

BOTANICAL STATION—Barbados.

OCCASIONAL BULLETIN OF

Miscellaneous Information, No. 8.

The present low price obtained for molasses suggests the possibility of our planters having to find some more lucrative means of disposing of this product. I cannot therefore do better than reproduce here the excellent paper read before the Louisiana Sugar Planters Association by Dr. W. C. Stubbs, Director of the Sugar Experiment Station at New Orleans, La. and also the discussion that followed with the hope that the information may be of some value to the planting community.

The paper was published in the Louisiana Planter of April 10th 1897.

JOHN R. BOVELL,
Superintendent.

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How best to combine our Molasses as a Feed for Work Stock.

[A paper read by Dr. W. C. Stubbs before The Louisiana Sugar Planters' Association April 8, 1897.]

The three proximate principles which give value to all feedstuffs are "albuminoids" which make muscle, tissue, tendons, nerves, etc., "carbohydrates" which furnish the fuel of the body, and "fats" which make fat.

The ratio of the carbohydrates and fats (estimating the latter as two and one-half times the fuel value of the former) to the albuminoids is called the nutritive ratio. This ratio can vary between wide extremes. An animal that is simply being maintained will thrive on a very wide ratio, while one subjected to very hard work requires a narrow ratio for its best endurance. Tables have been deduced for numerous experiments, suitable for all domestic animals under all conditions.

The following table gives the requirements per day of a horse weighing 1000 pounds, in pounds:

	Albuminoids	Carbohydrates	Fats	Nutritive ratio.
At light work.....	1.5	9.1	.3	6.5
At moderate work.....	1.8	11.2	.6	7.0
At heavy work.....	2.8	13.4	.8	5.5

There are large quantities of molasses that are being fed on the plantations daily, and the inquiry is frequently made—With what shall it be combined to give the best results?

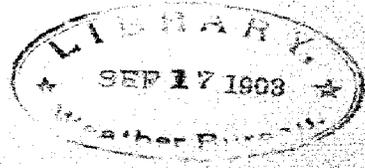
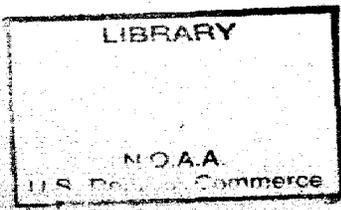
Molasses is almost pure hydrocarbons, with a small quantity of albuminoids and no fats, hence it is difficult to combine with most of the feeds accessible to the planters. The following table gives analyses of the feedstuffs of this state:

Analysis of common Feedstuffs.

	Albuminoids.	Carbohydrates.	Fat.
Oats.....	11.50	59.70	5.00
Corn.....	10.52	70.00	5.00
Pea-vine hay.....	14.57	42.22	2.90
Crab-grass hay.....	10.89	39.96	2.61
Alfalfa hay.....	14.28	42.63	2.15
Rice bran.....	12.10	50.04	8.76
Cotton seed meal.....	42.30	23.60	13.10
Molasses.....	2.40	71.60	...

The above table represents the actual composition of these feedstuffs when in good condition. Hays, particularly that from pea-vines, vary greatly according to time of harvest and care with which they are harvested; the leaves constituting the most valuable portions.

Again, only a portion of the above ingredients are digestible, varying within certain limits with each kind, under the heads of grain, hays and by-products. Several of the above, particularly molasses, have never had the co-efficients of digestibility determined.



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It will not be much of an error, however, in all of the calculations of rations in this paper, to assume that 75 per cent. of the albuminoids, 78 per cent. of the carbohydrates and 65 per cent. of the fats are digestible. Assuming these co-efficients, how can a ration, combining molasses with one or more of the above feeds, be made to suit the mules in their work varying from "light" to "very heavy." Several of our planters have mixed molasses while hot with rice bran, and the mixture on cooling is sufficiently solid to be transported in sacks.

The following is the analysis of such a mixture prepared on a large scale by one of our most progressive and intelligent planters.

One hundred pounds of mixture contains 5.75 pounds albuminoids, 60.30 pounds of carbohydrates, and 1.55 pounds of fat, with a very wide nutritive ratio of 1 to 11.

The above analysis, made in the laboratory of the station, would indicate an approximate mixture of two parts of molasses to one of bran. This mixture would, perhaps, answer for a maintenance ration, but when fed to working animals it should be additioned by some food rich in albuminoids in order to economize the carbohydrates present. If only 75 per cent. of the albuminoids are digestible it would require thirty-five, forty-one and sixty-four pounds respectively of this mixture to furnish the albuminoids required daily by 1000 pound mule at light, moderate, and heavy work. To supply the needed albuminoids excesses of carbohydrates of nine, twelve and twenty-one pounds have been furnished, which are virtually losses, since they can not be utilized by the animals.

Rationally, then, this mixture should be supplemented by a concentrated food in order to give what is known as a *balanced ration*. Cotton-seed meal added in small quantities will accomplish this purpose. Two pounds of cotton-seed meal to fifteen pounds of mixture for light work; two to twenty pounds for moderate work; and four to twenty pounds for heavy work. But our purpose is to discuss the rations which can be made with molasses and the feeds given above. The following mixtures will approximate the ration per day for light work for each 1,000 pound mule:

1. 15 pounds molasses and 4 pounds cotton seed meal.
2. 10 pounds molasses and 15 pounds oats.
3. 10 pounds molasses and 12 pounds pea vine hay.
4. 10 pounds molasses and 15 pounds corn.
5. 10 pounds molasses, 10 pounds corn and 1½ pounds cotton seed meal.
6. 15 pounds molasses and 12 pounds rice bran.

For moderate work, the following mixtures will approximate requirements:—

1. 15 pounds molasses, 5 pounds pea vine hay and 3 pounds cotton seed meal.
2. 10 pounds molasses, and 15 pounds pea vine hay.
3. 10 pounds molasses, 10 pounds pea vine hay and 5 pounds oats.
4. 15 pounds molasses, 10 pounds pea vine hay and 1 pound cotton seed meal.
5. 15 pounds molasses, 10 pounds rice bran and 2 pounds cotton seed meal.
6. 10 pounds molasses, 10 pounds corn and 2½ pounds cotton seed meal.

For heavy work, the following may be used:—

1. 10 pounds molasses, 15 pounds pea vine hay and 15 pounds oats.
2. 15 pounds molasses, 15 pounds pea vine hay and 10 pounds rice bran.
3. 15 pounds molasses, 15 pounds pea vine hay and 3 pounds cotton seed meal.
4. 15 pounds molasses, 15 pounds corn and 4 pounds cotton seed meal.
5. 15 pounds molasses, 15 pounds oats and 3½ pounds cotton seed meal.
6. 10 pounds molasses, 15 pounds corn and oats and 15 pounds pea vine hay.

In the above, wherever corn occurs in the mixture, the carbohydrates are in slight excess; wherever rice bran, the fats, due to preponderance of these ingredients in these two stuffs.

In the use of above palatability will have to be also consulted, since food must be palatable to permit an animal to eat large quantities.

The tables given above will enable any planter to calculate a ration suitable to the requirements of his mules out of the foodstuffs on hand or readily available.

The Use of Molasses as Stock Feed.

Discussion had at the regular monthly meeting of the Louisiana Sugar Planters' Association, on Thursday evening, April 8, President John Dymond in the Chair.

The Chairman—It was intended to have a paper this evening by Mr. B. C. Le Blanc on "Handling Cane at the Carrier," but we have just received a letter from that gentleman advising us of his inability to be present this evening on account of the high-water troubles. I would ask the secretary to read the letter. Dr. Stubbs has kindly consented to read a paper on the "Use of Molasses as Stock Feed," a matter in

which all of us are deeply interested, and if there be no objection we will take this up as the subject for discussion this evening.

Dr. W. C. Stubbs—I think I ought to make an explanation before reading the paper. This paper was written at the request of several planters and was to be published in *The Planter* this week, and under advice received from the editor I omitted a great deal of technical matter, simply forming conclusions. I did not know I would be called upon to read the paper before coming here, therefore did not bring down the tables to answer questions that might be asked me.

The subject, or rather the letters received, asked the question, "How best to compound our molasses as a feed for work stock," and this is the answer.

Dr. Stubbs' excellent paper will be found in the columns of our issue of April 10—(Ed.)

The Chairman—As I have just stated, Mr. Le Blanc had agreed to come down to-night to discuss his cane carrier device, but as you have just heard from his letter, he is prevented from being with us by the high water troubles. As Dr. Stubbs has kindly consented to take up this subject matter, it is now before you for discussion, and we hope we shall have a full debate, as it is one that interests every sugar planter in the State of Louisiana, and it is a source of large economy to many of us who are now using molasses.

Mr. Crozier—It seems to me that in some of these proportions that you almost lose sight of the value of grain; for instance, where you recommend fifteen pounds of oats. That is a pretty good feed of oats in itself. It seems to me that would be a very big feed for a mule.

Dr. Stubbs—The tables I gave are for light, moderate and heavy work, we feed more to a mule at work (doing heavy work) than we would feed to a mule doing light work.

Mr. Crozier—Fifteen pounds of oats is nearly a half bushel.

Dr. Stubbs—I am giving you the feed for heavy mules—on a thousand pound mule more is prescribed than for a mule of light weight. None of the tables given are based on practical experience at all. I don't want any one to understand me otherwise. I have given the exact tables required for light, heavy and moderate work. I have given analysis of feed and I have compounded it to suit that ration, that is all. A horse will eat a half bushel of oats if you work him hard.

You may maintain and fatten, which requires a different ration. You can maintain a mule upon a ration as we do of one to twelve. You can fatten on a much wider ration. The tables I have given are for the benefit of working mules—light, moderate and heavy.

The Chairman—I would state that a good many years ago I went to the Third avenue stables in New York and saw the superintendent and asked him on what they fed their horses. They had 2000 horses in the stables, and he told me that they gave them in the greater part of the year twelve pounds of grain and seven or eight pounds of hay per head; that in the summer time they fed eight pounds of corn, four of oats, and eight pounds of cut hay per head; and that on that the horses seemed to do well; that they took care of the horses carefully, employing one man to eight horses, and this man kept them in good trim all the time. I came down here and went to the Prytania street line—to its headquarters—and they told me that they fed ten pounds of corn per day. I am not certain about that—and about the same proportion of oats when needed, but they worked their mules two or three days in a week ten miles a day, and they worked on alternate days fifteen miles per day, making three trips of five and the other two of five, and on the long days that they made fifteen miles the mules seemed to be fagged out or gave evidence of distress. Of course, desiring to be as economical as possible in the use of stockfeed on the plantation, I took the largest rations, twelve pounds, and fed it to our mules, but found they were in a fair way to starve to death. I then went to investigating, and found the government only gave ten pounds. That seemed to be excellent authority, but the government doesn't plough with its mules; so in sheer desperation, having failed in all these attempts to get at the scientific side, we began to increase the feed and raised the ration to fourteen pounds, and found the animals ate all we gave them, and did but little better; we raised the ration to sixteen pounds; still no improvement; then fed eighteen pounds, and finally it got up to twenty-two or twenty-three pounds of grain per day.

Grain was high, but we had to furnish it to the mules to get our work done.

This verifies what Dr. Stubbs says about the rations required for an animal working in the cane fields: we plough per day more miles than a street car mule travels; and the mule in the field pulls a plough hard all the time.

Now, we have been trying since 1894 to introduce the use of molasses generally, in and out of the State, but find some skeptical people yet.

We now wish to see if we can not disseminate some data concerning the proper use of molasses so we can feed our stock a little more economically.

Dr. Stubbs—I would say that cotton planters feed a peck of corn per day—that is 14, 15 or 16 pounds to a cotton mule, which is not as large as our mules here; a peck of corn is considered a ration for a cotton mule.

Mr. Wibray J. Thompson—In the table where corn is mentioned does it mean corn and cobs?

Dr. Stubbs—Corn and cobs. It takes 70 pounds to make a bushel.

Mr. Thompson—Corn, cobs and shuck? How many pounds to the bushel?

Dr. Stubbs—Seventy-four pounds after Christmas; 76 before Christmas; that is the rule in Tennessee and Virginia.

Mr. Cozier—I think the greatest mistake that is some times made is where they feed oats altogether, and nothing else, because you will always find in such case the mortality is heaviest for the reason that they don't give enough oats. They are fed twice a day and the oats are digested soon; and often a mule goes in at night, eats his oats, and by 12 o'clock the oats are digested and the next morning the mule goes to work on an empty stomach.

They only give two gallons of oats at a feed; and while it looks big the mules get poor on it; something ought to be used besides oats.

Colonel Clarke—I turn out mules loose and let them eat what they want. I would like to ask Professor Stubbs, however, whether our way of feeding molasses is not equally as well as the best. We turn the trough full of molasses and keep it full and let the mule select the proper percentage for himself.

Dr. Stubbs—No, Sir; not by any means, for this reason. I will give you some of our experience. If fond of molasses they will over eat and will fill up on it to such an extent that they will not eat grain—will not touch it unless you are working them pretty hard.

Colonel Clarke—That don't seem to be our experience.

Mr. C. P. Binnings—That certainly is not ours.

Mr. Thompson—That might be likened to turning children free in a candy shop.

Colonel Clarke—As a rule we let them eat all they want.

Dr. Stubbs—I differ with you as to the way of putting the molasses in the trough.

Colonel Clarke—He says that works first rate in his case.

Dr. Stubbs—My mules are fond of it, and when not working they would spend their time there, would come back for it. My cows eat molasses to such extent that it rendered the milk unpalatable, we could not drink it. The stock will fight over it. It is just as Mr. Thompson suggests it is something like turning children loose in a candy shop. If you do this they will hardly ever touch anything else.

Mr. Clarke—If you turn these children into a candy shop three times a day during the year.

Professor Stubbs—That is another thing. You brought your mules up to it there; I have never done that.

The Chairman—Dr. Stubbs, in his conclusions, introduces the albuminoids in with these carb-hydrates; and the suggestion in one of these is that you feed three pounds of cotton seed meal or, rather, mix it with fifteen pounds of molasses. Therefore, if a barrel of molasses, filled up to the top quarter, say 500 pounds, would take a sack of cotton seed meal, why would it not be well to mix it that way? I would like Professor Stubbs to advise us on that point. Each time that you dump a barrel of molasses into the trough, dump in a sack of cotton seed meal and then carefully stir the whole mass, so that when the mule took the molasses he would also take the cotton seed meal.

Dr. Stubbs—Mules will eat cotton seed meal or cake. I give it to my mules and they eat it easily. I should say there would be no objection to your mixture, provided your troughs are cleaned out thoroughly.

The Chairman—Why would they have to be cleaned?

Dr. Stubbs—Because of the fermentability of the cotton seed meal.

The Chairman—The daily cleaning would be a serious objection.

Dr. Stubbs—It should not remain in there, because fermentation takes place. I want to say, as I have said before, that whenever cotton seed, or cotton seed meal ferments, elements are developed that are poisonous. These ptomaines are very dangerous and they frequently develop by fermentation in meal so as to render it unfit, hence none should be left in the trough. I would prefer to feed dry.

The Chairman—The Universal plan is as Mr. Clarke says: Troughs are filled with molasses just as with water—perhaps not so deep—and the mules take the molasses to their own desire.

Professor Stubbs—I don't think you will have any trouble in getting them to eat cotton seed meal at all. I have never had any trouble getting them to eat it.

The Chairman—Perhaps they may eat cake better than meal.

Mr. C. P. Binnings—My experience in the last ten years has been to feed the molasses in half-barrels, only putting about—well, a little over two-thirds of the half-barrel, putting several in the lot, and let the mules eat it. I have done that for the past ten years. I feed molasses that is fresh. I never feed it when it shows any acidity.

The Chairman—Fermented molasses is presumed not to be dangerous.

Mr. Binnings—I won't feed it.

Dr. Stubbs—No, sir: unless it had gone through a high degree of fermentation. I

would state one thing: I encountered a planter the other day, and there may be some objection to feeding molasses on his ground. He began feeding molasses ten years ago, and he spoke of its decaying the teeth of the mules. There may be some truth in it. This is a mere assertion of his. There is one thing connected with that, however, and that is the mules go to the water trough every ten or fifteen minutes, I think as much to clean their teeth as for anything else. I am not prepared or posted on that side of the question. This planter told me that, and he said he had been observing that closely.

Judge Rost—I have no experience, Mr. President; I have been listening, trying to find out whether fermented molasses was injurious or not, I am surprised to find it is not.

The Chairman—You know fermented grape juice is recommended.

Judge Rost—Yes, I know, but I had never heard fermented molasses recommended before.

Mr. Wibray Thompson—Is it seriously proposed to grade a ration to the size of the mule?

Dr. Stubbs—Yes, to the thousand pound mule.

Mr. Thompson—You would have to keep track of the weight of every heavy mule and weigh his food in proportion to his weight.

Dr. Stubbs—No; not at all; you can estimate it very readily. When you buy your mules nearly every one has an opportunity to judge whether it weighs 1,000 or more pounds; you can easily get at the grade.

Mr. E. V. Weems—I have lost mules from feeding fermenting molasses, I think. In 1894 I fed molasses and had a good many cases of colic; lost three or four, or so out of 150, and we stopped feeding it; and we had no more trouble for some days. I wanted to feed the molasses, so I commenced feeding it again, and we lost three or four more. We fed in troughs, and fed to them when the molasses was fermented.

The Chairman—How badly fermented?

Mr. Weems—It showed the foam of fermentation.

This year I am feeding it to our mules again, about as Mr. Clarke does, boiled. I have had no trouble so far.

Mr. Thompson—Do you approximate the amount per head?

Mr. Weems—I am not sure, but about a barrel to 110 head of stock.

Mr. Binnings—I feed about a barrel and a quarter to sixty head and have been doing it for eleven years; never stop except when it ferments badly. I always retain a sufficient amount of molasses to run me over until the crop season begins. I suppose I have as many as fifty customers buying molasses from me at 50 cents per barrel to feed their stock. I do not know of any deaths or sickness from it, I have heard of none.

Dr. Stubbs—When I said there was no danger from feeding fermented molasses I meant ordinary fermentation. There is always danger on account of the carbonic acid gas from the ferment, but that is no poison in itself; that simply produces expansion of the stomach and indirectly produces death. There are other ferments that are poisonous; I don't want to be understood as recommending fermented molasses; but a general colic may be produced on account of the decomposition of the molasses and its expansion in the animal.

Mr. Binnings—I guess our stock won't eat much when it is fermented. Our barrels, or half barrels, are cleaned out every day.

Mr. Thompson—I think, doctor, you recommend the grinding of the shuck, cob and corn. We did that, but at one time mixed about a pint of molasses with the corn, and we lost several mules in consequence. This was put in mangers for them, each mule being given his ration. Upon investigation we found the holster had not been properly cleaning the mangers.

We found it impossible to make him do it. I don't know positively if that was the cause of the deaths, but I believe it was. I had no reason to believe then, nor have I now that a pint was too much. Any fermented molasses was given and the mules left more or less, however, in their mangers. We lost several mules from that cause. You still take the same view of grinding the cob and all.

Dr. Stubbs—The highest authority, paradoxical as it may seem, says and asserts from actual experiments made, that a pound of corn and cob meal is just as good as a pound of corn meal.

Mr. Thompson—Is that true of Southern corn?

Dr. Stubbs—The experiment was made on Northern corn.

The proportion varies about 82 to 83 down to 68 or 69 on our creole corn; that is the variation, so it would not make much difference; 82 to 69 I think are the limits of the two different varieties. Prof. Henry, the professor in charge of the experiment station in Wisconsin, recently published a bulletin on the subject. Every body is now grinding the corn and cob together, frequently with the shuck. A great many objected on account of the shuck. You can grind five or ten bushels with the cob alone where you can grind but two with the shuck on.

Mr. Thompson—What machine is generally used in the South.

Dr. Stubbs—I have been using one manufactured by Mr. Foss. We have three of these. I am simply quoting from the papers of the North when I say that about the other mills. We found some difficulty in grinding the shuck, cob and all on the ground that it was slower work.

Mr. Thompson—What value do you place upon currying, if any?

Dr. Stubbs—There used to be a time when currying used to be considered as a partial substitute for feed.

To-day currying is only necessary to keep the hide free from disease. No book on feeding, of any character, pays any attention to currying at all, although it is used in experiments to keep the animals clean. I have no doubt cleanliness aids the animal in digesting and assimilating its food. I have no doubt this is because they are stronger, and it is simply on the ground that it makes an animal feel better, and therefore capable of eating and assimilating larger quantities; but experiments place no value on currying or cleaning at all.

Mr. Thompson. After an animal has been hard at work, is it safe to give it all the feed it will eat?

Dr. Stubbs. As a habit, if the ration is well balanced, yes.

Mr. Thompson. It is safe to do that?

Dr. Stubbs. If your ration is well balanced, just as much as the animal will eat is always safe. I would say, Mr. President, while on this subject, that for the last two years at Calhoun, in our dairy, we have had some interesting experiments. We had twelve cows weighing from 600 to 1400 pounds, and every day the milk was analyzed—it was weighed and analyzed twice a day. The results were curious. We have a Jersey cow there weighing 700 pounds that gave two and a half pounds of butter per day, and about three and a half gallons of milk, varying in butter fat from 6 to 7 per cent. We have a Holstein, weighing 1400 pounds which gives six gallons of milk a day and giving as low as 2 to 3 per cent of fat in the milk. That animal weighed 1400 pounds, the other 700; the Holstein giving twice the quantity in milk, but we did not half the results in butter as compared with the little Jersey. Both were fed the same ration, but in different quantities. We have kept a correct record, and these tables have thrown a valuable light on feeding. We changed the rations about every three months, varying the ratio and varying the food in order to test what was best adapted for making the butter.

Mr. Thompson. I don't think you have told us how molasses (or mules) should be fed?

Dr. Stubbs. I cannot tell off the reason.—I am simply giving you an idea. I have no experience in feeding scientifically, except at Audubon Park, upon cotton seed and molasses. We found that in feeding cows with cotton seed hulls and over four pounds of molasses, they began to scour, and we had to limit to that; that as soon as we increased over four pounds they began to scour. In that instance we simply poured the molasses over the hulls, the molasses diluted a little in order to make it mix.

The Chairman. In speaking about the matter of deaths by the use of molasses, I would say we began the feeding of molasses down the country in 1883, at the time the molasses market first gave out, and we had quite large number of deaths at that time, which were attributed to the molasses; so we discontinued feeding it for the time being. We began again, however, in 1894 in very severe earnest, and we have had no deaths whatever, so far as I know. The animals eat fifteen pounds per day; they eat it ad libitum and like it. During this last summer our animals ate fifteen pounds of molasses and fourteen pounds of oats, I think, per day. They had all the molasses and oats they could eat; so the deaths, while they seem in several instances cited to-night, to be attributable to the use of molasses, they seem to me to be erroneously attributed thereto. Based upon my own experience, I hardly think the deaths cited have been caused by fermented molasses, which is just simply vinegar without any deleterious elements in it. Now the next point that comes up, one that I would like Dr. Stubbs to discuss, is this matter of feeding oats. It does seem to me the sugar planters have not been giving that attention to oats that they should. They have in molasses an article very nearly identical with corn, and if we are going to buy any feed, buy oats and not corn. If we raise corn we have a good food article, but still one that is apparently closely allied to molasses, of which we have a super-abundant supply. This matter was brought out before the Louisiana State Agricultural Society this last winter, and it was there suggested that very few planters appreciate the wonderful value of oats as a first-class food for heavy work. To-night we hear Mr. Crozier bringing out the fact that animals might not get enough oats, as they sell by the bushel, that is deceptive in the matter of bulk so far as it is concerned. They seem to be the perfection of feed for work animals, and we ought not to buy any corn if we can buy oats.

Dr. Stubbs. You may be right, and Mr. Crozier, too. There are oats and oats. There are oats—I have seen several lots on this market—I am satisfied if you bought, any, and made an examination, you would have found them nearly all hulls. Now,

Col. McGense Burris exhibited some at the State agricultural meeting which weighed thirty or forty pounds to the bushel, and he fed fifteen pounds per day.

The oat is valuable in proportion to the kernel in it, and not the outer hull. A bushel of oats may not have the same feeding value as another bushel lying right alongside of it; and we get some of the other oats sometimes.

There has been discovered in oats an alkaloid avenine, and its action is similar to the effect of morphine or opium, and when oats are fed to horses it enables them to endure more hardship than any other food; hence a horse racer always feeds his running stock almost exclusively upon good, hard oats. As I stated in my paper just now, it is hard to put corn in any ration that will not have an excess of carbohydrates, and therefore the two cannot be combined without an excess of carbohydrates; whereas oats will not have as great a redundancy. Consequently feed less corn. The more corn you feed the more carbohydrates, and it is therefore more heating in its properties when eaten by an animal than oats. You must recollect an animal is, as it were, a sort of machine. You throw coal into a steam boiler, and when it needs repairs you send it to a shop; the animal is a machine and has to be run on the same principles with this difference that you can stop a boiler and send it to the shop for repairs; these albuminoids are elements of the tissues, and the muscles, and so on; whereas carbohydrates simply furnish the fuel for running the machine. In hot weather you don't want as much as in cold weather.

The Chairman. Is not a sugar planter carrying coals to New Castle when he buys corn?

Dr. Stubbs. To a large extent, but not entirely.

The corn does contain 10 per cent. albuminoids, and 70 per cent. carbohydrates, therefore the nutritive ration between the two is wide.

It is better to buy corn and feed it than not to buy anything. If one is feeding molasses he should always buy the largest amount of albuminoids to feed in the molasses.

Mr. Thompson. What about wheat bran. What should be the proportion, say?

Dr. Stubbs. Wheat bran has a proportion of this character; 14 per cent. albuminoids, 3 to 4 per cent. fats, about 30 to 40 per cent. carbohydrates, oats have 11 per cent. albuminoids, 50 per cent. carbohydrates, and 4 to 5 per cent. fats. So you see the two are nearly equal. But the prices would or should be consulted. That is another point I want to bring out. After all, we have to get down to the price just as with fertilizers; we have to look at the price of these different substances. We have to buy our albuminoids at so many cents per pound; carbohydrates at a lower price not more than, perhaps less than $\frac{1}{2}$ cent a pound. Wherever you can buy the albuminoids cheapest is the best, if it is palatable.

Mr. Crozier. It was the digestion of the feed in the animals' stomach within 24 hours where the mistake was made. As Professor Stubbs has said, there are oats and oats. If a planter should happen to get bad oats, he would find but little solid food in them. Say you feed at 12 o'clock two gallons; if you will take the hulls off you will find one-half pint, or probably a quarter, of solid food. That is 12 o'clock. The same food at 6 o'clock; you see it is eighteen hours that that mule has to go on that ration; that is where the bad results come from.

If the oats fed contained a larger percentage of kernel the results would be different.

Dr. Stubbs. Dr. Dalrymple read a paper before this association sometime ago in which he condemned in unmeasured terms only feeding twice a day. A mule's stomach is a small bag or sack, and feeding only twice a day is a dangerous policy. He said in that paper he had an experience in this city, and that all the cases were due to the fact that the stock had only been fed twice a day. He referred to the stock standing all night long with a large feed and said they generally eat too much, and that colic frequently resulted and with that colic death; so that point is before us and the veterinary surgeon.

There being no further discussion on this subject, the next business on the desk was the annual election of officers, which had been deferred from the previous meeting.

Owing to the absence of those who were prevented from attending the meeting by high-water, the election was, by motion, duly seconded, again postponed, as more fully appears in our last week's issue.

METEOROLOGICAL REPORT OF DODDS BOTANICAL STATION FOR 1896--HEIGHT ABOVE SEA LEVEL 210 FEET.

MONTHS	BAROMETRIC PRESSURE			TEMPERATURE.							TENSION OF VAPOUR.			HUMIDITY.			WIND. Velocity, miles per hour.	Rainfall for 1896.	Number of wet days		
	9 a. m.	3 p. m.	Mean.	Maximum, mean.	Minimum, mean.	Maximum, extreme.	Minimum, extreme.	Maximum blackened bulb aft. from ground in vacuo.	Mean for month.	Range.	Dew Point 9 a. m.	Dew Point 3 p. m.	9 a. m.	3 p. m.	Mean.	9 a. m.				3 p. m.	Mean.
January	29-974	29-890	29-935	81-8	76-7	85-1	72-5	157-4	79-2	12-6	68-7	68-8	70-1	70-4	70-2	71-7	68-6	70-1	7-3	3-92	16
February	30-014	29-933	29-973	82-9	76-8	85-1	73-2	156-1	79-5	11-9	69-5	66-3	72-1	64-7	68-3	73-8	62-3	68-1	8-8	2-87	11
March	29-966	29-898	29-938	82-6	77-0	85-3	70-3	158-0	79-8	15-0	69-1	68-3	71-1	69-2	70-1	71-3	65-3	68-3	8-6	4-41	12
April	29-944	29-876	29-910	83-2	77-4	85-8	71-9	160-0	80-3	13-9	70-9	70-5	75-6	74-6	75-1	72-5	71-0	71-7	9-2	5-53	16
May	29-961	29-887	29-919	84-3	77-2	86-9	71-6	153-3	80-7	15-3	73-5	73-3	82-6	82-0	82-8	76-4	74-6	75-5	8-8	5-85	18
June	29-985	29-941	29-965	84-3	76-7	86-9	71-0	153-0	80-5	15-9	78-8	78-2	98-4	96-5	97-4	89-2	87-5	83-3	10-7	4-75	18
July	30-001	29-948	29-974	84-7	75-8	86-7	71-3	152-6	80-2	15-4	73-7	73-3	83-2	82-0	82-6	75-9	72-5	74-2	9-4	4-95	22
August	29-958	29-911	29-934	83-1	76-0	87-7	70-7	154-6	80-8	17-0	74-2	73-7	84-6	83-2	83-9	75-9	73-8	74-3	7-7	5-34	22
September	29-919	29-847	29-883	85-5	76-1	87-9	71-4	156-7	80-8	16-5	74-6	73-5	85-7	82-6	84-1	75-9	71-5	73-7	6-3	5-32	21
October	29-927	29-841	29-884	85-1	76-5	87-4	69-4	164-7	80-8	18-0	74-1	73-1	84-3	81-5	82-9	75-4	71-1	73-2	5-1	7-30	20
November	29-884	29-807	29-845	83-5	74-7	87-0	68-6	153-9	79-1	16-4	74-1	73-1	83-7	82-3	83-0	80-2	75-9	78-0	7-4	20-41	28
December	29-966	29-881	29-923	82-7	74-5	85-8	69-7	150-1	78-6	16-1	72-9	73-1	81-0	81-5	81-2	78-1	77-4	77-7	8-5	10-86	24
	29-958	29-889	29-924	83-8	76-3	86-5	70-9	155-0	80-0	15-5	72-8	72-1	81-0	79-2	80-1	77-2	72-6	74-0	8-1	80-41	228

JOHN R. BOVELL, Superintendent.

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BARBADOS RAINFALL FROM JANUARY TO DECEMBER 1896.

Elevation	Name of Station.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Totals.			
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.		
237	Lower Barracks.....	17	2.37	14	2.87	15	3.45	17	6.20	16	7.65	19	6.85	21	5.60	20	7.82	17	5.92	15	7.06	25	24.56	21	12.47	217	91.82		
152	St. Michael (Lowlands).....	15	2.17	9	1.51	10	1.94	14	5.74	14	6.73	17	4.32	18	5.72	17	5.62	14	5.26	15	6.57	25	21.90	10	10.21	192	78.03		
216	Chaplain Hall.....	8	1.64	8	1.54	6	1.22	13	4.70	12	4.64	15	4.32	19	5.22	15	4.61	17	6.32	12	5.67	21	23.55	14	7.21	206	69.28		
320	Leeds.....	14	3.51	14	2.69	14	2.89	18	6.45	20	6.88	20	6.43	21	7.29	22	5.28	22	6.05	16	5.08	23	23.50	20	10.54	219	86.74		
90	Government House.....	14	1.67	12	1.49	10	1.26	18	5.45	20	6.01	21	3.73	23	4.64	23	5.28	22	5.19	15	3.87	25	18.94	19	6.65	216	64.10		
97	District A.....	14	1.64	10	1.39	12	2.50	16	5.25	21	6.01	22	3.73	23	4.64	22	4.70	18	5.12	14	5.12	22	20.38	19	7.86	216	66.33		
110	Central Police Station.....	14	1.65	14	1.43	12	2.50	16	5.25	21	6.01	22	3.73	23	4.64	22	4.70	18	5.12	14	5.12	22	20.38	19	7.86	216	66.33		
233	White Hall.....	14	1.65	14	1.43	12	2.50	16	5.25	21	6.01	22	3.73	23	4.64	22	4.70	18	5.12	14	5.12	22	20.38	19	7.86	216	66.33		
70	Crazetts.....	9	1.46	11	1.44	10	2.43	14	5.51	14	6.46	18	3.73	21	5.16	12	4.73	14	4.56	17	4.65	16	4.96	23	21.40	15	11.50	164	79.59
...	Bayralls.....	14	2.24	11	1.92	11	2.30	15	6.03	17	7.07	19	3.71	21	7.18	22	7.48	17	4.82	16	4.56	23	19.99	14	10.16	167	87.76		
...	Fairfield.....	7	1.65	6	1.54	6	2.41	11	5.61	7	5.96	15	3.69	18	4.33	13	5.67	18	4.08	11	5.32	20	18.92	14	8.51	128	67.90		
...	Watersford.....	23	1.71	10	1.57	14	1.72	18	5.13	22	4.33	16	4.23	26	4.96	21	4.61	20	5.39	22	4.87	16	18.95	23	7.77	231	69.53		
...	Queen's House.....	12	1.97	7	1.21	9	1.71	11	4.51	13	6.57	18	4.23	12	3.43	11	5.42	16	4.93	13	5.57	22	23.23	18	8.23	152	58.94		
...	Lower Birney.....	12	1.88	10	1.56	8	1.88	14	5.32	13	6.54	13	4.79	16	5.19	16	5.83	14	5.19	16	5.83	22	23.23	18	8.70	172	70.77		
...	Windsor Hill.....	207	29.00	159	25.63	165	35.83	232	87.67	254	100.35	280	72.39	300	79.77	289	89.56	262	85.88	281	85.38	339	318.56	279	141.80	2,938	1,151.70		
...	Average.....	12-94	1.81	9-94	1.60	10-38	2.24	14-50	5.48	15-87	6.27	18-05	4.52	18-75	4.99	18-06	5.69	16-37	5.37	14-44	5.34	22-60	21-23	18-60	9-15	189-91	73-89		
150	Woodbourne.....	8	2.62	7	2.17	7	1.42	10	5.62	16	5.35	17	3.61	17	4.78	17	5.66	11	4.39	15	5.82	21	21.60	...	...	146	63.03
220	Lowthers.....	9	2.34	6	2.05	11	3.52	13	6.04	16	6.06	15	5.18	22	5.28	19	4.79	15	4.61	16	5.93	22	25.00	...	...	160	64.96
...	Seawall.....	8	2.68	6	2.05	4	1.34	12	6.31	15	7.26	14	6.14	15	6.15	12	5.03	12	4.46	13	5.72	12	22.53	15	6.90	180	80.87		
254	Coverley.....	16	3.51	12	2.37	8	2.52	17	7.66	21	6.02	22	5.68	22	6.41	18	6.88	16	4.32	18	4.33	22	22.53	...	...	188	72.61
283	Hannays.....	18	2.10	16	2.18	8	2.27	14	8.08	19	7.08	19	8.80	14	4.95	14	7.97	19	5.86	13	6.52	18	24.52	12	9.45	192	84.33		
270	Balls.....	12	2.36	19	2.19	13	2.32	15	6.28	17	4.94	22	4.49	23	6.11	23	6.11	4.47	16	4.96	12	5.90	19	23.99	18	6.91	184	74.56	
135	Gibbons.....	12	2.19	9	2.61	11	3.44	13	7.75	17	6.96	19	6.63	23	8.66	18	6.51	17	5.25	16	6.74	22	25.47	21	7.68	218	84.87		
...	Lower Greys.....	15	2.15	11	1.96	11	1.88	15	7.53	17	6.78	18	4.28	23	8.66	16	6.82	17	6.63	18	6.74	22	25.47	21	7.68	218	84.87		
207	Newton.....	10	2.07	10	2.47	12	2.07	12	5.71	17	5.84	22	5.08	22	6.71	16	5.61	13	4.61	13	6.01	17	32.57	13	7.74	177	79.12		
...	Panmutye.....	11	2.11	4	1.77	6	2.75	12	5.71	12	5.89	11	5.08	15	8.01	22	9.02	15	7.88	19	8.12	21	30.72	13	10.83	154	79.76		
20	Maxwells.....	13	1.92	12	1.44	14	1.84	15	4.89	16	5.21	20	6.34	25	6.72	16	5.69	14	4.82	12	5.99	22	25.16	19	6.68	183	68.45		
...	Durants.....	6	2.95	4	1.99	5	3.21	9	6.34	9	4.56	14	5.70	15	5.91	10	4.34	11	4.54	10	4.40	22	25.16	19	6.68	95	46.47		
862	Bridge.....	10	2.41	8	2.24	9	2.09	14	6.28	16	6.60	16	3.23	15	5.12	13	6.32	10	4.92	10	6.13	22	25.16	21	11.62	158	71.94		
169	Pentley.....	8	2.38	7	1.78	13	2.94	14	6.74	21	6.35	17	4.58	21	4.29	18	5.38	15	5.32	19	5.19	24	19.16	19	8.27	206	76.00		
...	Wilecys.....	12	2.64	8	1.97	10	2.71	14	6.09	11	6.37	14	4.39	22	5.39	16	6.08	11	4.40	15	5.12	20	20.43	19	6.54	180	72.68		
...	Little Foursquare.....	9	2.72	9	1.83	13	6.71	13	6.71	19	6.13	17	4.70	23	5.97	17	5.47	15	4.60	13	6.25	20	19.64	17	8.09	180	72.68		
...	Hope.....	12	2.14	12	1.79	15	1.38	18	6.97	19	6.72	21	4.66	25	6.69	22	7.40	17	6.04	17	6.67	23	23.72	17	8.23	181	82.90		
...	Lower Hill.....	217	43.19	179	41.79	202	45.82	272	130.19	385	117.99	390	99.11	410	118.84	338	123.71	287	99.22	286	166.91	400	447.01	269	131.15	3,519	1,419.66		
...	Average.....	10-85	2.46	8-95	2.09	10-10	2.92	13-60	6.51	16-75	5.90	17-50	4.96	20-50	5.84	16-65	6.19	14-35	4.96	14-76	6.35	21-05	23-36	10-81	8-26	181-86	81-10		
720	St. Georges (Highlands).....	4	3.65	4	3.47	4	2.47	7	6.87	9	7.71	8	5.55	11	6.07	7	6.00	9	5.94	19	5.89	18	25.70	6	10.80	90	91.12		
...	Lemon Harbour.....	16	8.81	10	3.68	8	2.64	14	8.54	19	7.77	15	4.37	20	4.57	23	7.48	19	4.71	18	6.85	24	24.22	18	9.71	200	88.35		
720	Asbury.....	17	3.89	14	3.22	11	2.49	18	9.60	17	9.05	15	5.33	23	6.83	18	8.15	17	5.41	16	6.69	23	26.64	21	12.74	206	101.43		
747	Groves.....	14	2.96	12	2.51	13	3.00	13	6.48	17	7.65	17	6.48	27	7.65	17	7.06	16	6.08	17	7.45	22	21.89	17	10.29	187	86.56		
537	Moonside.....	17	3.58	14	3.51	8	2.55	15	6.08	13	7.65	17	6.48	27	7.65	17	7.06	16	6.08	17	7.45	22	21.89	17	10.29	187	86.56		
877	Golden Ridge.....	18	3.23	14	2.97	15	3.17	13	6.21	18	7.08	17	6.48	27	7.65	17	7.06	16	6.08	17	7.45	22	21.89	17	10.29	187	86.56		
...	Woodland.....	17	3.76	10	1.67	10	3.44	19	7.99	17	7.98	16	5.24	23	4.34	23	8.21	18	4.98	15	6.82	25	26.90	20	13.10	202	67.23		
...	Proterogive.....	13	3.65	11	3.32	13	3.43	21	4.66	18	8.31	25	5.58	19	6.07	17	6.47	15	4.77	15	7.33	26	24.72	20	13.10	211	96.48		
...	Par View.....	129	32.31	101	27.97	98	26.76	147	69.12	143	60.72	154	52.64	180	54.93	147	57.85	125	42.17	127	53.67	182	198.19	101	68.14	1,024	752.92		
...	Average.....	14-33	3.49	11-22	3.11	10-33	3.37	16-38	7.88	15-39	7.75	17.41	5.84	20-00	6.04	16.31	7.28	16.62	5.37	15.87	6.71	22.75	24.77	16.33	11-26	104.05	92.		

BARBADOS RAINFALL FROM JANUARY TO DECEMBER 1896—Continued.

NAME OF STATION.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Totals.		
	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	
II.—District B.—Cont'd.																											
St. George. (Lowlands.)																											
District H.....	11	3.49	10	2.14	8	2.40	13	7.28	16	7.28	20	5.23	23	4.34	19	7.18	19	5.24	17	6.11	33	23.35	30	9.84	201	83.97	
Marmichael.....	11	2.18	11	2.68	8	2.27	16	7.93	17	6.41	18	5.96	20	4.61	21	5.16	16	4.62	19	6.39	24	20.97	30	10.50	191	82.68	
Constant.....	13	2.03	17	3.22	8	2.51	11	6.54	13	5.43	18	5.41	16	4.82	17	7.38	12	5.68	13	5.05	21	21.91	30	10.50	191	82.68	
Brighton.....	13	2.03	17	3.22	8	2.51	11	6.54	13	5.43	18	5.41	16	4.82	17	7.38	12	5.68	13	5.05	21	21.91	30	10.50	191	82.68	
Valley.....	12	2.20	9	2.16	16	2.68	12	6.74	9	6.42	14	5.83	24	4.90	24	6.27	18	6.02	19	7.61	33	21.81	32	13.01	224	89.86	
Windsor.....	15	2.65	15	2.82	19	2.82	13	7.64	23	6.42	18	4.66	24	5.39	22	7.36	18	6.31	20	7.12	25	20.39	33	13.14	168	88.13	
Salters.....	11	3.79	16	2.88	9	2.31	12	7.43	18	6.42	12	5.81	21	5.32	20	7.72	15	6.42	20	7.21	29	21.81	13	10.19	163	76.52	
Le Panches.....	11	3.79	16	2.88	9	2.31	12	7.43	18	6.42	12	5.81	21	5.32	20	7.72	15	6.42	20	7.21	29	21.81	13	10.19	163	76.52	
St. Peter's Mill.....	16	2.62	11	1.90	9	2.06	13	5.42	16	6.42	17	4.19	21	5.92	20	5.75	14	5.46	20	7.21	23	19.06	30	9.81	302	86.55	
Total.....	112	21.29	97	21.29	88	21.16	180	62.50	133	63.46	153	47.01	122	45.16	171	65.55	143	47.28	155	62.86	207	190.92	171	104.52	1,752	752.19	
Average.....	12.44	2.36	10.78	2.36	9.78	2.35	14.44	6.94	14.75	7.91	17.00	5.22	12.33	6.02	19.00	7.28	15.89	5.25	17.22	6.93	23.00	21.22	19.00	11.01	194.66	53.95	
III.—District C.																											
St. Philip. (Highlands.)																											
District C.....	16	3.96	15	2.84	11	3.56	16	6.22	15	7.35	18	4.85	23	4.63	21	4.62	15	6.30	19	6.20	25	20.48	21	8.13	217	71.63	
Clifton.....	19	3.66	13	2.60	12	2.80	16	5.85	17	4.74	14	4.59	19	5.54	18	4.83	15	4.74	20	6.13	31	21.62	20	8.33	222	74.38	
Hill View.....	14	3.28	14	2.67	13	3.08	17	6.67	12	6.43	20	3.77	16	4.11	19	3.85	15	5.25	16	5.89	23	18.45	20	6.23	148	60.67	
Mount Pleasant.....	49	10.80	42	7.61	49	12.47	65	24.26	65	28.94	73	18.15	77	18.60	79	17.96	61	20.27	73	24.26	96	81.65	61	23.08	790	262.76	
Total.....	16.33	3.68	14.00	2.54	12.25	3.12	16.25	6.06	16.50	5.96	18.25	4.54	19.25	4.65	19.75	4.49	15.35	5.07	18.00	6.06	24.00	20.41	20.33	7.56	210.16	74.10	
Average.....	16.33	3.68	14.00	2.54	12.25	3.12	16.25	6.06	16.50	5.96	18.25	4.54	19.25	4.65	19.75	4.49	15.35	5.07	18.00	6.06	24.00	20.41	20.33	7.56	210.16	74.10	
St. Peter. (Lowlands.)																											
Bashley.....	11	3.00	5	1.42	8	2.36	15	5.80	15	6.47	16	3.38	17	4.27	14	3.70	14	4.02	16	4.93	19	16.93	15	5.32	135	52.72	
Mojo.....	9	3.02	10	2.04	5	2.75	14	4.21	15	7.11	15	3.98	17	4.37	14	4.02	14	4.93	16	5.14	24	18.28	20	6.21	165	71.12	
Golden Grove.....	113	...	10	1.72	13	2.81	22	7.39	18	5.18	21	3.75	23	6.38	22	5.35	19	5.74	20	7.26	30	17.14	21	5.89	219	68.99	
Parishourne.....	12	2.95	10	1.90	8	2.72	15	6.03	16	6.33	16	4.28	14	3.66	14	4.28	8	4.52	16	5.86	21	16.75	17	5.99	148	61.75	
Willbours.....	135	12	3.47	10	1.90	10	2.29	18	5.94	15	3.30	16	3.56	18	5.25	15	4.55	13	5.76	20	6.14	22	17.64	19	6.47	188	69.47
Three Houses.....	125	10	2.79	12	1.68	8	2.40	15	6.74	15	6.31	18	4.60	14	3.57	15	5.12	15	4.44	15	7.85	16	20.46	11	8.12	166	79.18
Sandy Hill.....	74	16	4.10	14	2.27	9	2.83	17	7.99	12	6.39	15	6.80	13	4.96	18	4.05	16	5.35	17	9.30	23	23.57	20	8.33	196	72.74
Kirton.....	150	11	3.10	11	2.28	11	2.83	17	7.99	12	6.39	15	6.80	13	4.96	18	4.05	16	5.35	17	9.30	23	23.57	20	8.33	196	72.74
Porteusse.....	243	13	3.52	12	2.11	12	4.15	18	6.24	16	5.68	15	3.02	16	4.48	16	4.91	17	6.23	19	7.27	25	19.76	20	6.77	187	71.66
Thicket.....	161	18	3.55	12	2.11	12	4.15	18	6.24	16	5.68	15	3.02	16	4.48	16	4.91	17	6.23	19	7.27	25	19.76	20	6.77	187	71.66
Bushy Park.....	119	15	3.28	14	1.61	10	3.26	16	7.74	14	6.78	21	6.38	20	6.07	19	5.86	17	5.96	20	9.55	24	22.21	22	10.67	213	89.49
Congo Road.....	105	11	3.33	7	1.58	8	2.40	14	6.42	13	6.68	15	4.98	21	4.43	16	5.24	14	4.52	19	8.23	22	21.75	16	8.63	176	78.12
Senhouse Grove.....	291	15	3.32	15	1.84	15	3.61	16	5.46	16	8.18	15	4.75	22	4.55	22	5.34	21	5.22	20	7.31	19	15.25	20	8.88	115	45.96
Oughtersons.....	210	16	3.62	11	2.87	12	4.41	16	5.53	16	5.96	18	4.75	22	4.55	22	5.34	21	5.22	20	7.31	19	15.25	20	8.88	115	45.96
Dodds.....	108	10	1.56	8	1.86	9	2.76	12	5.11	19	6.03	19	4.02	21	3.98	20	4.89	20	4.83	20	6.47	26	21.83	20	10.58	190	76.51
Sunbury.....	110	14	3.95	10	1.56	12	3.21	13	6.00	23	7.42	18	5.00	22	5.60	20	4.91	20	6.80	19	7.14	24	21.83	20	10.58	190	76.51
Carrington.....	228	15	2.80	11	2.80	12	3.80	13	6.00	23	7.42	18	5.00	22	5.60	20	4.91	20	6.80	19	7.14	24	21.83	20	10.58	190	76.51
Chapel.....	264	12	2.56	16	2.56	15	2.99	13	6.40	20	6.93	23	5.59	24	5.30	22	5.06	21	5.84	20	7.43	24	21.25	15	11.98	209	84.95
Edgemoor.....	207	12	2.80	11	2.71	10	2.91	13	7.44	15	6.93	23	5.59	24	5.30	22	5.06	21	5.84	20	7.43	24	21.25	15	11.98	209	84.95
Edgemoor.....	207	12	2.80	11	2.71	10	2.91	13	7.44	15	6.93	23	5.59	24	5.30	22	5.06	21	5.84	20	7.43	24	21.25	15	11.98	209	84.95
Foursquare.....	13	3.08	9	2.02	11	3.60	14	5.94	16	5.43	17	4.56	23	4.92	19	4.65	13	5.51	19	6.95	28	20.97	21	10.86	187	80.63	
Summersvale.....	13	3.08	9	2.02	11	3.60	14	5.94	16	5.43	17	4.56	23	4.92	19	4.65	13	5.51	19	6.95	28	20.97	21	10.86	187	80.63	
Total.....	284	70.91	268	47.85	251	66.08	343	144.37	272	141.30	314	94.33	456	90.06	369	106.25	324	105.61	371	146.48	469	457.63	397	184.76	4,259	1,658.55	
Average.....	13.36	3.22	11.22	3.05	10.04	2.96	14.81	6.29	14.17	8.11	17.00	4.96	19.36	4.09	17.57	5.09	16.20	5.28	18.55	7.31	22.63	19.82	18.90	8.80	195.96	75.55	

BARBADOS RAINFALL FROM JANUARY TO DECEMBER 1896.—Continued.

NAME OF STATION.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Totals.			
	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.		
IV. DISTRICT D.—Cont'd.																												
ST. THOMAS.																												
(Lowlands.)																												
Fishpond.....	725	3.03	13	4.60	6	2.08	13	7.48	14	6.91	15	5.27	17	6.53	23	8.43	14	6.07	17	7.51	23	23.65	19	10.68	191	90.86		
Office Branch.....	680	18	4.30	13	4.89	8	2.42	13	10.22	...	23	7.95	32	7.53	27	9.57	21	6.18	17	7.68	25	28.05	25	15.45	212	110.00		
Schomas.....	616	18	4.02	15	4.98	13	3.28	16	9.80	14	5.50	24	6.72	28	7.66	20	10.25	19	7.40	21	7.62	24	24.92	26	13.60	233	105.76	
Hopewell.....	531	19	3.01	18	4.02	15	6.85	16	8.95	23	6.65	24	7.48	27	7.09	27	8.16	21	6.50	20	7.54	27	26.12	26	13.75	263	101.94	
Elighill.....	453	15	2.28	14	3.85	13	2.63	15	6.80	15	5.93	17	6.83	16	6.10	21	7.22	20	7.50	15	6.39	24	21.05	18	10.51	203	84.89	
Witches.....	398	18	1.49	19	1.63	12	1.60	17	7.14	18	6.50	17	6.69	19	6.90	15	8.59	20	6.24	13	5.37	34	19.76	16	9.86	197	81.07	
Remots.....	350	15	2.05	22	3.62	16	1.96	16	9.39	23	6.00	25	8.16	28	7.28	26	7.61	23	7.33	16	8.46	26	23.35	23	12.55	229	98.66	
Grand View.....	...	8	1.18	15	2.61	12	1.65	16	6.06	13	5.61	21	5.86	13	4.16	22	6.22	23	6.36	18	7.02	23	20.14	19	10.07	192	78.14	
Grand View.....	...	12	1.59	17	2.26	18	2.00	15	6.06	19	5.26	21	5.86	13	4.16	22	6.22	23	6.36	18	7.02	23	20.14	19	10.07	192	78.14	
Mangrove Pond.....	590	19	2.01	11	3.74	17	1.87	15	9.35	20	5.85	20	6.74	24	6.56	23	8.81	19	7.98	15	5.25	24	25.31	20	11.40	225	95.42	
Strong Hope.....	...	17	3.25	16	4.43	12	2.57	14	9.35	18	6.56	18	6.74	24	6.56	23	8.81	19	7.98	15	5.25	24	25.31	20	11.40	218	98.91	
Exchange.....	...	12	2.50	16	3.53	18	2.68	16	7.48	20	7.15	19	6.83	19	6.30	23	9.31	13	6.38	18	6.84	24	23.21	16	13.81	210	96.12	
Clifton.....	756	16	2.93	17	3.54	14	3.18	16	8.30	21	7.20	26	7.87	26	6.90	26	7.04	20	5.68	18	7.99	23	27.16	24	12.63	245	99.44	
Total.....	197	93.84	201	46.20	171	31.02	198	105.28	218	80.22	270	88.97	298	83.12	287	105.64	243	81.46	216	93.63	317	306.59	293	157.31	2,874	1,218.98		
Average.....	15.15	2.60	15.46	3.65	13.15	2.38	15.23	8.11	16.77	6.63	20.77	6.81	22.15	6.39	22.08	8.13	19.08	6.50	16.62	7.30	24.38	23.35	30.23	12.10	221.07	93.75		
ST. JAMES.																												
(Highlands.)																												
Springhead.....	860	12	4.37	14	3.46	14	1.87	14	12.06	16	9.05	28	5.64	17	5.73	21	9.16	16	6.33	17	7.77	22	21.32	18	8.92	204	98.88	
Tains.....	884	13	3.42	16	3.70	11	1.84	16	11.81	17	9.93	19	6.16	21	6.45	20	11.36	14	7.11	17	7.37	21	26.34	20	9.43	204	108.12	
St. John Hill.....	618	15	4.05	11	3.44	8	1.67	16	12.84	17	8.66	24	6.82	18	5.98	19	9.83	16	6.39	13	7.10	20	27.00	19	10.61	196	101.30	
Total.....	...	40	11.84	40	10.60	33	5.38	46	36.71	50	27.68	66	18.12	56	18.16	60	30.38	46	20.43	47	23.24	63	78.06	57	28.99	604	308.50	
Average.....	13.33	3.95	13.33	3.33	11.00	1.70	13.33	12.24	16.87	9.21	25.00	6.04	18.67	6.95	20.00	10.11	13.23	6.81	15.66	7.41	21.60	26.02	19.00	9.66	201.32	102.83		
ST. JAMES.																												
(Lowlands.)																												
Blowers.....	822	13	2.51	14	3.30	13	2.30	16	9.59	18	7.57	30	7.66	24	6.90	23	7.27	15	5.48	12	5.25	21	32.38	20	15.88	211	108.91	
Westmead.....	130	14	2.93	13	3.16	10	1.13	13	7.70	16	6.44	22	5.19	30	4.36	24	8.79	...	5.68	15	6.16	19	30.54	14	7.23	186	94.45	
Caution.....	198	10	2.23	7	2.28	8	0.36	13	5.94	13	7.13	15	5.37	34	5.92	19	9.23	9	5.81	11	5.31	19	32.52	13	6.33	182	94.75	
Borders.....	...	12	2.20	10	2.94	6	1.38	15	6.38	10	4.34	16	6.34	17	4.36	16	6.48	19	6.13	13	5.87	23	31.09	15	8.45	162	74.78	
St. John's Village.....	559	8	2.65	11	2.33	16	1.57	15	7.63	18	3.34	21	6.19	23	4.60	24	7.32	13	5.00	13	5.87	23	54.50	20	9.14	185	85.99	
St. John's Village.....	...	19	2.65	13	3.20	16	1.51	16	8.17	16	6.69	15	6.81	23	6.41	22	6.55	18	6.61	18	6.03	23	55.71	19	9.21	200	89.50	
Phonoe.....	...	13	4.48	17	4.91	14	2.35	16	10.14	13	9.10	21	7.32	24	6.25	24	10.46	21	7.22	15	6.22	24	27.68	22	10.51	233	110.95	
Apes Hill.....	...	19	4.32	14	3.11	10	1.73	13	10.01	16	7.47	19	6.67	26	6.03	24	10.27	20	6.84	13	5.89	26	24.64	13	8.36	216	102.70	
St. John's Lane.....	...	11	1.90	10	1.38	9	1.78	17	6.05	30	3.31	18	6.01	24	4.95	18	6.31	19	3.80	11	6.59	21	20.23	12	8.46	184	73.44	
St. John's Lane.....	...	9	1.80	12	2.00	9	1.61	11	5.85	16	4.63	16	6.60	15	4.56	19	6.21	16	6.03	13	6.25	22	23.66	21	10.33	181	81.60	
Total.....	148	30.24	136	33.86	113	18.03	163	87.10	168	63.99	199	70.44	232	89.89	224	91.46	169	60.67	141	80.45	246	363.17	300	102.61	2,944	973.90		
Average.....	13.45	2.75	12.96	3.08	10.27	1.94	14.82	7.92	13.37	8.68	18.69	6.40	11.09	5.83	30.56	8.28	13.36	6.33	13.09	7.91	23.65	24.19	18.18	9.23	194.60	88.49		

BARBADOS RAINFALL FROM JANUARY TO DECEMBER, 1896. Continued.

NAME OF STATION.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Totals.		
	Feet.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
V. District E.																											
St. Peter.																											
(Highlands)																											
Nicholas Abbey	894	14	4.95	7	2.16	9	2.01	10	16.98	17	8.60	14	4.71	18	6.13	13	5.98	14	10.77	14	10.77	21	21.20	15	8.98	166	102.50
Oxford	486	14	3.99	11	2.66	11	2.60	12	14.97	17	7.52	15	3.40	22	5.02	18	6.97	15	8.64	19	10.12	23	18.93	19	8.24	196	97.46
Orange Hill	...	21	4.10	13	3.59	12	1.92	11	13.24	16	10.78	16	6.06	22	6.78	22	8.23	21	8.31	18	7.53	23	23.44	20	8.06	217	101.45
Rock Hill	...	16	5.01	10	3.58	12	2.87	14	13.87	13	11.25	21	5.15	17	7.92	18	9.30	15	8.14	15	11.62	22	26.30	20	10.48	193	109.96
Mangrove	581	20	3.62	11	3.32	11	2.04	15	13.38	13	9.60	21	5.93	23	7.41	22	9.37	18	6.88	13	8.90	21	28.80	22	9.68	210	100.77
Black Bass	700	19	3.41	8	3.31	11	1.65	12	11.29	11	8.89	17	4.95	14	6.54	17	10.23	12	8.27	13	7.00	19	20.97	17	7.92	163	84.74
The Castle	...	13	5.53	12	2.67	9	1.88	11	16.27	20	8.61	16	3.68	19	5.46	16	6.65	18	9.76	18	8.75	22	16.69	14	6.27	183	94.59
Pleasant Hill	...	17	3.56	12	3.15	9	1.60	13	14.21	15	10.47	16	5.02	20	6.43	19	8.55	15	9.12	15	10.16	21	22.83	19	8.31	191	108.42
Portland	...	15	4.92	10	2.49	10	1.75	10	13.97	...	6.08	...	3.85	...	5.76	...	8.21	...	10.60	...	8.84	...	19.16	...	8.66	43	30.39
Total	...	142	39.09	94	27.34	94	17.23	108	127.06	124	83.88	186	42.05	155	67.76	145	72.92	128	80.40	125	83.21	172	190.29	146	73.97	1,564	901.30
Average	...	15.78	4.34	10.44	3.04	10.44	1.91	12.00	14.12	15.50	9.32	17.00	4.67	19.37	6.42	18.12	8.10	15.37	8.94	16.62	9.25	21.50	21.81	18.25	8.22	189.89	100.14
St. Peter.																											
(Lowlands)																											
Alleydale	338	12	3.67	9	2.85	8	1.81	10	13.54	17	9.61	16	4.35	18	5.17	18	8.21	12	9.48	11	8.46	16	18.50	7	6.93	158	92.27
Bakers	380	13	3.55	7	2.97	5	1.57	12	9.91	13	8.41	11	4.79	16	4.98	13	9.57	13	7.80	11	8.68	14	21.81	16	8.36	141	82.45
Maynards	69	14	2.60	11	2.49	9	1.94	11	11.83	17	9.15	21	4.16	23	5.68	22	8.42	16	8.60	16	8.60	21	18.47	18	6.61	202	88.54
District E.	150	18	2.88	16	3.02	14	1.96	15	13.99	17	10.87	20	4.80	26	8.20	23	11.24	20	10.11	18	11.68	25	25.38	22	9.57	235	110.58
Ashon Hill	...	17	2.70	12	2.38	12	1.86	12	13.21	17	8.91	17	4.32	23	4.45	14	7.52	17	9.67	13	7.50	18	17.35	12	5.75	156	84.58
Six Menn	...	11	3.17	6	2.38	6	1.02	13	10.84	10	6.66	10	4.33	18	6.10	13	7.63	14	7.23	13	9.34	15	18.31	15	6.66	144	83.94
Heywoods	50	11	2.86	10	3.62	8	1.28	14	9.48	13	6.56	17	6.29	20	5.67	17	11.97	16	6.18	13	11.45	22	23.01	19	7.75	180	97.12
Total	...	113	24.21	83	23.17	83	13.93	102	94.65	122	69.26	193	39.59	168	47.36	145	73.65	129	68.11	114	75.51	158	164.43	133	50.20	1,497	735.78
Average	...	14.12	3.03	10.37	2.90	10.37	1.74	12.75	11.33	15.37	8.74	16.62	4.55	21.00	5.82	18.12	9.21	16.12	8.51	14.25	9.44	19.12	20.56	16.62	7.40	184.87	91.23
St. Lucy.																											
(Lowlands)																											
Lamberts	350	15	1.52	12	1.77	14	4.44	13	15.66	19	6.23	18	2.53	27	5.79	19	5.79	19	8.64	21	7.16	28	19.14	19	5.37	219	84.66
Mount Gay	...	12	5.23	10	2.29	9	1.46	12	16.00	20	7.74	18	8.90	27	6.00	20	7.98	15	8.81	16	9.23	22	19.80	14	6.61	206	96.10
Parkers	...	13	4.20	11	1.82	7	1.40	12	17.20	19	7.94	17	8.92	25	6.99	20	7.26	17	9.37	13	11.56	22	20.80	14	6.61	206	96.10
Spring Hall	71	13	4.72	6	1.68	10	1.99	11	13.62	14	7.19	10	3.61	22	5.37	12	5.26	15	6.06	16	7.56	19	19.80	13	4.51	136	73.63
Hope	...	13	2.70	6	1.64	5	1.11	11	13.17	19	7.16	18	4.34	22	6.79	16	7.40	15	7.79	16	7.13	22	12.37	21	6.03	194	87.88
Checkers Hall	184	14	3.70	11	1.46	12	1.27	11	14.63	16	7.61	13	4.24	26	6.86	20	10.68	16	7.98	14	7.13	22	15.66	17	5.93	174	84.74
Highlands	...	13	5.12	9	3.13	10	1.88	11	16.91	16	7.64	10	2.91	34	6.86	18	8.21	18	6.99	14	6.84	24	20.14	18	6.11	193	84.96
Calvary	...	13	3.81	10	0.90	9	1.14	9	14.45	14	3.81	14	4.37	22	7.76	18	7.68	16	9.69	20	8.90	24	17.84	21	6.11	174	84.96
Friendship	...	10	3.75	6	1.52	7	1.24	11	14.86	11	6.76	13	3.43	21	6.08	13	6.38	11	7.25	13	7.37	18	15.94	13	5.39	147	74.42
Total	...	124	48.06	81	16.28	93	13.84	113	148.17	143	74.52	145	37.26	237	62.90	174	73.23	162	78.30	161	86.15	210	189.40	174	50.48	1,866	871.99
Average	...	13.40	4.30	9.10	1.63	9.30	1.38	11.30	14.82	16.20	7.45	14.90	3.73	25.70	6.22	17.40	7.32	16.20	7.83	16.10	8.61	31.00	18.94	17.49	5.93	185.60	88.20

St. Peter's
St. Lucy's

BARBADOS RAINFALL FROM JANUARY TO DECEMBER 1896.—Continued.

NAME OF STATION.	Elevation. Feet.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Totals.	
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
VI.—District F.																											
St. Joseph.																											
(Highlands.)																											
Buckden	...	18	5.08	15	3.61	14	3.44	16	11.05	14	8.78	19	6.47	30	6.21	26	8.86	21	6.66	16	7.16	21	28.60	23	10.84	218	107.37
Little Island	1080	20	5.42	18	8.91	17	3.17	18	10.61	21	9.66	24	6.13	22	6.33	28	8.88	26	7.19	19	7.74	21	21.86	...	20	23.8	90.10
Blackmans	910	28	5.03	18	4.77	22	3.12	20	9.79	23	10.80	23	7.20	27	6.98	28	9.42	27	6.90	16	7.88	26	25.76	26	12.63	281	109.38
Blackmans House	960	21	5.47	21	4.67	22	3.65	22	10.50	26	9.66	24	7.29	27	6.98	27	9.26	26	6.84	18	7.87	26	24.63	25	11.32	265	109.46
Casle Gra	1078	22	5.28	17	3.78	15	3.08	20	10.48	20	9.47	19	5.83	24	6.16	21	8.60	22	6.00	12	7.44	23	24.71	18	9.12	236	109.30
Andrews	780	18	4.21	18	5.04	17	3.58	20	10.61	22	9.71	19	7.85	24	7.02	25	9.30	22	7.13	17	8.20	23	27.19	20	13.64	249	113.45
Lanings	1040	18	4.78	11	4.72	16	2.85	14	10.66	16	9.80	13	6.33	16	6.57	22	8.38	16	7.08	16	8.37	24	27.14	19	11.25	205	107.59
Holbert	...	21	4.98	16	5.21	15	3.06	19	10.36	15	9.97	28	4.21	22	7.46	16	7.91	21	7.01	15	8.12	25	26.97	19	13.56	235	111.83
Salisbury	...	14	5.18	15	3.01	9	2.71	13	10.01	15	8.26	15	6.25	18	4.86	20	7.28	19	6.31	16	6.74	24	24.19	18	9.32	196	94.17
Total	...	171	46.11	149	38.62	147	28.28	162	94.07	182	85.62	181	60.46	205	58.21	213	77.24	194	61.07	145	69.02	210	232.49	168	91.69	2133	942.91
Average	...	19.00	5.12	16.56	4.20	16.33	3.14	18.00	10.45	20.22	9.51	20.11	6.72	22.78	6.47	23.67	8.58	21.56	6.79	16.11	7.67	34.00	35.83	21.00	11.46	23.93	106.03
St. Joseph.																											
(Lowlands.)																											
Prizes	...	16	6.21	6	2.15	9	1.85	20	11.54	16	9.98	16	8.98	20	6.33	18	8.55	16	6.61	15	6.50	20	24.49	20	8.19	176	72.40
Melwies	...	14	4.43	8	2.04	7	1.72	12	9.28	15	15.60	18	5.98	18	4.32	19	6.92	14	4.25	14	6.46	17	17.53	16	9.44	169	74.97
Risser Hill	728	16	4.66	19	2.36	8	1.66	13	13.01	14	12.72	16	5.58	18	5.82	18	9.46	18	5.63	19	7.03	22	22.57	18	7.10	181	88.14
District F.	966	20	4.66	13	2.74	18	2.93	13	8.47	20	12.77	20	6.89	19	3.48	18	4.91	19	3.75	16	5.41	23	1.84	20	5.31	188	88.93
Paras	...	20	8.01	13	2.68	18	2.93	13	13.78	24	13.78	20	6.89	19	7.16	19	7.95	18	6.81	16	5.80	22	25.40	22	9.26	232	108.94
Spa	...	13	2.91	13	2.68	18	2.93	13	13.78	24	13.78	20	6.89	19	7.16	19	7.95	18	6.81	16	5.80	22	25.40	22	9.26	232	108.94
Postor Hill	...	12	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17	20	8.41	177	108.56
Postor Hill	...	13	2.33	10	1.92	9	2.11	11	12.09	11	18.43	19	9.04	17	5.76	20	6.90	13	6.61	10	6.46	15	25.17				

SUMMARY OF BARBADOS RAINFALL FROM JANUARY TO DECEMBER 1896.

NAME OF STATIONS.	No. of Stations.	January.		February.		March.		April.		May.		June.		August.		September.		October.		November.		December.		Totals.	
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
I.—District A. St. Michael (Lowlands)	16	12.94	1.81	9.94	1.60	10.35	2.24	14.50	5.48	15.87	6.27	15.06	5.57	16.37	5.59	18.06	5.37	14.44	5.34	22.60	21.23	18.00	9.45	189.91	73.89
II.—District B. a. Christ Church (Lowlands)	20	10.85	2.46	8.95	2.09	10.10	2.28	13.60	6.51	16.75	5.96	17.56	4.96	14.85	6.13	14.85	4.96	14.75	8.35	21.05	23.26	16.81	8.29	181.86	81.10
b. St. George (Highlands)	9	14.38	3.59	11.22	3.11	10.38	2.97	16.32	7.68	15.89	7.75	17.11	5.25	13.62	6.27	15.87	6.71	22.75	24.77	16.82	11.36	104.66	92.32		
b. St. George (Lowlands)	9	12.44	2.86	10.78	2.36	9.78	2.35	14.41	6.94	14.78	7.01	17.05	5.57	13.89	6.25	17.22	6.92	23.90	21.22	19.00	11.61	104.66	89.57		
III.—District C. a. St. Philip (Highlands)	4	16.39	3.63	14.76	2.53	12.25	3.12	18.25	6.06	16.58	5.92	15.54	4.43	12.25	5.97	18.00	6.06	24.00	20.41	27.33	7.56	210.16	74.11		
a. St. Philip (Lowlands)	13	13.36	3.22	11.22	2.05	10.04	2.96	14.91	6.27	16.17	6.27	17.01	4.34	16.26	5.09	18.52	7.32	22.68	19.89	18.90	8.80	185.96	75.53		
a. St. John (Highlands)	15	15.53	4.60	12.50	3.28	11.00	3.14	16.40	8.98	17.67	8.08	19.44	5.25	15.12	6.27	16.07	7.07	22.92	24.26	20.50	9.66	212.29	92.50		
b. St. John (Lowlands)	4	11.50	3.00	9.50	1.81	7.50	1.95	15.56	7.34	16.50	7.08	15.74	4.54	16.00	4.70	16.00	5.28	14.00	6.59	20.25	19.91	18.75	6.62	178.50	74.06
IV.—District D. a. St. Thomas (Highlands)	13	16.69	4.25	13.85	4.22	13.05	2.78	16.55	9.98	20.00	9.05	19.45	6.75	19.23	8.87	13.38	6.22	13.38	7.97	24.63	24.82	21.46	12.98	228.68	110.81
a. St. Thomas (Lowlands)	13	15.15	2.60	15.15	3.55	13.15	2.33	15.23	8.11	16.77	6.03	20.74	6.81	19.08	8.13	19.08	6.22	15.62	7.20	24.43	23.32	20.23	12.10	221.07	93.75
b. St. James (Highlands)	3	13.33	3.93	13.33	3.23	11.00	1.79	15.33	12.24	16.67	9.21	22.43	4.44	15.38	6.81	15.66	7.41	21.66	20.02	19.00	9.6	201.32	102.82		
b. St. James (Lowlands)	11	13.45	2.75	12.86	3.68	10.27	1.64	14.82	7.92	15.27	5.82	18.62	5.44	20.36	8.28	15.36	6.33	13.00	7.31	22.53	24.19	18.18	9.33	194.29	88.49
V.—District E. a. St. Peter (Highland)	9	15.78	4.34	10.41	3.01	10.41	1.91	13.06	14.12	15.50	9.32	17.47	6.42	18.12	8.10	15.37	8.49	16.62	9.25	21.50	21.81	18.29	8.22	189.39	100.14
a. St. Peter (Lowlands)	8	14.12	3.68	10.37	2.80	10.37	1.74	13.75	11.83	15.37	8.74	15.40	5.92	18.12	9.01	16.12	8.21	14.25	9.44	19.12	20.56	16.62	7.46	184.83	94.23
b. St. Peter (Lowlands)	10	13.40	4.30	9.10	1.83	9.50	1.35	11.36	14.82	16.26	7.45	14.33	6.22	17.40	7.72	18.20	7.83	16.10	8.61	21.90	18.94	17.40	5.92	185.60	88.20
VI.—District F. a. St. Andrew (Highlands)	9	19.00	5.12	16.56	4.29	16.23	3.14	18.00	10.45	20.22	9.51	20.61	6.47	23.05	8.68	21.53	6.78	16.11	7.67	24.06	25.83	21.00	11.46	259.52	106.03
a. St. Andrew (Lowlands)	8	15.25	4.35	10.25	2.83	10.00	2.60	14.50	11.53	16.12	9.76	17.35	5.78	19.26	7.74	16.37	5.74	15.52	6.35	21.37	23.11	18.72	7.32	193.50	94.91
b. St. Andrew (Highlands)	6	15.17	4.52	10.40	2.64	11.06	1.83	15.67	10.72	15.83	9.90	17.44	6.34	19.50	9.41	19.00	7.41	16.00	7.58	23.00	22.78	16.80	7.42	196.47	93.15
b. St. Andrew (Lowlands)	4	10.50	3.39	7.00	1.80	8.75	1.76	10.56	13.26	12.06	8.52	11.36	5.25	18.00	6.02	13.25	7.90	14.00	7.70	18.33	19.03	13.33	6.98	153.91	65.28
Total	194	260.17	67.67	217.13	52.43	207.07	49.43	276.86	180.61	310.96	148.25	311.31	98.04	362.87	338.63	314.67	223.72	228.48	110.94	490.12	429.89	360.14	172.34	3,746.46	1,703.80
Average	...	143.8	35.7	11.45	2.76	10.90	2.89	14.57	9.51	16.33	7.80	16.2	5.69	19.07	7.30	18.55	6.46	15.71	7.41	22.11	22.60	18.43	9.07	197.14	89.67

WEEKLY STATEMENT OF COMPARATIVE PRICES OF THE WEST INDIAN GOOD BROWN SUGAR FOR THE FIFTY-TWO WEEKS
—JANUARY TO DECEMBER.

WEEKS.	Av. for 10 years 1882-'91.		Av. for 5 years 1892-'96.		For the year 1896.		WEEKS.	Av. for 10 years 1882-'91.		Av. for 5 years 1892-'96.		For the year 1896.	
	s.	d.	s.	d.	s.	d.		s.	d.	s.	d.	s.	d.
1	14	4-8	10	10-8	9	9	27	11	6-0	11	7-8	9	6
2	14	3-6	10	10-8	9	9	28	14	5-1	11	6-0	9	3
3	14	3-3	10	11-4	10	0	29	14	3-0	11	5-7	9	3
4	14	2-4	11	0-6	10	3	30	14	2-1	11	2-4	9	0
5	14	0-3	11	1-2	10	6	31	14	1-2	11	1-2	9	0
6	14	0-0	11	1-8	10	6	32	14	0-9	11	1-2	9	3
7	13	11-4	11	2-4	10	9	33	14	0-0	11	0-0	9	0
8	13	11-1	11	1-8	10	9	34	13	11-7	10	11-1	9	3
9	14	0-9	11	0-6	10	6	35	14	0-9	10	11-4	9	3
10	14	1-8	11	1-8	10	6	36	13	10-8	10	10-8	9	0
11	14	3-0	11	1-8	10	3	37	13	11-7	11	0-0	8	9
12	14	3-0	11	2-4	10	3	38	13	9-6	10	11-4	8	9
13	14	5-4	11	3-0	10	6	39	12	8-1	10	11-7	9	0
14	14	5-4	11	4-2	10	6	40	13	6-2	10	9-3	9	0
15	14	7-5	11	5-1	10	9	41	13	6-9	10	8-4	9	0
16	14	8-4	11	6-6	11	0	42	13	7-2	10	5-7	8	9
17	14	9-0	11	8-1	11	0	43	13	7-5	10	6-0	9	0
18	14	6-6	11	9-0	11	0	44	13	6-0	10	5-7	9	0
19	14	8-1	11	8-4	10	9	45	13	5-7	10	4-2	9	14
20	14	7-8	11	7-2	10	9	46	13	5-1	11	9-6	9	6
21	14	10-2	11	8-7	10	6	47	13	5-1	10	3-6	9	9
22	14	10-2	11	8-1	10	3	48	13	5-4	10	3-6	9	9
23	14	9-3	11	9-3	10	0	49	13	6-6	10	3-6	9	9
24	14	7-5	11	9-6	9	9	50	13	6-6	10	2-4	9	9
25	14	8-4	11	9-6	5	9	51	13	6-3	10	2-4	9	9
26	14	7-5	11	8-4	9	6	52	13	6-9	10	0-6	9	0
Av. for 6 months	14	5-15	11	4-5	10	4-5	Av. for 6 months	13	9-59	10	9-76	9	2-18

TABLE OF THE RAINFALL OF THE ISLAND OF BARBADOS, W.I. FROM THE YEAR 1847 TO 1896—A PERIOD OF 50 YEARS.

Years.	Number of Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.	Crops in Hhds. for same period.
1847	3	2.83	.95	1.20	2.98	1.02	2.10	2.27	5.26	10.20	7.11	8.45	3.73	48.10	For 1847 33,111
8	3	4.76	2.04	2.66	1.58	6.74	2.21	6.25	7.58	5.41	11.78	5.79	7.04	63.77	" 8 28,165
9	3	3.61	2.72	3.90	2.69	2.34	6.63	5.64	6.82	4.74	8.53	1.42	3.75	52.77	" 9 33,077
1850	3	1.14	2.52	.78	2.96	4.70	10.48	9.01	6.82	3.34	10.17	9.51	6.30	67.88	" 1850 35,802
1	6	1.62	3.01	1.93	1.58	6.13	5.31	6.63	7.00	6.53	4.29	6.05	6.05	59.40	" 1 38,731
2	7	2.30	1.58	1.53	2.17	7.11	2.17	2.49	7.36	9.72	6.53	14.15	6.60	53.77	" 2 48,611
3	11	4.01	3.94	2.38	3.38	9.26	5.21	3.39	8.08	7.75	10.43	8.56	2.20	68.84	" 3 38,719
4	16	2.64	1.96	1.43	1.20	1.33	5.76	5.68	5.11	3.97	7.03	11.13	3.73	50.88	" 4 45,181
5	18	6.96	2.95	1.85	5.49	6.82	6.61	8.00	12.84	9.27	5.12	5.98	5.41	77.31	" 5 39,290
6	17	1.73	2.18	1.19	.81	2.94	5.49	2.86	7.80	5.88	6.45	7.25	4.21	48.49	" 6 43,077
7	20	2.63	5.78	2.02	1.54	2.64	5.43	7.14	6.33	7.93	6.58	9.07	3.10	60.90	" 7 38,793
8	21	1.52	1.28	1.40	.96	2.23	4.54	3.69	4.24	3.54	10.46	6.13	5.23	45.22	" 8 50,778
9	26	2.10	2.64	1.22	1.24	3.56	5.68	5.72	3.21	4.80	10.13	10.18	3.74	51.22	" 9 39,666
1860	23	2.28	2.85	1.13	2.41	.66	3.13	3.90	7.93	7.31	13.30	7.97	5.09	57.91	" 1860 42,684
1	21	3.49	1.96	2.76	6.35	8.01	9.31	8.28	4.65	6.77	7.60	7.50	7.11	73.82	" 1 49,845
2	19	7.60	1.12	.31	1.12	3.33	7.18	5.39	7.23	4.74	11.18	7.40	2.36	59.27	" 2 46,120
3	27	1.19	3.88	2.36	2.26	.58	1.62	3.65	9.34	4.99	2.89	6.45	3.27	42.38	" 3 42,281
4	26	2.74	2.47	.77	.66	3.07	2.17	7.51	7.37	10.77	9.14	6.31	6.16	59.19	" 4 36,199
5	35	2.36	2.19	1.39	4.13	5.89	9.19	7.35	8.91	5.07	11.00	4.53	6.58	68.64	" 5 47,209
6	36	3.75	2.75	1.57	1.26	2.74	2.63	6.23	11.89	4.22	8.98	7.85	5.80	59.68	" 6 52,241
7	40	2.68	4.49	.88	1.64	2.66	10.94	7.50	9.62	8.54	12.74	4.30	3.89	69.93	" 7 53,398
8	42	4.29	1.74	1.93	.97	1.68	3.45	6.26	5.62	4.63	8.20	4.42	1.40	44.60	" 8 53,242
9	45	1.53	1.47	1.03	3.34	4.32	3.05	4.42	6.95	4.56	6.90	5.13	5.73	48.62	" 9 32,885
1870	91	3.96	1.85	.90	.93	2.80	10.15	5.62	5.61	5.03	11.24	8.37	3.38	60.17	" 1870 39,270
1	141	4.13	2.29	1.07	.56	.98	2.71	3.65	5.37	6.70	6.33	4.03	4.08	41.16	" 1 53,907
2	165	2.10	2.38	.96	1.31	1.55	2.90	2.67	4.11	8.50	4.55	9.95	7.72	48.55	" 2 39,167
3	214	3.91	2.00	1.02	1.40	3.75	1.35	5.57	7.09	10.27	10.31	1.78	2.83	51.69	" 3 37,337
4	230	3.77	.93	2.90	2.69	1.23	5.30	5.88	8.11	12.59	8.91	4.06	2.91	59.22	" 4 47,293
5	204	5.29	1.68	1.41	2.30	1.21	1.75	2.94	5.47	18.57	8.12	3.30	9.67	61.71	" 5 66,000
6	78	3.28	1.23	2.37	1.17	1.96	4.61	7.13	3.65	10.64	7.95	4.91	3.83	52.73	" 6 37,347
7	26	4.75	.51	3.96	2.19	5.49	9.27	11.02	4.50	5.60	8.69	8.88	11.11	74.10	" 7 49,879
8	34	4.78	.27	1.53	6.13	5.20	5.31	7.66	9.55	6.53	9.42	13.08	3.56	73.10	" 8 43,511
9	213	4.41	5.23	3.07	1.04	3.88	10.30	4.47	9.30	6.61	6.56	15.30	4.27	74.30	" 9 67,146
1880	222	11.23	4.38	1.75	5.61	1.70	6.26	4.41	3.95	10.94	4.15	6.56	2.16	70.98	" 1880 54,217
1	217	1.60	2.02	.42	2.89	2.26	8.93	7.80	10.29	13.14	9.07	7.67	4.58	70.45	" 1 51,433
2	217	2.48	1.82	2.10	2.11	2.91	4.92	5.76	3.02	5.97	6.78	8.83	3.30	50.00	" 2 54,937
3	233	6.28	2.65	1.01	1.84	2.86	7.11	4.87	5.67	7.02	11.30	6.15	5.61	63.12	" 3 52,851
4	213	2.05	1.64	3.78	3.55	3.24	4.78	4.70	6.09	4.22	7.70	14.32	3.62	57.95	" 4 62,085
5	191	2.17	1.82	1.75	.86	3.24	2.90	3.52	5.22	5.30	6.96	7.22	4.09	44.08	" 5 67,764
6	99	1.79	1.95	1.82	1.08	3.56	4.05	13.80	18.47	12.65	9.73	14.30	2.67	82.81	" 6 46,769
7	152	3.52	2.06	1.72	.55	5.11	6.96	9.76	10.65	6.23	8.03	8.27	6.15	69.61	" 7 68,372
8	99	9.53	3.33	2.31	5.15	4.78	4.73	8.26	12.31	7.93	2.92	5.07	2.57	69.09	" 8 73,009
9	114	3.10	1.66	3.36	1.68	3.48	7.71	9.57	7.22	12.59	5.28	7.72	13.56	76.92	" 9 65,268
1890	178	4.74	1.93	3.25	3.71	2.88	3.83	2.35	8.09	7.39	9.09	2.22	3.65	52.53	" 1890 85,261
1	187	3.42	3.21	.58	1.53	1.45	11.43	7.85	7.62	3.43	10.16	11.99	3.63	66.30	" 1 50,547
2	177	3.24	1.92	2.48	3.87	7.47	14.47	7.52	11.49	13.43	5.55	10.73	4.29	86.46	" 2 59,254
3	167	2.55	1.43	1.14	3.94	4.35	7.21	10.23	12.00	10.10	11.90	6.05	5.28	70.18	" 3 67,157
4	162	2.74	1.56	2.08	2.05	1.22	2.83	4.02	4.20	9.93	7.21	5.77	3.12	46.71	" 4 66,232
5	180	3.24	1.55	2.37	3.12	3.70	2.60	3.09	9.53	17.74	10.93	12.84	4.33	80.05	" 5 56,451
6	194	3.57	2.76	2.29	9.51	7.80	5.22	5.69	7.30	6.46	7.41	22.60	9.07	89.67	" 6 49,829
		4,866	172.42	114.02	91.06	125.43	179.94	279.68	296.57	379.97	387.08	414.82	396.30	244.02	3089.89
...		3.45	2.28	1.82	2.51	3.60	5.69	5.93	7.60	7.74	8.30	7.93	4.88	61.80	