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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.
B.P. No.

248

Press
Mis.

Dated

19-2-1876

196- .

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
19th February 1876.*

No. 240. Read the following letter from C. J. LYALL, Esq., Under-Secretary to the Government of India, Department of Revenue, Agriculture, and Commerce, (Agriculture and Horticulture,) to D. F. CARMICHAEL, Esq., Secretary to the Government of Madras, Revenue Department, dated Calcutta, 28th January 1876, No. 3/66 :—

In continuation of the Circular from this department, No. 2/174, dated the 14th May 1875, forwarding copy of a letter from the Government of Bengal, with its enclosure, on the subject of two supposed new varieties of Carolina rice raised by Mr. W. C. Taylor, Deputy Collector of Pooree, I am directed to transmit, for the information of His Grace the Governor in Council, copy of a despatch* to Her Majesty's Secretary of State for India and of His Lordship's reply† thereto, communicating the opinions of two American gentlemen who were consulted in the matter.

* No. 15, dated the 5th July 1875.

† „ 63, „ 23rd December 1875 and enclosures.

ENCLOSURE No. 1.

Despatch from the Government of India, Department of Revenue, Agriculture, and Commerce.
Agriculture and Horticulture, SIMLA,

No. 15.

5th July 1875.

MY LORD MARQUIS,—We have the honor to forward herewith copy of a letter (with enclosures) from the Government of Bengal, No. 1,416, dated the 26th April last, reporting experiments made in different parts of that province with Carolina paddy-seed.

2. The report submitted by the Deputy Collector of Pooree contains, as your Lordship will observe, a record of very successful results obtained more particularly with two varieties of seed sown found to form part of the consignment of Carolina paddy raised in 1871. We beg to forward samples of these varieties, and we should be glad if your Lordship would be good enough to cause it to be ascertained whether these varieties are already known in America, or whether we are to look upon them as new the result of the altered physical conditions under which the American plant has been here brought.

We have, &c.,

NORTHBROOK,
NAPIER OF MAGDALA,
H. W. NORMAN,
A. HOBHOUSE,
W. MUIR,
A. J. ARBUTHNOT,
A. CLARKE,
A. EDEN.

From Her Majesty's Secretary of State for India, to the Government of India, dated India Office, London, 23rd December 1875, No. 63, (Revenue.)

With reference to your Excellency's despatch, dated the 5th July 1875 (No. 15), I have to inform you that on its receipt the Reporter on the Products of India communicated with the Commissioner of Agriculture at Washington, who forwarded samples of the rice-seed sent from India by you to two gentlemen* in the Southern States. I herewith transmit copies† of the replies of these gentlemen giving their opinions on the samples.

* Robert Habershams & Co.
James R. Sparkman.

† Dated the 8th and 18th October 1875.

Proceedings of the Madras Government, Revenue Department,
19th February 1876.

From Messrs. R. HABERSHAMS, SONS & Co., to the Commissioner of Agriculture, Washington, dated Savannah, Georgia, 8th October 1875.

Your favor of the 2nd instant and the samples (later) are at hand. We enclose you a sample of rice like yours in cultivation here and three larger ones. The long, narrow, and small chunky ones are yours; also send you a stalk of it. This is so inferior to our native kind that it is never grown on any large plantation, and is generally grown in small patches and dressed in plantation mortars. As the dealer will not buy it, it is not what we call merchantable, and is discouraged and discountenanced. Many years ago a large planting was made of this India rice on the best tide swamp, and we milled it. It was an experiment and was given up. Years ago there was what was called the Ward long-grain tried. It was longer and larger than your long one. That made the handsomest rice we ever had, but it was given up, we think, owing to the difficulty of milling it. It was milled by Mr. Ward at his own mill as a matter of pride, and would not work well at the Free Mills.

We have seen much finer samples of India rice than yours from Carolina seed the first year. The only plan is to plant in India fresh Carolina seed every year.

Even in Louisiana they have to do that, and the only good rice they make is the first year from our coast rice. It does not deteriorate as fast as in India, but the falling off is perceptible every year.

We would like to know how many years your sample was deteriorating.

From J. R. SPARKMAN, Esq., to the Commissioner of Agriculture, Washington, dated 18th October 1875.

Your letter of the 2nd instant came duly.

The samples of India rice not received for several days after.

In 1871 seed-rice was selected from this immediate neighbourhood for shipment to India, and I have shown the two samples received from you to the planters who furnished the parcels for exportation.

We are not surprised to find that the choicest Carolina seed has been returned to us so changed as not to be recognised. Our experience is that the modifying influences of climate are universal.

The most northern latitudes always produce the heaviest grain. With the exception of the small area of tide lands on the Cape Fear river in North Carolina, Georgetown County is the northern boundary of rice culture, so far as tide lands are cultivated, and most of the seed for the different regions south of this is furnished by the planters of this country, some of whom by extra care in the growth and preparation for market have deservedly made high reputation; one great desideratum, perhaps, the greatest, is the selection of seed free from volunteer or red rice. This volunteer is the growth of the shattered or shelled rice, left on the land during the work of harvesting. What is left by the birds as gleaners is returned to the soil in its preparation for the succeeding crop, and thus becomes incorporated with it, not to be distinguished by the appearance of the plant, but the grain after a few years is more easily separated in its attachment to the stalk, and shells off in handling during the harvest or drops during a high wind, thus polluting the land and reproducing itself, just in proportion as the crop gets a little over-ripe, or is slovenly and carelessly handled.

This is termed "red" rice from the discoloration of the inner pellicle under the chaff, at first a thin pale red, but each succeeding year of deeper color, and more tenacious in attachment, so that a parcel heavily polluted with old volunteer will require $\frac{1}{4}$ th to $\frac{1}{3}$ rd longer time in milling to clear it of this red pellicle or inner hull. Next to the freedom from red is the uniform size of the grain in determining its fitness for seeds. For hulling or separating the chaff, the paddy is ground between large stones, set at such a distance as nicely to skin the grain, as it were, without cracking or breaking it. The more uniform the grain in length and size and weight, the more thoroughly is the first process executed and the more easily the second performed of

Proceedings of the Madras Government, Revenue Department,
19th February 1876.

pounding preparatory to the third of brushing, by which the grain is polished. I allude to these matters pertaining more to the milling of the "Burra" (long grain) parcel sent me, as to the length, size, and weight, and I find upon hulling some of this red or volunteer the per-centage has diminished. Whether in increased under culture in India cannot now be determined, as I have no sample of that which was sent from here in 1871. But there can be no doubt as to the deterioration of the grain under foreign culture. The samples sent me are different from our ordinary crop rice, and inferior to parcels selected for seed usually. Our experience is that the best seed will deteriorate under a change of climate so rapidly that in the more southern portions of Carolina, and throughout Georgia, it becomes necessary to get northern seed (from us generally) every three or four years.

There are many varieties of rice, and in the field here at least twelve to fifteen different varieties may be detected by any one at close observation.

In what respect these varieties differ could be out, but this is not what you desire.

The smaller grain sent by you, called "Tiku" resembles very much a grain which is frequently mixed in our crops and known here as a grain, and has not been selected and cultivated so, but it has no advantage for a crop

The millers in this county have inspected the parcels, and pronounce them entirely different from Carolina crop-rice.

No. 241. ORDER THEREON, 19th February 1876, No. 248.

Miscellaneous.

(True

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t.)

D. F. CARMICHAEL,
Secretary to Government.

To the Board of Revenue.

Exd. F. R. Bantleman.

No. 15 of 1875.

GOVERNMENT OF INDIA.

DEPARTMENT OF REVENUE, AGRICULTURE, AND COMMERCE.

AGRICULTURE and HORTICULTURE.

To

THE MOST HONOURABLE THE MARQUIS OF SALISBURY,
Her Majesty's Secretary of State for India.

SIMLA, THE 5TH JULY 1875.

MY LORD MARQUIS,

WE have the honour to forward herewith copy of a letter (with enclosures) from the Government of Bengal, No. 1416, dated the 26th April last, reporting experiments made in different parts of that Province with Carolina paddy seed.

2. The report submitted by the Deputy Collector of Pooree contains, as Your Lordship will observe, a record of very successful results obtained more particularly with two varieties of seed sown, found to form part of the consignment of Carolina paddy raised in 1871. We beg to forward samples of these varieties, and we should be glad if Your Lordship would be good enough to cause it to be ascertained whether these varieties are already known in America, or whether we are to look upon them as new, the result of the altered physical conditions under which the American plant has been here brought.

We have the honour to be,

MY LORD MARQUIS,

Your Lordship's most obedient, humble Servants,

NORTHBROOK.

NAPIER OF MAGDALA.

H. W. NORMAN.

A. HOBHOUSE.

W. MUIR.

A. J. ARBUTHNOT.

A. CLARKE.

A. EDEN.

? Surely Eden is not a
member of the Secret
Committee

Obdt. of 1876

REVENUE.

THE BOARD OF REVENUE.

Dated February 19th,

Recd.

Encl.

G.O., 19th February 1876, No. 248.

Nos. 240-241.

Carolina Rice—Communicating to the Board of Revenue letter from the Government of India forwarding copies of despatches on the subject of two supposed new varieties of — discovered by Mr. W. C. Taylor, Deputy Collector of Pooree.

No.

GOVERNMENT OF INDIA.
DEPARTMENT OF REVENUE,
AGRICULTURE, AND COMMERCE.

AGRICULTURE and HORTICULTURE.

No. 15, DATED SIMLA, THE 5TH JULY 1875.

(COPY.)

(Letter to Her Majesty's Secretary of State
for India.)

SUBJECT.

REQUESTS that certain enquiry may be made of
America with respect to some Carolina rice seed
raised in Pooree, of which a sample is forwarded.

No. 63 (Revenue), dated India Office, London, the 23rd December 1875.

From—Her Majesty's Secretary of State for India,
To—The Government of India.

WITH reference to your Excellency's Despatch, dated the 5th July 1875, (No. 15,) I have to inform you that, on its receipt, the Reporter on the Products of India communicated with the Commissioner of Agriculture at Washington, who forwarded samples of the rice seed sent from India by you, to two gentlemen* in the Southern States. I herewith transmit copies† of the replies of these gentlemen giving their opinions on the samples.

Dated Savannah, Georgia, the 8th October 1875.

From—Messrs. R. HABERSHAMS, SONS & Co.,
To—The Commissioner of Agriculture, Washington.

YOUR favour of the 2nd instant, and the samples (later) are at hand. We enclose you a sample of rice like yours in cultivation here, and three larger ones. The long narrow and small chunky ones are yours; also send you a stalk of it. This is so inferior to our native kind that it is never grown on any large plantation and is generally grown in small patches and dressed in plantation mortars. As the dealer will not buy it, it is not what we call merchantable, and is discouraged and discountenanced. Many years ago a large planting was made of this India rice on the best tide swamp and we milled it. It was an experiment and was given up. Years ago there was what was called the Ward long-grain tried. It was longer and larger than your long one. That made the handsomest rice we ever had, but it was given up, we think, owing to the difficulty of milling it. It was milled by Mr. Ward at his own mill as a matter of pride, and would not work well at the Free Mills.

We have seen much finer samples of India rice than yours from Carolina seed the first year.

The only plan is to plant in India fresh Carolina seed every year.

Even in Louisiana they have to do that, and the only good rice they make is the first year from our coast rice. It does not deteriorate as fast as in India, but the falling-off is perceptible every year.

We would like to know how many years your sample was deteriorating.

Dated the 18th October 1875.

From—J. R. SPARKMAN, Esq.,
To—The Commissioner of Agriculture, Washington.

YOUR letter of the 2nd instant came duly.

The samples of India rice not received for several days after.

In 1871, seed rice was selected from this immediate neighbourhood for shipment to India, and I have shewn the two samples received from you to the planters who furnished the parcels for exportation.

We are not surprised to find that the choicest Carolina seed has been returned to us, so changed as not to be recognised. Our experience is that the modifying influences of climate are universal.

The most northern latitudes always produce the heaviest grain. With the exception of the small area of tide lands on the Cape Fear river in North Carolina, Georgetown County is the northern boundary of rice culture so far as tide lands are cultivated, and most of the seed for the different regions south of this is furnished by the planters of this country, some of whom by extra care in the growth and preparation for market have deservedly made high reputation; one great desideratum, perhaps the greatest, is the selection of seed free from volunteer or red rice. This volunteer is the growth of the shattered or shelled rice, left on the land during the work of harvesting. What is left by the birds as gleaners, is returned to the soil in its preparation for the succeeding crop, and thus becomes incorporated with it, not to be distinguished by the appearance of the plant, but the grain after a few years is more easily separated in its attachment to the stalk, and shells off in handling during the harvest or drops during a high wind, thus polluting the land and reproducing itself, just in proportion as the crop gets a little over-ripe, or is slovenly and carelessly handled.

This is termed "red" rice from the discolouration of the inner pellicle under the chaff, at first a thin pale red, but each succeeding year of deeper colour, and more tenacious in attachment, so that a parcel heavily polluted with old volunteer will require 1/4th to 1/3rd longer time in milling to clear it of this red pellicle or inner hull. Next to the freedom from red is the uniform size of the grain in determining its fitness for seeds. For hulling or separating the chaff, the paddy is ground between large stones, set at such a distance as nicely to skin the grain, as it were, without cracking or breaking it. The more uniform the grain in length and size and weight, the more thoroughly is the first process executed and the more easily the

second performed of *pounding* preparatory to the third of *brushing*, by which the flour is removed, and the grain polished. I allude to these matters pertaining more directly to *milling*, because I detect considerable discrepancy in the grains of the "Burra Dhan" (long grain) parcel sent me, as to length, size and weight, and I find upon hulling some of it considerable *red* rice. Whether in this red or volunteer the percentage has diminished, or increased under culture in India cannot now be determined, as I have no sample of that which was sent from here in 1871. But there can be no doubt as to the deterioration of the grain under foreign culture. The samples sent me are different from our ordinary crop rice, and inferior to parcels selected for seed usually. Our experience is that the best seed will deteriorate under a change of climate so rapidly that in the more southern portions of Carolina, and throughout Georgia, it becomes necessary to get northern seed (from us generally) every three or four years.

There are many varieties of rice, and in the same field here at least 12 to 15 different varieties may be detected by any one accustomed to close observation.

In what respect these varieties differ could be pointed out, but this is not what you desire.

The smaller grain sent by you, called "Tiku Dhan," resembles very much a grain which is frequently mixed in our crops and known here as *cooter rice*, but it has no advantage for a crop grain, and has not been selected and cultivated separately.

The millers in this county have inspected the two parcels, and pronounce them entirely different from Carolina crop rice.

1876.

GOVERNMENT OF INDIA.
DEPARTMENT OF REVENUE,
AGRICULTURE, AND COMMERCE.
AGRICULTURE and HORTICULTURE.

FROM
HER MAJESTY'S SECRETARY OF
STATE FOR INDIA.

Dated 23rd December 1875. } No. 63 (Rev.)
Recd. 17th January 1876. } Enclosures.
Spare copies.

D. No. }
L. No. } Progs. } No.

Rev 585/76

SUBJECT.

WITH reference to despatch No. 15 of 1875, states that the samples of the rice seed sent from India were forwarded to two gentlemen in the Southern States, whose opinions thereon are enclosed.

No. ³/₆₆

FROM

C. J. LYALL, Esq.,

Under Secretary to the Government of India,

To *the Secretary to the Government of Madras.*

Department of Revenue,
Agriculture and Commerce.
Agriculture and Horticulture.

Calcutta, the 28th January 1876.

SIR,

IN continuation of the circular from this Department, No. ²/₇₇, dated the 14th May 1875, forwarding copy of a letter from the Government of Bengal, with its enclosure, on the subject of two supposed new varieties of Carolina rice raised by Mr. W. C. Taylor, Deputy Collector of Pooree, I am directed to transmit for the information of His Grace the Governor in Council copy of a despatch* to Her Majesty's Secretary of State for India, and of His Lordship's reply† thereto, communicating the opinions of two American gentlemen who were consulted in the matter.

I have the honour to be,

SIR,

Your most obedient Servant,

C. J. Lyall

Under Secretary to the Government of India.

29 May 1875 No 350 - 57

By

No 248

Communicated to
the Board of Revenue
with reference to G.O.
29 May and 2nd August
1875 Nos 845 & 1166.

19th February 1876

To the Board of Revenue, Secy

To

No 585
Revenue 1876. Depto
GOVERNMENT OF INDIA.
DEPARTMENT OF REVENUE,
AGRICULTURE, AND COMMERCE.
AGRICULTURE and HORTICULTURE.

To

No. ³/₆₆

Dated Calcutta, the 28th January 1876.

Recd 10th Feby
In 2nd 7
Secy

Secy

SUBJECT.

FORWARDS copies of despatches to and from Her
Majesty's Secretary of State for India, on the sub-
ject of two supposed new varieties of Carolina rice
discovered by Mr. W. C. Taylor, Deputy Collector
of Pooree.

No 248 - 19th February 1876

O. S. G. P. - No. 680, R., A., & C. - 28-1-76. - 150.

Wm Adams