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9 June, 1997

13 JUN 1997

m-johnst@uwe.ac.uk

Dear Tony,

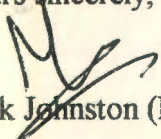
Just a few lines, as I think the enclosed copies explain my intended and continued interests in Guyanese cocoa!

In summary, I wish to undertake a more detailed collection and characterization of cocoa in Guyana involving a student group next year, in order to properly restore the cocoa collection at Timehir, and then collect material from 2-3 key wild cocoa localities. I enclose an outline of the possible activities, and would naturally greatly appreciate any comments.

I'm also looking into the possibility of submitting the cocoa germplasm proposal to other research bodies such as Leverhulme Trust.

My very best wishes.

Yours sincerely,


Mark Johnston (Dr.)

0117 9251233



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Dear John,

I hope you understand the decision I made concerning the possibility of re-submitting the EU proposal. This certainly does not in anyway reflect my continued interest and energy to explore research possibilities in Guyanese cocoa. I am hoping to formulate a similar research proposal to be submitted to an alternative funding organizations shortly....I'll be in touch on this later over the summer.

One key reason for writing is concerning possible research interest next year. I am keen to continue the student-based activities in Guyana with the collection and characterization of cocoa from different localities. I have proposed to Prof. Ahmed a 3-month project to i) restore the germplasm collection at Timehri, including the cutting of drainage canals, and planting of shade trees, and ii) the collection of cocoa budwood from key cocoa localities. A summary of the possible activities enclosed.

I was wondering whether it would be possible for the student group to spend 7-10 days in Trinidad, being shown basic collection, characterization and grafting techniques which may be transferred to Guyana, either by themselves or with involvement from NARI. This would be around mid-July next year. I would certainly warmly welcome your comments and suggestion on this.

Lastly, I do hope you are well. Please do accept my very best wishes to you and your family. I look forward to Trini as soon as I can.

Yours sincerely,

A handwritten signature in dark ink, appearing to be 'Mark Johnston', written over a horizontal line.

Mark Johnston (Dr.)

cc. Tony Lass (Cadbury Ltd)



Faculty of Applied Sciences

**Department of Environmental Health
and Science**

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9 June, 1997

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Dear Prof. Ahmed,

Firstly I do apologize for not being in touch more frequently, I trust all is well in Guyana and that your plans for development of NARI are being supported.

I've been meaning to write for sometime concerning the development of our cocoa interests in Guyana. Although our EU bid was unfortunately unsuccessful I am still extremely keen to develop and explore new avenues for research.

I would be most interested to hear whether or not there has been any alterations or developments concerning the cocoa germplasm at Timehri which brings me onto my key area of interest for possible research activities next year.

Next year I would be keen to undertake a more detailed wide-spread collection and characterization of the cocoa in Guyana; i) to help to maintain and restore the germplasm material at Timehri, and ii) collect material from more distant localities, characterize this material and return it to the germplasm at Timehri. I enclose an outline of what I think would be of value, if of course this is of interest to you & NARI. I would certainly welcome your comments and suggestions on this.

I envisage such a project running for approximately 3 months from July next year, whereby a student group may visit Guyana to assist in the restoration of the Timehri germplasm, and then collect material from the wild populations. I may request the

assistance of GDF (with your permission), who I understand have provided assist to similar research projects in remote areas. I would also like to suggest that the students spend 7-10 days in Trinidad at the CRU before visiting Guyana to learn key techniques in germplasm collection and grafting. Would NARI be interested in sending a member of staff to the CRU at the same time to enable technology transfer? I have written to Prof. Spence on this, and copied this letter to him for his reference.

I would hope that by the end of the project we shall have a good representation of the cocoa genetic material, which will assist in the long-term development of agricultural expansion in Guyana.

Lastly, may I request a general letter of support for the project, this will assist us in obtaining funds from charitable trust and organizations here in the UK.

Many, many thanks for your time and consideration of these points. My very best wishes, and I very much look forward to meeting you once again in the not too distant future.

Yours sincerely,

Mark Johnston (Dr.)

cc. Tony Lass (Cadbury Ltd)
Prof. John Spence (CRU)

Guyana 1998 Cocoa Project

Objectives

- Describe, catalogue and collect wild cocoa germplasm material from key localities in Guyana.
- Restore the existing Guyana cocoa germplasm bank at Timehri, and incorporate material collected for future research and commercialization of cocoa in Guyana

The project is in close collaboration with the National Agricultural Research Institute (NARI) in Guyana, who are responsible for agricultural research and development in the country. Technical assistance is being provided by the Cocoa Research Unit, University of the West Indies, Trinidad.

Workprogramme

The overall aim of the project is to assist in the *ex-situ* conservation and documentation of cocoa (*Theobroma cacao* L.) in Guyana. Preliminary studies on the current status and history of cocoa in Guyana have already been undertaken (Watkins, Knowles & Johnston, 1996; Johnston, 1997), and this project will expand on these studies and assist in the facilitation of cocoa germplasm conservation. The overall aim and specific objectives of the project will be undertaken through four integrated tasks.

Task 1 Development of techniques in germplasm collection and curation

Before undertaking the field investigations members of the team will spend 1-2 weeks in Trinidad at the Cocoa Research Unit being trained in cocoa collection and curation techniques. These techniques will then be transferred to Guyana through the re-establishment of the Guyana cocoa germplasm bank at Timehri, and the incorporation of wild material collected.

Task 2 Restoration of the Guyana cocoa germplasm bank

Before undertaking the collection of cocoa material the Guyana cocoa germplasm bank at Timehri will be restored, this will include the removal of surrounding vegetation, digging of drainage canals and the preparation of root stock for receiving the budwood collected from the localities visited during Task 3. This will be undertaken in close collaboration with the National Agricultural Research Institute (NARI), who have recently taken-over ownership of the germplasm bank.

Task 3 Collection and documentation of wild cocoa

Each of the identified localities will be visited, and the cocoa documented in accordance with IPGRI crop descriptors, and specimen budwood collected using techniques developed at the CRU, Trinidad. Each tree will also be tagged, and mapped using GPS co-ordinates and the best available maps.

Task 4 Incorporation of wild cocoa material into existing germplasm bank

Material collected from the field investigations will be incorporated back into the Guyana germplasm bank at Timehir, using techniques and experience gained at the CRU, Trinidad (Task 1).

Detailed Project Proposal

.... to follow!



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9 June, 1997

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Re: Guyana & Native Crop Research

Dear *Midello*,

I do apologize for not being in touch earlier, being examination time marking and preparation for examination boards has dominated my agenda rather.

As you may have guessed I have decided not to re-submit the cocoa proposal in the next INCO-DC round. I have to admit this was not any easy decision. There were several key reasons behind my decision;

1. In the last round we obtained a C grade, and a shift from C to A to be eligible for funding would mean an almost complete re-write of the proposal, as well as having to submit a justification for re-submittal.
2. On CORDIS some similar research projects on pineapples and papaya were funded in the last INCO round, as well as under other EU programmes. This would make our chances of funding even harder.
3. The next INCO round included a wider range of eligible topic areas, including medicine, but with the same amount of funds being available.

However, I am still very interested and keen to explore and develop research collaboration strengthening the network already established. There are two key areas to consider for discussion;

1. Specific cocoa germplasm research in Guyana.

I am already planning a research project to Guyana next summer continuing the characterization of wild and cultivated cocoa in Guyana. I am also wishing to explore alternative funding mechanisms to support this, fifth framework, Leverhulme, etc? The draft objectives of next years research are to;

- Describe, catalogue and collect wild cocoa germplasm material from key localities in Guyana.
- Restore the existing Guyana cocoa germplasm bank at Timehri, and incorporate material collected for future research and commercialization of cocoa in Guyana

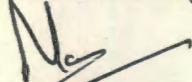
2. Combined methodologies in *in-* and *ex-situ* conservation through ethnobotanical leads

As you may be aware there has been some fascinating recent work on the combination of *ex-* and *in-situ* germplasm conservation techniques, including the application of ethnobotanical investigations in assessing the utilization and selection of crop genotypes by indigenous people. This is an area of particular interest, especially given that ethnobotany is my forte.

Such a project could be developed with closer collaboration and networking with key institutions in the Caribbean. If partners are interested in such a project I would be interested in discussing possible activities and details of any Caribbean contacts, with the possibility of submitting to future fifth framework programme(s).

Lastly, I hope you find some of these points of interest and we can continue to develop research interests. May I thank you for all your support and hard work. My very best wishes.

Yours sincerely,



Mark Johnston (Dr.)

Hope all
is well,