |
| 65    | 32.12   | 51      | 22.47   | 53         | 23.97   | 42       | 20.81   | 29        | 10.57   | 38        | 38.55   | 473     | 189.46  |
| 21.67 | 10.71   | 17.00   | 7.49    | 17.67      | 7.99    | 14.00    | 6.97    | 9.67      | 3.52    | 12.67     | 9.52    | 158.00  | 63.15   |

BARBADOS RAINFALL FROM

| Name of Station.        | Elevation.<br>Feet. | January. |         | February. |         | March. |         | April. |         | May.  |         | June. |         |
|-------------------------|---------------------|----------|---------|-----------|---------|--------|---------|--------|---------|-------|---------|-------|---------|
|                         |                     | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days. | Inches. | Days. | Inches. |
|                         |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <b>ST. PHILIP.</b>      |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Lowlands.</i>        |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Three Houses ...        | 135                 | 14       | 2.72    | 11        | 1.41    | 12     | 5.01    | 6      | .70     | 16    | 2.62    | 13    | 6.51    |
| Fortescue ...           | 150                 | 10       | 2.21    | 7         | 1.32    | 5      | 2.95    | 1      | .80     | 9     | 2.48    | 10    | 5.71    |
| Thicket ...             | ...                 | 7        | 2.44    | 6         | 1.08    | 7      | 3.96    | 4      | .74     | 7     | 2.14    | 15    | 5.22    |
| Bushy Park ...          | 161                 | 9        | 2.41    | 6         | .89     | 11     | 3.78    | 2      | .47     | 10    | 2.13    | 11    | 3.91    |
| Oughterson ...          | 291                 | 15       | 2.31    | 9         | 1.42    | 14     | 4.55    | 4      | .84     | 12    | 1.60    | 8     | 4.93    |
| Gov't. Indus. Scho! ... | 210                 | 18       | 2.86    | 15        | 1.42    | 16     | 4.28    | 5      | .70     | 17    | 2.45    | 19    | 5.42    |
| Sunbury ...             | ...                 | 10       | 2.18    | 6         | .62     | 11     | 3.23    | 4      | .38     | 10    | 1.89    | 10    | 4.11    |
| Hampton ...             | 103                 | 11       | 2.70    | 4         | .90     | 7      | 3.73    | 3      | .79     | 12    | 3.03    | 11    | 5.81    |
| Carrington ...          | 110                 | 14       | 2.98    | 9         | 1.31    | 13     | 4.47    | 3      | .75     | 15    | 3.06    | 12    | 6.11    |
| Chapel ...              | 2.8                 | 15       | 2.13    | 12        | 1.24    | 13     | 4.09    | 5      | .72     | 13    | 2.52    | 14    | 5.21    |
| Edgecumbe ...           | 207                 | 16       | 2.47    | 7         | 1.16    | 16     | 3.99    | 1      | .11     | 12    | 1.87    | 13    | 5.71    |
| Fourequare ...          | ...                 | 13       | 2.21    | 13        | .82     | 10     | 3.69    | 2      | .46     | 4     | 1.99    | 1     | 6.01    |
| Summervale ...          | ...                 | 21       | 2.71    | 14        | 1.86    | 16     | 4.43    | 7      | .70     | 19    | 1.79    | 16    | 4.51    |
| Stirling ...            | ...                 | 11       | 1.76    | 13        | .98     | 15     | 3.72    | ...    | 1.00    | 14    | 2.12    | 13    | 5.81    |
| Palmers ...             | ...                 | 9        | 1.69    | 10        | 1.22    | 9      | 3.36    | 2      | .35     | 11    | 2.47    | 12    | 4.61    |
| Senhouse Grove ...      | ...                 | 8        | 2.26    | 6         | .94     | 11     | 4.52    | 3      | 1.27    | 10    | 2.51    | 6     | 4.11    |
| Bayleys ...             | 128                 | 5        | 1.07    | 6         | .94     | 10     | 3.76    | 1      | .24     | 6     | .92     | 7     | 4.61    |
| Ruby ...                | ...                 | 10       | 2.27    | 7         | .81     | 9      | 3.83    | 5      | .88     | 10    | 1.84    | 13    | 5.71    |
|                         |                     | 216      | 41.48   | 161       | 20.13   | 205    | 71.38   | 58     | 11.20   | 207   | 39.38   | 204   | 88.91   |
|                         |                     | 12.00    | 2.30    | 8.94      | 1.12    | 11.39  | 3.97    | 3.41   | .62     | 11.50 | 2.10    | 11.33 | 4.91    |
| <b>ST. JOHN.</b>        |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Highlands.</i>       |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Cliff ..                | 534                 | 4        | .56     | 10        | 1.79    | 12     | 5.02    | 6      | 1.27    | 11    | 2.99    | 11    | 6.01    |
| Ashford ...             | 606                 | 18       | 3.13    | 14        | 1.59    | 13     | 4.65    | 5      | .67     | 13    | 2.84    | 18    | 6.41    |
| Pool ...                | 716                 | 14       | 3.85    | 13        | 1.90    | 12     | 4.35    | 4      | .69     | 12    | 2.55    | 15    | 6.11    |
| Henley ...              | 553                 | 22       | 2.89    | 16        | 2.02    | 13     | 3.95    | 8      | 1.06    | 15    | 3.16    | 19    | 6.01    |
| Wakefield ...           | 707                 | 13       | 3.71    | 14        | 2.53    | 9      | 4.07    | 5      | .86     | 10    | 1.74    | 12    | 5.46    |
| Malvern ...             | 900                 | 16       | 3.85    | 10        | 2.29    | 8      | 3.65    | 8      | .77     | 11    | 1.94    | 12    | 4.41    |
| Kendal ...              | 544                 | 17       | 2.84    | 15        | 1.96    | 14     | 5.06    | 7      | 1.10    | 14    | 2.16    | 14    | 5.61    |
| Claybury ...            | 750                 | 17       | 4.44    | 9         | 2.64    | 9      | 5.05    | 5      | .81     | 6     | 1.54    | 13    | 5.21    |
| Clifton Hall ...        | ...                 | 8        | 2.89    | 11        | 1.72    | 12     | 3.30    | 2      | .25     | 12    | 1.01    | 15    | 5.51    |
| Lemon Arbor ...         | 720                 | 16       | 3.05    | 15        | 2.14    | 13     | 5.24    | 5      | .88     | 10    | 1.87    | 16    | 6.71    |
|                         |                     | 145      | 31.21   | 127       | 20.58   | 115    | 44.34   | 55     | 8.76    | 114   | 23.70   | 145   | 58.11   |
|                         |                     | 14.50    | 3.12    | 12.70     | 2.05    | 11.50  | 4.43    | 5.50   | .84     | 11.40 | 2.37    | 4.50  | 5.81    |

**JANUARY TO DECEMBER 1917.**

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Total. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|--------|---------|
| Days. | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.  | Inches. |
| 23    | 11-37   | 14      | 6-97    | 16         | 8-72    | 17       | 7-46    | 12        | 2-80    | 14        | 12-49   | 168    | 68-80   |
| 15    | 9-34    | 11      | 6-48    | 12         | 6-77    | 5        | 5-00    | 5         | 3-45    | 10        | 7-72    | 100    | 58-76   |
| 18    | 9-77    | 15      | 7-77    | 13         | 7-20    | 10       | 6-72    | 11        | 2-58    | 8         | 9-39    | 121    | 59-21   |
| 19    | 9-89    | 13      | 7-00    | 13         | 5-97    | 9        | 6-75    | 7         | 2-90    | 6         | 5-94    | 116    | 52-16   |
| 18    | 10-43   | 19      | 7-00    | 16         | 6-54    | 9        | 7-33    | 7         | 2-57    | 9         | 7-36    | 140    | 58-00   |
| 22    | 9-41    | 21      | 7-29    | 18         | 4-96    | 16       | 6-99    | 12        | 3-48    | 21        | 6-94    | 260    | 55-70   |
| 20    | 9-12    | 11      | 5-65    | 13         | 4-73    | 13       | 6-81    | 11        | 2-38    | 9         | 4-48    | 128    | 45-60   |
| 19    | 10-82   | 18      | 6-29    | 17         | 5-57    | 17       | 8-69    | 8         | 3-21    | 11        | 4-65    | 1-8    | 53-44   |
| 18    | 10-70   | 17      | 7-39    | 17         | 6-54    | 18       | 6-85    | 9         | 4-62    | 13        | 5-16    | 1-8    | 61-96   |
| 23    | 9-71    | 17      | 6-55    | 16         | 5-83    | 15       | 8-28    | 13        | 3-89    | 17        | 8-07    | 173    | 58-31   |
| 18    | 10-17   | 16      | 8-01    | 13         | 5-95    | 18       | 8-48    | 8         | 5-26    | 13        | 4-82    | 151    | 57-99   |
| 15    | 9-61    | 10      | 3-69    | 14         | 6-99    | 13       | 8-12    | 7         | 1-23    | 7         | 4-12    | 109    | 42-98   |
| 25    | 9-15    | 24      | 7-42    | 18         | 6-20    | 18       | 7-21    | 14        | 3-47    | 18        | 8-22    | 210    | 57-79   |
| 22    | 9-71    | 18      | 5-12    | 15         | 4-39    | 21       | 8-80    | 12        | 2-85    | 13        | 5-19    | 167    | 50-66   |
| 23    | 9-75    | 12      | 5-66    | 14         | 6-74    | 11       | 5-76    | 7         | 2-27    | 8         | 8-65    | 128    | 52-85   |
| 18    | 10-20   | 8       | 4-69    | 9          | 4-10    | 13       | 8-25    | 8         | 2-91    | 9         | 5-01    | 109    | 50-94   |
| 15    | 8-72    | 14      | 5-89    | 14         | 6-19    | 8        | 6-21    | 5         | 2-26    | 6         | 9-02    | 98     | 49-41   |
| 19    | 11-16   | 18      | 6-57    | 15         | 4-45    | 12       | 7-34    | 8         | 2-97    | 9         | 7-38    | 135    | 55-22   |
| 351   | 179-03  | 276     | 115-78  | 263        | 108-26  | 243      | 132-81  | 164       | 55-10   | 201       | 124-64  | 2519   | 987-58  |
| 19-50 | 9-95    | 15-33   | 6-43    | 14-61      | 6-01    | 13-50    | 7-38    | 9-11      | 3-06    | 11-17     | 6-92    | 141-61 | 54-87   |
| 17    | 10-11   | 12      | 7-49    | 18         | 8-34    | 14       | 7-28    | 9         | 4-62    | 13        | 9-68    | 137    | 61-38   |
| 22    | 12-60   | 20      | 7-61    | 19         | 8-92    | 18       | 6-32    | 14        | 4-55    | 17        | 10-56   | 191    | 69-92   |
| 27    | 13-33   | 18      | 8-35    | 16         | 8-62    | 17       | 7-85    | 12        | 5-37    | 13        | 10-50   | 173    | 74-14   |
| 25    | 12-28   | 21      | 7-36    | 22         | 7-32    | 20       | 8-41    | 16        | 5-77    | 20        | 8-11    | 217    | 68-45   |
| 16    | 10-44   | 18      | 9-17    | 18         | 7-84    | ...      | ...     | 9         | 5-02    | 8         | 12-00   | 152    | 63-74   |
| 17    | 12-12   | 14      | 7-85    | "          | 7-39    | 12       | 6-86    | 9         | 3-78    | 17        | 11-27   | 143    | 66-37   |
| 24    | 12-21   | 18      | 7-65    | 20         | 8-40    | 13       | 8-05    | 12        | 5-68    | 16        | 8-87    | 189    | 70-47   |
| 21    | 12-70   | 20      | 7-65    | 18         | 9-35    | 16       | 10-66   | 9         | 5-24    | 14        | 14-60   | 157    | 79-94   |
| 19    | 11-79   | 13      | 7-45    | 13         | 8-09    | 8        | 7-13    | 9         | 5-02    | 14        | 11-44   | 141    | 67-63   |
| 22    | 13-56   | 15      | 7-73    | 19         | 8-83    | 15       | 8-24    | 10        | 5-18    | 20        | 13-22   | 176    | 76-28   |
| 210   | 121-24  | 174     | 78-32   | 172        | 83-50   | 138      | 71-35   | 109       | 50-33   | 152       | 110-15  | 1653   | 701-27  |
| 21-00 | 12-12   | 17-40   | 7-83    | 17-20      | 8-35    | 15-33    | 7-93    | 10-90     | 5-04    | 15-20     | 11-02   | 165-60 | 70-13   |

**BARBADOS RAINFALL FROM**

| Name of Station.       | Elevation<br>Feet. | January. |         | February. |         | March. |         | April. |         | May.  |         | June. |         |
|------------------------|--------------------|----------|---------|-----------|---------|--------|---------|--------|---------|-------|---------|-------|---------|
|                        |                    | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days. | Inches. | Days. | Inches. |
|                        |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <b>ST. JOHN.</b>       |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Lowlands.</i>       |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| Codrington College     | ...                | 13       | 2.88    | 12        | 1.94    | 12     | 3.88    | 6      | .63     | 11    | 2.61    | 15    | 6.55    |
| College                | ...                | 14       | 2.55    | 14        | 1.79    | 14     | 3.47    | 6      | .76     | 12    | 2.94    | 15    | 5.79    |
| New Castle             | 238                | 18       | 1.90    | 13        | 1.28    | 16     | 3.95    | 8      | .72     | 19    | 1.99    | 20    | 4.75    |
|                        |                    | 45       | 7.28    | 39        | 4.96    | 42     | 11.30   | 20     | 2.11    | 42    | 7.54    | 50    | 17.63   |
|                        |                    | 15.00    | 2.43    | 13.00     | 1.65    | 14.00  | 3.77    | 6.67   | .70     | 14.00 | 2.51    | 16.67 | 5.63    |
| <b>IV DISTRICT "D"</b> |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <b>ST. THOMAS.</b>     |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Highlands.</i>      |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| Mount White            | 987                | 20       | 4.49    | 15        | 3.71    | 15     | 6.01    | 6      | 1.13    | 11    | 1.64    | 15    | 7.46    |
| Lion Castle            | 900                | 24       | 5.18    | 19        | 3.92    | 16     | 7.53    | 7      | 1.28    | 13    | 2.43    | 21    | 6.79    |
| District "D"           | 678                | 23       | 3.87    | 17        | 2.81    | 15     | 5.33    | 6      | .73     | 14    | 1.91    | 20    | 4.91    |
| Farmers                | 963                | 20       | 4.86    | 18        | 3.70    | 14     | 5.51    | 7      | .95     | 16    | 2.00    | 18    | 6.90    |
| Cane field             | 1,024              | 19       | 5.97    | 11        | 2.85    | 10     | 6.43    | 6      | 1.41    | 9     | 2.20    | 16    | 6.65    |
| Bloomsbury             | ...                | 19       | 3.88    | 13        | 2.96    | 11     | 5.31    | 4      | 1.07    | 10    | 1.48    | 13    | 5.99    |
| Vaucluse               | ...                | 17       | 3.44    | 11        | 3.03    | 13     | 5.14    | 6      | 1.13    | 10    | 1.93    | 12    | 6.42    |
| Highland               | ...                | 19       | 4.76    | 17        | 3.77    | 18     | 7.17    | 8      | 1.41    | 11    | 1.81    | 18    | 7.43    |
|                        |                    | 161      | 36.15   | 121       | 26.78   | 112    | 48.46   | 50     | 9.14    | 91    | 15.40   | 133   | 52.36   |
|                        |                    | 20.13    | 4.56    | 15.50     | 3.34    | 14.00  | 6.06    | 6.25   | 1.14    | 11.75 | 1.93    | 16.63 | 6.55    |
| <b>ST. THOMAS.</b>     |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Lowlands.</i>       |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| Fisher Pond            | 725                | 14       | 4.21    | 15        | 2.31    | 11     | 3.95    | 4      | 1.17    | 10    | 2.25    | 14    | 6.72    |
| Olive Branch           | 680                | 13       | 3.39    | 10        | 2.58    | 12     | 2.36    | 6      | .77     | 11    | 1.98    | 17    | 5.67    |
| Hopewell               | 534                | 23       | 4.87    | 16        | 3.67    | 20     | 5.25    | 8      | .89     | 19    | 2.50    | 22    | 6.69    |
| Welches                | 398                | 9        | 2.92    | 10        | 3.83    | 5      | 3.86    | 2      | .71     | 6     | 1.30    | 10    | 6.43    |
| Bennett                | 359                | 18       | 3.86    | 14        | 1.69    | 14     | 5.61    | 7      | .81     | 11    | 1.62    | 14    | 5.00    |
| Clifton                | ...                | 15       | 4.38    | 12        | 3.70    | 13     | 5.57    | 6      | .96     | 9     | 2.02    | 14    | 5.41    |
| Cane Garden            | 300                | 23       | 3.71    | 19        | 2.66    | 12     | 4.21    | 5      | .46     | 15    | 1.64    | 21    | 5.67    |
| Applewaites            | ...                | 13       | 1.71    | 15        | 2.85    | 13     | 4.82    | 7      | .75     | 17    | 2.28    | 21    | 6.70    |
|                        |                    | 128      | 29.08   | 111       | 23.79   | 100    | 35.63   | 45     | 6.55    | 99    | 15.79   | 133   | 48.21   |
|                        |                    | 16.00    | 3.64    | 13.88     | 2.97    | 12.50  | 4.45    | 5.63   | .82     | 12.38 | 1.95    | 16.63 | 6.61    |
| <b>ST. JAMES.</b>      |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Highlands.</i>      |                    |          |         |           |         |        |         |        |         |       |         |       |         |
| Springhead             | 860                | 15       | 3.09    | 15        | 3.60    | 11     | 4.50    | 8      | 1.03    | 8     | 1.74    | 18    | 5.61    |
| Sion Hill              | 918                | 8        | 2.70    | 11        | 5.11    | 6      | 5.29    | 3      | 1.93    | 6     | 1.76    | 10    | 6.68    |
| Apes Hill              | ...                | 18       | 4.26    | 15        | 4.25    | 13     | 7.00    | 6      | 1.06    | 13    | 2.29    | 18    | 6.73    |
|                        |                    | 41       | 10.05   | 41        | 12.96   | 30     | 16.79   | 17     | 3.96    | 27    | 5.79    | 46    | 19.10   |
|                        |                    | 13.67    | 3.35    | 13.67     | 4.32    | 10.00  | 5.60    | 5.67   | 1.32    | 9.00  | 1.93    | 15.34 | 6.21    |

JANUARY TO DECEMBER 1917.

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Totals. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|---------|---------|
|       | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.   | Inches. |
| 25    | 12.49   | 19      | 7.58    | 18         | 8.13    | 16       | 8.34    | 11        | 3.47    | 15        | 10.95   | 173     | 69.40   |
| 21    | 10.41   | 17      | 6.78    | 12         | 7.05    | 14       | 7.59    | 11        | 3.97    | 13        | 9.38    | 163     | 61.42   |
| 28    | 9.24    | 22      | 6.25    | 18         | 7.99    | 21       | 5.67    | 12        | 3.63    | 18        | 9.44    | 211     | 59.76   |
| 72    | 32.14   | 58      | 20.31   | 48         | 23.17   | 51       | 21.60   | 34        | 10.07   | 44        | 29.77   | 547     | 187.58  |
| 00    | 10.71   | 19.33   | 6.87    | 16.00      | 7.72    | 17.00    | 7.20    | 11.33     | 3.36    | 15.33     | 9.92    | 182.33  | 62.53   |
| 22    | 16.72   | 18      | 7.97    | 17         | 8.16    | 19       | 9.23    | 9         | 4.68    | 14        | 14.08   | 181     | 85.18   |
| 29    | 15.06   | 25      | 7.29    | 24         | 8.44    | 23       | 10.88   | 16        | 5.42    | 21        | 15.88   | 243     | 80.62   |
| 25    | 10.86   | 24      | 6.12    | 20         | 6.97    | 19       | 9.13    | 15        | 3.96    | 21        | 12.51   | 219     | 69.17   |
| 26    | 13.86   | 23      | 7.10    | 19         | 9.25    | 18       | 8.57    | 10        | 4.50    | 17        | 14.65   | 206     | 81.88   |
| 20    | 7.13    | 12      | 8.29    | 16         | 10.83   | 12       | 9.09    | 9         | 6.01    | 17        | 18.43   | 157     | 95.32   |
| 26    | 13.21   | 13      | 6.14    | 21         | 7.96    | 18       | 7.77    | 8         | 5.28    | 14        | 14.75   | 170     | 75.80   |
| 21    | 11.78   | 16      | 5.64    | 16         | 7.13    | 18       | 10.14   | 10        | 3.99    | 12        | 11.60   | 165     | 71.37   |
| 25    | 14.31   | 25      | 7.27    | 25         | 8.10    | 21       | 9.22    | 11        | 5.10    | 21        | 17.10   | 219     | 87.45   |
| 91    | 113.53  | 153     | 55.82   | 158        | 56.84   | 153      | 74.03   | 88        | 38.98   | 137       | 119.00  | 1560    | 646.79  |
| 25    | 14.19   | 19.50   | 6.98    | 19.75      | 7.11    | 10.13    | 9.25    | 11.00     | 4.87    | 17.13     | 14.88   | 195.00  | 80.85   |
| 19    | 13.58   | 16      | 6.70    | 18         | 7.92    | 16       | 9.22    | 10        | 4.62    | 20        | 13.32   | 167     | 76.27   |
| 20    | 10.51   | 21      | 6.75    | 22         | 7.76    | 15       | 8.12    | 10        | 4.36    | 18        | 9.31    | 175     | 62.96   |
| 27    | 12.47   | 25      | 6.95    | 24         | 8.34    | 25       | 9.32    | 14        | 4.38    | 22        | 12.81   | 245     | 78.14   |
| 19    | 12.46   | 10      | 5.05    | 10         | 6.64    | 10       | 6.62    | 5         | 3.03    | 8         | 6.50    | 104     | 59.40   |
| 23    | 12.31   | 18      | 6.17    | 15         | 7.81    | 14       | 9.48    | 8         | 3.53    | 10        | 10.10   | 166     | 69.92   |
| 22    | 12.08   | 19      | 6.36    | 17         | 7.48    | 13       | 8.81    | 12        | 4.77    | 18        | 12.35   | 175     | 73.89   |
| 22    | 10.81   | 23      | 5.15    | 16         | 8.24    | 20       | 7.21    | 10        | 3.33    | 18        | 8.30    | 205     | 61.45   |
| 23    | 12.83   | 20      | 6.35    | 17         | 7.75    | 20       | 7.38    | 14        | 3.99    | 19        | 9.54    | 199     | 66.44   |
| 175   | 97.0    | 152     | 49.78   | 139        | 61.99   | 138      | 66.16   | 83        | 32.28   | 133       | 82.31   | 1426    | 548.50  |
| 88    | 12.13   | 19.00   | 6.22    | 17.42      | 7.75    | 17.25    | 8.27    | 10.38     | 4.04    | 16.63     | 10.29   | 17.50   | 68.56   |
| 20    | 11.42   | 19      | 5.46    | 20         | 8.44    | 14       | 5.93    | 10        | 2.68    | 18        | 12.24   | 176     | 65.74   |
| 15    | 12.85   | 9       | 7.84    | 8          | 9.77    | 6        | 3.00    | 12        | 3.81    | 8         | 7.57    | 102     | 68.92   |
| 22    | 14.71   | 15      | 5.76    | 14         | 9.59    | 12       | 6.74    | 11        | 4.55    | 16        | 11.78   | 173     | 73.65   |
| 57    | 38.93   | 44      | 19.06   | 42         | 27.80   | 32       | 16.27   | 33        | 11.07   | 42        | 31.59   | 451     | 213.32  |
| 00    | 13.00   | 14.34   | 6.86    | 14.00      | 9.27    | 10.67    | 5.43    | 11.00     | 3.89    | 11.00     | 10.53   | 159.34  | 71.11   |

**BARBADOS RAINFALL FE**

| Name of Station.            | Elevation.<br>Feet. | January. |         | February. |         | March. |         | April. |         | May.  |         | June  |
|-----------------------------|---------------------|----------|---------|-----------|---------|--------|---------|--------|---------|-------|---------|-------|
|                             |                     | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days. | Inches. | Days. |
|                             |                     |          |         |           |         |        |         |        |         |       |         |       |
| <b>ST. JAMES.</b>           |                     |          |         |           |         |        |         |        |         |       |         |       |
| <i>Lowlands</i>             |                     |          |         |           |         |        |         |        |         |       |         |       |
| Blowers ...                 | ...                 | 21       | 4.45    | 17        | 3.42    | 14     | 6.43    | 7      | 1.05    | 16    | 1.77    | 16    |
| Holstown Police Station ... | ...                 | 19       | 3.78    | 13        | 2.74    | 16     | 5.63    | 6      | .62     | 18    | 1.17    | 16    |
| Mount Standfast ...         | ...                 | 12       | 2.77    | 8         | 2.64    | 8      | 4.47    | 3      | .30     | 10    | 1.24    | 13    |
| Trents ...                  | ...                 | 14       | 3.69    | 14        | 2.85    | 10     | 5.37    | 3      | .44     | 13    | 1.62    | 13    |
| Westmoreland ...            | ...                 | 16       | 3.96    | 11        | 3.60    | 11     | 3.69    | 4      | .80     | 10    | 1.87    | 12    |
| Lancaster ...               | 413                 | 21       | 5.41    | 16        | 5.12    | 15     | 7.52    | 5      | .90     | 12    | 1.84    | 18    |
| Mullineux ...               | ...                 | 14       | 3.55    | 9         | 2.34    | 12     | 4.52    | 4      | .76     | 12    | 1.47    | 14    |
| Norwood ...                 | ...                 | 16       | 2.71    | 12        | 1.90    | 11     | 4.42    | 5      | .59     | 10    | 1.23    | 13    |
| Husbands ...                | ...                 | 12       | 2.78    | 12        | 2.15    | 9      | 3.46    | 3      | .36     | 8     | 1.00    | 10    |
| Oxnards ...                 | ...                 | 15       | 2.98    | 7         | 1.99    | 11     | 2.47    | 4      | .25     | 7     | 1.16    | 16    |
|                             |                     | 160      | 36.08   | 124       | 28.75   | 117    | 48.98   | 44     | 6.07    | 111   | 14.37   | 141   |
|                             |                     | 16.00    | 3.61    | 12.40     | 2.88    | 11.70  | 4.90    | 4.40   | 1.61    | 11.10 | 1.44    | 14.10 |
| <b>V. DISTRICT "B."</b>     |                     |          |         |           |         |        |         |        |         |       |         |       |
| <i>ST. PETER.</i>           |                     |          |         |           |         |        |         |        |         |       |         |       |
| <i>Highlands</i>            |                     |          |         |           |         |        |         |        |         |       |         |       |
| Nicholas Abbey ...          | 824                 | 16       | 2.43    | 11        | 2.49    | 11     | 2.08    | 7      | 1.66    | 10    | 1.64    | 12    |
| Oxford ...                  | 836                 | 18       | 2.93    | 12        | 1.84    | 12     | 2.23    | 8      | 1.90    | 11    | 1.87    | 19    |
| Orange Hill ...             | ...                 | 18       | 2.97    | 19        | 3.00    | 10     | 3.42    | 10     | 1.99    | 10    | 1.89    | 12    |
| Mangrove ...                | ...                 | 14       | 3.06    | 16        | 3.43    | 9      | 4.42    | 4      | 1.55    | 11    | 1.97    | 17    |
| Castle ...                  | 700                 | 18       | 2.21    | 12        | 1.89    | 12     | 1.73    | 5      | 1.32    | 11    | 1.55    | 10    |
| Ebworth ...                 | ...                 | 14       | 2.34    | 11        | 2.40    | 12     | 2.36    | 6      | 1.84    | 12    | 1.66    | 14    |
| Rock Hall ...               | ...                 | 21       | 3.81    | 15        | 3.91    | 11     | 4.68    | 5      | 1.60    | 12    | 2.31    | 22    |
| Portland ...                | ...                 | 17       | 3.37    | 11        | 3.33    | 12     | 3.00    | 6      | 1.77    | 12    | 2.20    | 15    |
|                             |                     | 136      | 23.17   | 107       | 22.26   | 89     | 23.92   | 51     | 13.63   | 80    | 15.06   | 121   |
|                             |                     | 17.00    | 2.90    | 13.83     | 2.79    | 11.13  | 2.99    | 6.38   | 1.70    | 11.13 | 1.89    | 15.13 |
| <b>ST. PETER.</b>           |                     |          |         |           |         |        |         |        |         |       |         |       |
| <i>Lowlands</i>             |                     |          |         |           |         |        |         |        |         |       |         |       |
| District "K" ...            | ...                 | 21       | 3.13    | 17        | 3.41    | 15     | 4.04    | 9      | 1.61    | 13    | 1.76    | 19    |
| Ashton Hall ...             | ...                 | 14       | 3.30    | 9         | 2.83    | 9      | 3.56    | 4      | 1.72    | 6     | 1.58    | 9     |
| Heywood ...                 | 50                  | 12       | 2.95    | 11        | 3.30    | 9      | 3.59    | 5      | 1.69    | 9     | 1.59    | 17    |
| Alleyne Dale ...            | ...                 | 21       | 2.76    | 13        | 2.12    | 14     | 3.14    | 8      | 2.25    | 11    | 1.72    | 17    |
| The Farm ...                | ...                 | 14       | 3.14    | 13        | 3.55    | 9      | 3.73    | 4      | 1.54    | 9     | 1.43    | 21    |
| The Rectory ...             | ...                 | 15       | 2.80    | 12        | 3.23    | 9      | 3.87    | 7      | 2.13    | 16    | 1.42    | 18    |
|                             |                     | 97       | 18.08   | 75        | 15.49   | 65     | 21.98   | 37     | 10.94   | 58    | 9.50    | 101   |
|                             |                     | 16.17    | 3.01    | 12.50     | 3.03    | 10.33  | 3.66    | 6.17   | 1.82    | 9.67  | 1.58    | 16.85 |

**JANUARY TO DECEMBER 1917.**

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Totals. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|---------|---------|
| Days. | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.   | Inches. |
| 22    | 12-98   | 23      | 6-61    | 20         | 7-11    | 20       | 8-52    | 14        | 3-38    | 16        | 8-98    | 206     | 70-30   |
| 27    | 11-19   | 20      | 4-57    | 17         | 6-76    | 18       | 5-68    | 9         | 2-69    | 13        | 4-86    | 192     | 55-34   |
| 22    | 10-22   | 14      | 3-51    | 17         | 6-25    | 11       | 4-29    | 12        | 2-89    | 11        | 5-77    | 111     | 49-59   |
| 20    | 11-64   | 17      | 5-64    | 15         | 7-33    | 10       | 7-83    | 8         | 2-99    | 9         | 5-82    | 146     | 60-85   |
| 22    | 11-55   | 11      | 4-90    | 14         | 6-52    | 12       | 4-14    | 7         | 2-72    | 11        | 8-05    | 141     | 50-77   |
| 25    | 14-46   | 21      | 6-27    | 19         | 7-48    | 15       | 7-17    | 15        | 4-17    | 15        | 9-28    | 197     | 77-31   |
| 20    | 12-30   | 14      | 5-77    | 16         | 7-54    | 11       | 8-39    | 8         | 2-25    | 12        | 6-80    | 146     | 61-87   |
| 21    | 10-42   | 18      | 4-93    | 17         | 7-68    | 11       | 8-18    | 9         | 2-92    | 9         | 6-73    | 152     | 56-83   |
| 23    | 10-72   | 13      | 3-79    | 13         | 5-18    | 13       | 4-18    | 4         | 2-08    | 8         | 5-60    | 128     | 46-65   |
| 22    | 12-01   | 19      | 4-85    | 16         | 5-12    | 12       | 4-52    | 9         | 2-39    | 10        | 4-46    | 148     | 48-92   |
| 224   | 117-50  | 170     | 50-87   | 164        | 67-02   | 133      | 63-09   | 95        | 29-78   | 114       | 66-35   | 1597    | 585-06  |
| 22-40 | 11-75   | 17-00   | 5-09    | 16-40      | 6-70    | 13-30    | 6-31    | 9-50      | 2-98    | 11-46     | 6-64    | 159-70  | 53-51   |
| 17    | 14-08   | 17      | 6-16    | 20         | 7-52    | 13       | 9-96    | 11        | 2-58    | 14        | 13-99   | 159     | 68-54   |
| 23    | 14-89   | 17      | 5-08    | 16         | 9-22    | 15       | 10-04   | 12        | 1-91    | 17        | 9-18    | 180     | 65-20   |
| 21    | 15-73   | 14      | 5-42    | 17         | 7-92    | 12       | 8-36    | 8         | 1-93    | 14        | 16-63   | 165     | 75-52   |
| 16    | 11-83   | 16      | 5-96    | 17         | 9-81    | 14       | 5-62    | 9         | 2-27    | 16        | 11-44   | 159     | 68-20   |
| 21    | 13-60   | 19      | 5-73    | 18         | 7-19    | 16       | 10-45   | 9         | 2-24    | 13        | 11-56   | 164     | 63-12   |
| 23    | 15-27   | 18      | 6-57    | 19         | 9-30    | 9        | 9-78    | 10        | 2-27    | 11        | 18-82   | 159     | 73-11   |
| 25    | 14-62   | 23      | 6-39    | 21         | 11-16   | 18       | 6-37    | 11        | 2-85    | 20        | 13-48   | 264     | 69-08   |
| 23    | 15-67   | 15      | 6-22    | 24         | 10-59   | 18       | 10-01   | 13        | 2-57    | 15        | 12-19   | 181     | 76-29   |
| 169   | 115-69  | 139     | 47-48   | 152        | 72-80   | 115      | 70-59   | 83        | 18-62   | 120       | 102-29  | 1371    | 569-06  |
| 21-13 | 14-46   | 17-38   | 5-94    | 19-00      | 9-10    | 14-38    | 8-2     | 10-38     | 2-33    | 15-00     | 12-79   | 171-38  | 71-13   |
| 25    | 15-81   | 23      | 5-19    | 20         | 9-14    | 16       | 5-00    | 14        | 2-61    | 18        | 13-94   | 210     | 72-22   |
| 17    | 15-71   | 9       | 4-79    | 14         | 8-52    | 8        | 5-66    | 7         | 1-74    | 8         | 11-98   | 111     | 67-29   |
| 25    | 15-73   | 15      | 5-14    | 15         | 8-54    | 9        | 4-08    | 10        | 1-98    | 10        | 10-66   | 147     | 65-77   |
| 25    | 16-20   | 20      | 6-96    | 17         | 9-50    | 17       | 9-63    | 13        | 2-19    | 17        | 12-10   | 193     | 73-27   |
| 22    | 13-38   | 14      | 4-16    | 18         | 8-00    | 9        | 3-42    | 11        | 2-82    | 15        | 9-39    | 159     | 61-05   |
| 24    | 14-69   | 21      | 5-26    | 19         | 9-51    | 12       | 4-41    | 9         | 2-82    | 15        | 11-85   | 171     | 69-26   |
| 138   | 91-52   | 102     | 31-74   | 103        | 53-60   | 71       | 32-20   | 64        | 14-26   | 83        | 69-42   | 994     | 408-86  |
| 23-00 | 15-25   | 17-00   | 5-29    | 17-17      | 8-93    | 11-88    | 5-37    | 10-67     | 2-38    | 18-63     | 11-57   | 165-67  | 68-14   |

**BARBADOS RAINFALL FROM**

| Name of Station.             | Elevation.<br>Feet. | January. |         | February. |         | March. |         | April. |         | May.  |         | June. |         |
|------------------------------|---------------------|----------|---------|-----------|---------|--------|---------|--------|---------|-------|---------|-------|---------|
|                              |                     | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days. | Inches. | Days. | Inches. |
|                              |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <b>ST. LUCY.</b>             |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>Lowlands</i>              |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Lamberts                     | 350                 | 18       | 2-81    | 11        | 1-50    | 10     | 1-63    | 5      | 1-28    | 7     | 1-21    | 15    | 4-64    |
| Mount Gay                    | ...                 | 13       | 2-41    | 6         | 1-20    | 7      | 1-84    | 6      | 1-17    | 7     | 1-32    | 15    | 4-85    |
| Pickerings                   | 71                  | 15       | 2-57    | 10        | 1-47    | 5      | 1-47    | 8      | 1-79    | 5     | 1-83    | 16    | 4-63    |
| Husbands                     | 184                 | 16       | 3-36    | 9         | 1-48    | 6      | 1-84    | 5      | 1-07    | 5     | 1-72    | 11    | 4-88    |
| Collyns                      | 404                 | 12       | 2-05    | 6         | 1-49    | 10     | 1-79    | 4      | 1-55    | 7     | 1-53    | 11    | 5-13    |
| Friendship                   | ...                 | 12       | 2-68    | 7         | 1-61    | 7      | 1-39    | 5      | 1-31    | 11    | 1-63    | 14    | 5-65    |
| Cove                         | ...                 | 15       | 2-03    | 11        | 1-68    | 11     | 1-73    | 7      | 1-65    | 11    | 1-75    | 14    | 5-26    |
|                              |                     | 101      | 19-41   | 60        | 10-43   | 56     | 11-69   | 35     | 7-82    | 53    | 8-99    | 96    | 35-13   |
|                              |                     | 14-43    | 2-77    | 8-57      | 1-49    | 8-00   | 1-67    | 5-00   | 1-12    | 7-57  | 1-28    | 13-71 | 5-02    |
| <b>VI DISTRICT "F"</b>       |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| <i>ST. JOSEPH. Highlands</i> |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Blackmans                    | 910                 | 18       | 3-51    | 16        | 2-33    | 17     | 4-78    | 9      | 1-83    | 19    | 1-60    | 14    | 3-63    |
| Andrews                      | 780                 | 14       | 4-84    | 16        | 3-10    | 11     | 4-05    | 2      | 1-44    | 8     | 2-64    | 14    | 6-34    |
| Lammings                     | 1,040               | 19       | 4-16    | 13        | 4-06    | 13     | 5-04    | 5      | 1-13    | 13    | 1-83    | 15    | 6-09    |
| District "F"                 | 966                 | 21       | 2-82    | 14        | 1-89    | 13     | 3-49    | 8      | 1-64    | 13    | 1-84    | 20    | 3-64    |
| Bissex Hill                  | 723                 | 13       | 3-51    | 9         | 2-71    | 12     | 5-44    | 3      | 1-71    | 12    | 2-15    | 18    | 8-54    |
| Retreat                      | ...                 | 12       | 3-31    | 7         | 2-95    | 10     | 5-24    | 7      | 1-75    | 15    | 2-28    | 14    | 4-86    |
|                              |                     | 97       | 22-15   | 75        | 17-04   | 76     | 29-84   | 34     | 4-50    | 71    | 11-84   | 95    | 34-00   |
|                              |                     | 16-17    | 3-69    | 12-50     | 2-84    | 12-67  | 4-98    | 5-67   | 1-75    | 11-23 | 1-98    | 15-83 | 5-07    |
| <i>ST. JOSEPH. Lowlands</i>  |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Preizers                     | ...                 | 11       | 1-95    | 14        | 2-10    | 12     | 4-07    | 6      | 1-85    | 9     | 1-64    | 13    | 5-58    |
| <i>ST. ANDREW. Highlands</i> |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Gregg Farm                   | ...                 | 9        | 2-78    | 10        | 3-54    | 10     | 5-11    | 3      | 1-49    | 9     | 1-40    | 13    | 4-78    |
| Cleland                      | ...                 | 17       | 3-30    | 15        | 3-60    | 12     | 3-85    | 7      | 1-48    | 13    | 2-65    | 14    | 4-42    |
|                              |                     | 26       | 6-03    | 25        | 7-14    | 22     | 8-96    | 10     | 1-97    | 22    | 4-05    | 27    | 9-20    |
|                              |                     | 13-00    | 3-02    | 12-50     | 3-57    | 11-00  | 4-48    | 5-00   | 1-99    | 11-00 | 2-03    | 13-50 | 4-60    |
| <i>ST. ANDREW. Lowlands</i>  |                     |          |         |           |         |        |         |        |         |       |         |       |         |
| Bruce Vale                   | ...                 | 15       | 4-41    | 10        | 4-05    | 7      | 4-56    | 2      | 1-65    | 7     | 2-31    | 15    | 7-18    |
| Haggatts                     | ...                 | 15       | 3-62    | 14        | 4-44    | 7      | 3-77    | 6      | 1-23    | 8     | 3-78    | 16    | 8-36    |
| Greenland                    | ...                 | 8        | 2-22    | 11        | 2-52    | 6      | 2-37    | 3      | 1-75    | 9     | 1-92    | 11    | 4-67    |
| Baxters House                | ...                 | 23       | 3-17    | 16        | 2-35    | 17     | 4-35    | 10     | 1-82    | 18    | 1-78    | 23    | 5-40    |
| Walkers                      | ...                 | 14       | 2-71    | 15        | 2-61    | 8      | 2-18    | 6      | 1-8     | 12    | 2-05    | 13    | 4-60    |
|                              |                     | 75       | 16-03   | 66        | 15-97   | 45     | 17-23   | 27     | 4-43    | 54    | 11-84   | 83    | 30-21   |
|                              |                     | 13-00    | 3-21    | 13-10     | 3-19    | 9-00   | 3-45    | 5-40   | 1-89    | 16-80 | 2-37    | 16-60 | 6-04    |

**JANUARY TO DECEMBER 1917.**

| July. |         | August. |         | September. |         | October. |         | November. |         | December. |         | Totals. |         |
|-------|---------|---------|---------|------------|---------|----------|---------|-----------|---------|-----------|---------|---------|---------|
| Days. | Inches. | Days.   | Inches. | Days.      | Inches. | Days.    | Inches. | Days.     | Inches. | Days.     | Inches. | Days.   | Inches. |
| 18    | 12-57   | 15      | 4-59    | 16         | 5-41    | 12       | 7-69    | 12        | 2-42    | 15        | 9-46    | 154     | 55-20   |
| 20    | 13-56   | 14      | 5-26    | 15         | 7-90    | 13       | 10-25   | 10        | 2-07    | 14        | 7-72    | 140     | 59-55   |
| 22    | 12-15   | 15      | 5-54    | 13         | 5-62    | 11       | 9-65    | 11        | 2-37    | 9         | 5-48    | 135     | 52-52   |
| 17    | 9-78    | 12      | 5-46    | 13         | 8-20    | 10       | 7-62    | 7         | 2-40    | 11        | 4-68    | 122     | 51-60   |
| 21    | 15-35   | 16      | 6-21    | 14         | 6-71    | 10       | 9-94    | 9         | 2-39    | 15        | 10-65   | 135     | 65-69   |
| 17    | 10-26   | 15      | 5-06    | 14         | 7-57    | 10       | 8-02    | 8         | 3-32    | 9         | 4-04    | 129     | 52-54   |
| 15    | 11-18   | 16      | 5-06    | 17         | 5-09    | 13       | 5-85    | 11        | 3-08    | 15        | 9-08    | 156     | 52-99   |
| 130   | 84-80   | 103     | 37-18   | 102        | 46-50   | 79       | 59-01   | 68        | 18-05   | 88        | 51-06   | 971     | 390-09  |
| 8-57  | 12-11   | 14-71   | 5-31    | 14-57      | 6-64    | 11-29    | 8-48    | 9-71      | 2-58    | 12-57     | 7-29    | 138-71  | 55-78   |
| 21    | 11-09   | 21      | 5-91    | 19         | 8-26    | 18       | 10-51   | 10        | 5-23    | 16        | 12-89   | 189     | 70-57   |
| 21    | 13-39   | 13      | 6-84    | 16         | 8-50    | 18       | 10-75   | 9         | 5-50    | 16        | 12-52   | 158     | 79-80   |
| 25    | 14-54   | 22      | 7-66    | 20         | 9-19    | 28       | 9-62    | 11        | 5-64    | 18        | 14-39   | 197     | 85-17   |
| 23    | 9-10    | 22      | 5-57    | 20         | 7-01    | 19       | 10-05   | 12        | 5-07    | 18        | 12-03   | 203     | 62-65   |
| 19    | 16-47   | 12      | 7-80    | 15         | 8-80    | 16       | 12-81   | 6         | 2-57    | 14        | 15-68   | 149     | 87-22   |
| 23    | 10-93   | 17      | 5-60    | 21         | 7-16    | 20       | 9-13    | 9         | 3-82    | 8         | 8-13    | 163     | 64-19   |
| 132   | 75-57   | 107     | 39-37   | 111        | 48-92   | 114      | 62-90   | 57        | 27-83   | 90        | 75-64   | 10-59   | 449-60  |
| 22-00 | 12-60   | 17-23   | 6-56    | 18-50      | 8-15    | 19-00    | 10-48   | 9-50      | 4-64    | 15-00     | 12-61   | 176-50  | 74-98   |
| 20    | 12-49   | 9       | 7-03    | 11         | 9-14    | 6        | 9-30    | 4         | 6-26    | 10        | 11-11   | 125     | 72-32   |
| 19    | 12-20   | 12      | 5-44    | 10         | 8-95    | 8        | 7-47    | 8         | 4-63    | 10        | 14-23   | 121     | 70-97   |
| 23    | 16-38   | 17      | 6-40    | 22         | 11-78   | 13       | 9-66    | 10        | 2-95    | 16        | 15-27   | 179     | 82-89   |
| 42    | 29-08   | 29      | 11-84   | 32         | 20-68   | 21       | 17-13   | 19        | 7-58    | 26        | 30-20   | 300     | 153-86  |
| 21-00 | 14-54   | 14-50   | 5-92    | 16-00      | 10-34   | 10-50    | 8-57    | 9-00      | 3-79    | 13-00     | 15-10   | 150-00  | 76-93   |
| 20    | 12-78   | 16      | 5-56    | 12         | 8-42    | 9        | 7-79    | 7         | 5-35    | 14        | 13-30   | 134     | 76-36   |
| 19    | 13-62   | 13      | 5-24    | 15         | 9-97    | 10       | 8-09    | 12        | 5-37    | 14        | 15-81   | 149     | 83-90   |
| 17    | 12-99   | 7       | 4-60    | 10         | 8-27    | 6        | 7-89    | 3         | 2-73    | 9         | 16-64   | 100     | 37-47   |
| 26    | 10-87   | 24      | 5-13    | 23         | 9-09    | 23       | 7-53    | 15        | 3-71    | 21        | 14-83   | 239     | 69-04   |
| 22    | 11-48   | 16      | 3-60    | 18         | 8-76    | 15       | 8-63    | 11        | 4-00    | 11        | 13-53   | 166     | 65-13   |
| 104   | 61-75   | 76      | 24-13   | 78         | 44-51   | 63       | 40-53   | 48        | 21-16   | 69        | 74-11   | 788     | 361-90  |
| 20-80 | 12-35   | 15-20   | 4-83    | 15-60      | 8-90    | 12-60    | 8-11    | 9-60      | 4-23    | 13-80     | 14-82   | 157-60  | 72-38   |

**SUMMARY OF BARBADOS RAINFALL**

| Name of Station.  | No. of Stations | January. |         | February. |         | March. |         | April. |         | May.   |         | June.  |         |
|---|-----------------|----------|---------|-----------|---------|--------|---------|--------|---------|--------|---------|--------|---------|
|   |                 | Days.    | Inches. | Days.     | Inches. | Days.  | Inches. | Days.  | Inches. | Days.  | Inches. | Days.  | Inches. |
| <b>I. DISTRICT "A"</b><br>ST. MICHAEL.<br>Lowlands ...    | 17              | 14-35    | 2-33    | 9-82      | 1-00    | 11-53  | 3-10    | 4-82   | 7-70    | 10-71  | 2-77    | 13-18  | 0-21    |
| <b>II. DISTRICT "B"</b><br>CHRIST CHURCH.<br>Lowlands ... | 16              | 14-06    | 2-21    | 9-04      | 1-27    | 13-13  | 3-55    | 5-56   | 9-1     | 11-00  | 2-67    | 15-13  | 5-72    |
| ST. GEORGE.<br>Highlands ...                              | 4               | 16-25    | 3-44    | 13-00     | 2-43    | 13-00  | 5-01    | 6-75   | 1-00    | 14-25  | 2-60    | 15-50  | 6-39    |
| ST. GEORGE.<br>Lowlands ...                               | 5               | 13-40    | 2-20    | 10-10     | 1-51    | 13-00  | 4-11    | 6-00   | 7-80    | 13-80  | 2-88    | 15-80  | 7-12    |
| <b>III. DISTRICT "C"</b><br>ST. PHILIP.<br>Highlands ...  | 3               | 12-33    | 2-45    | 10-67     | 1-73    | 11-00  | 4-50    | 5-33   | 2-0     | 12-33  | 2-21    | 13-33  | 5-25    |
| ST. PHILIP.<br>Lowlands ...                               | 18              | 12-00    | 2-30    | 8-04      | 1-12    | 11-39  | 3-97    | 3-41   | 6-2     | 11-50  | 2-19    | 11-33  | 4-91    |
| ST. JOHN.<br>Highlands ...                                | 10              | 14-50    | 3-12    | 12-70     | 2-05    | 11-50  | 4-43    | 5-50   | 7-34    | 11-40  | 2-37    | 14-50  | 5-82    |
| ST. JOHN.<br>Lowlands ...                                 | 3               | 15-00    | 2-43    | 13-00     | 1-65    | 14-00  | 3-77    | 6-67   | 7-70    | 14-00  | 2-51    | 16-67  | 5-68    |
| <b>IV. DISTRICT "D"</b><br>ST. THOMAS.<br>Highlands ...   | 8               | 20-13    | 4-56    | 15-50     | 3-34    | 14-00  | 6-06    | 6-25   | 1-14    | 11-75  | 1-93    | 16-63  | 6-55    |
| ST. THOMAS.<br>Lowlands ...                               | 8               | 16-09    | 3-64    | 13-88     | 2-97    | 12-50  | 4-45    | 5-63   | 7-82    | 13-38  | 1-95    | 16-63  | 6-04    |
| ST. JAMES.<br>Highlands ...                               | 3               | 13-67    | 3-35    | 13-67     | 4-32    | 10-00  | 5-60    | 5-67   | 1-32    | 9-00   | 1-93    | 15-34  | 6-34    |
| ST. JAMES.<br>Lowlands ...                                | 10              | 16-60    | 2-61    | 12-40     | 2-89    | 11-70  | 4-90    | 4-40   | 7-61    | 11-10  | 1-44    | 14-10  | 5-62    |
| <b>V. DISTRICT "E"</b><br>ST. PETER.<br>Highlands ...     | 8               | 17-00    | 2-90    | 13-38     | 2-79    | 11-13  | 2-99    | 6-38   | 1-70    | 11-13  | 1-89    | 15-13  | 5-44    |
| ST. PETER.<br>Lowlands ...                                | 6               | 16-17    | 3-01    | 12-50     | 3-03    | 10-33  | 3-66    | 6-17   | 1-81    | 9-67   | 1-58    | 16-55  | 6-19    |
| ST. LUCY.<br>Lowlands ...                                 | 7               | 14-43    | 2-77    | 8-57      | 1-49    | 8-00   | 1-67    | 5-90   | 1-12    | 7-57   | 1-28    | 13-71  | 5-02    |
| <b>VI. DISTRICT "F"</b><br>ST. JOSEPH.<br>Highlands ...   | 6               | 16-17    | 3-69    | 12-50     | 2-84    | 12-67  | 4-98    | 5-67   | 7-5     | 11-33  | 1-98    | 15-33  | 5-67    |
| ST. JOSEPH.<br>Lowlands ...                               | 1               | 11-00    | 1-95    | 14-00     | 2-10    | 12-00  | 4-07    | 6-00   | 1-65    | 9-00   | 1-64    | 13-00  | 5-58    |
| ST. ANDREW.<br>Highlands ...                              | 2               | 13-00    | 3-02    | 12-50     | 3-57    | 11-00  | 4-43    | 5-00   | 7-99    | 11-00  | 2-03    | 13-50  | 4-60    |
| ST. ANDREW.<br>Lowlands ...                               | 5               | 15-00    | 3-21    | 13-20     | 3-19    | 9-00   | 3-45    | 5-40   | 8-9     | 10-80  | 2-37    | 16-00  | 6-04    |
|   | 140             | 280-46   | 56-28   | 270-57    | 45-93   | 21-33  | 78-75   | 105-61 | 19-74   | 214-22 | 40-22   | 285-76 | 110-19  |
|   |                 | 14-76    | 2-96    | 12-14     | 2-32    | 11-67  | 4-11    | 5-56   | 1-61    | 11-7   | 2-12    | 15-04  | 5-80    |

FROM JANUARY TO DECEMBER 1917.

|     | July.   |        | August. |        | September. |        | October. |        | November. |        | December. |         | Totals. |  |
|-----|---------|--------|---------|--------|------------|--------|----------|--------|-----------|--------|-----------|---------|---------|--|
|     | Inches. | Days.  | Inches. | Days.  | Inches.    | Days.  | Inches.  | Days.  | Inches.   | Days.  | Inches.   | Days.   | Inches. |  |
| 58  | 11-74   | 15-24  | 6-08    | 14-19  | 6-80       | 12-56  | 5-48     | 7-88   | 2-86      | 9-88   | 4-80      | 141-59  | 53-19   |  |
| 88  | 11-41   | 15-56  | 6-67    | 13-81  | 5-75       | 14-19  | 6-16     | 7-56   | 3-92      | 9-88   | 3-86      | 151-19  | 53-46   |  |
| 00  | 12-67   | 20-50  | 7-64    | 20-50  | 7-82       | 19-75  | 8-56     | 13-00  | 5-37      | 19-00  | 9-78      | 198-50  | 72-64   |  |
| 80  | 12-14   | 17-20  | 7-57    | 17-00  | 7-00       | 15-60  | 8-46     | 11-20  | 5-48      | 11-60  | 5-16      | 167-80  | 64-52   |  |
| 67  | 10-71   | 17-00  | 7-49    | 17-67  | 7-90       | 14-00  | 6-97     | 9-67   | 3-52      | 12-67  | 9-52      | 158-00  | 63-15   |  |
| 50  | 9-95    | 15-33  | 6-43    | 14-61  | 6-01       | 13-50  | 7-38     | 9-11   | 3-06      | 11-17  | 6-92      | 141-61  | 54-87   |  |
| 00  | 12-12   | 17-40  | 7-88    | 17-20  | 8-35       | 15-33  | 7-93     | 10-90  | 5-03      | 15-20  | 11-02     | 165-69  | 73-13   |  |
| 00  | 10-71   | 19-33  | 6-87    | 16-00  | 7-72       | 17-00  | 7-20     | 11-33  | 3-36      | 15-33  | 9-92      | 182-33  | 62-53   |  |
| 25  | 14-19   | 19-50  | 6-98    | 19-75  | 7-11       | 19-13  | 9-25     | 11-00  | 4-87      | 17-13  | 14-88     | 195-00  | 80-85   |  |
| 88  | 12-13   | 19-00  | 6-22    | 17-43  | 7-75       | 17-25  | 8-27     | 10-38  | 4-04      | 16-63  | 10-29     | 179-50  | 63-56   |  |
| 00  | 13-00   | 14-84  | 6-36    | 14-60  | 9-27       | 10-67  | 5-43     | 11-00  | 3-69      | 14-00  | 10-53     | 150-34  | 71-11   |  |
| 40  | 11-75   | 17-00  | 5-09    | 16-40  | 6-70       | 13-30  | 6-31     | 9-50   | 2-98      | 11-40  | 6-64      | 159-70  | 58-51   |  |
| 13  | 14-46   | 17-38  | 5-94    | 19-00  | 9-10       | 14-38  | 3-82     | 10-28  | 2-33      | 15-00  | 12-79     | 171-38  | 71-13   |  |
| 00  | 15-25   | 17-00  | 5-29    | 17-17  | 8-93       | 11-83  | 5-37     | 19-67  | 5-38      | 13-83  | 11-57     | 165-67  | 63-14   |  |
| 57  | 12-11   | 14-71  | 5-31    | 14-57  | 6-64       | 11-29  | 8-43     | 9-71   | 2-58      | 12-57  | 7-29      | 138-71  | 55-73   |  |
| 200 | 12-60   | 17-33  | 6-56    | 18-50  | 8-15       | 19-00  | 10-48    | 9-50   | 4-64      | 15-00  | 12-51     | 176-50  | 71-93   |  |
| 000 | 12-49   | 9-00   | 7-03    | 11-00  | 9-14       | 6-00   | 9-30     | 4-00   | 6-26      | 10-00  | 11-11     | 125-00  | 72-32   |  |
| 100 | 14-54   | 14-50  | 5-92    | 16-00  | 10-34      | 10-50  | 8-57     | 9-00   | 3-79      | 13-00  | 15-10     | 150-00  | 76-93   |  |
| 080 | 12-35   | 15-20  | 4-83    | 15-60  | 8-90       | 12-60  | 8-11     | 9-60   | 4-23      | 13-80  | 14-82     | 157-60  | 72-38   |  |
| 891 | 236-32  | 313-02 | 122-11  | 310-46 | 149-47     | 237-88 | 146-43   | 185-39 | 74-39     | 256-59 | 188-56    | 3070-92 | 1265-98 |  |
| 152 | 12-44   | 16-47  | 6-43    | 16-84  | 7-87       | 14-10  | 7-71     | 9-76   | 3-94      | 13-50  | 9-90      | 161-34  | 69-58   |  |