PROGRAMA SANIDAD VEGETAL

REPORT ON THE FIRST REGIONAL COURSE
FOR
PLANT QUARANTINE INSPECTORS
IN
THE CARIBBEAN

IICA

REPORT ON THE FIRST REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS IN THE CARIBBEAN

INTRODUCTION

The first course for Plant Quarantine Inspectors in the Caribbean was held from October 18 - 29th, 1982 at the Normandie Hotel, Port-of-Spain, Trinidad and Tobago. The course was sponsored by The Ministry of Agriculture, Lands and Food Production Trinidad and Tobago and The Inter-American Institute for Cooperation on Agriculture (IICA) with assistance from The Animal and Plant Health Inspection Service (APHIS) of The United States Department of Agriculture (USDA) and The University of the West Indies (UWI).

The course was opened by Dr. Patrick Alleyne, Permanent Secretary of the Ministry of Agriculture, who substituted for the Honourable Minister, Mr. Kamaluddin Mohammed, who was unable to attend but sent his best wishes to the meeting.

In his opening remarks, the Chairman of the opening session, Dr. Ronald Barrow pointed out that a regional course for plant quarantine inspectors had been on the drawing board since 1967, and he was pleased to see that at last the course was being held. Dr. E. Patrick Alleyne welcomed the participants and expressed the concern of his Ministry with the ever increasing number of pests and diseases in the region. He wished the course well and declared the course open.

OBJECTIVES OF THE COURSE

The objectives of the course were as follows:

1. To develop and foster among Plant Quarantine Inspectors of the Region an awareness of their mutual responsibility to keep the Caribbean free from foreign pests and diseases.

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OBJECTIVES OF THE COURSE cont'd

2. To improve the skills of Plant Quarantine Inspectors in the detection and treatment of plant pests and diseases which pose a threat to Caribbean Agriculture from either regional or extra-regional sources.
3. To improve communication between Plant Quarantine Inspectors of various territories of the region.
4. To form the basis for the preparation of a Caribbean Plant Quarantine Training Manual.

THE COURSE PROGRAMME

The programme is outlined in Appendix I. A few minor changes were made during the course. In addition to the programmed subjects, four hypothetical cases were studied. These are given in Appendix 2. The students expressed considerable satisfaction from the information gained during consideration of the cases. The handouts and other information provided in the course was incorporated with a working reference manual by all students.

PARTICIPANTS AND LECTURERS

The list of participants and lecturers were as in Appendix 3. Participants came from Barbados, Dominica, Grenada, Guyana, Haiti, Jamaica, Surinam and Trinidad and Tobago

EVALUATION

The course was evaluated by two questionnaires Sample copies of these are attached as Appendix 4 and Appendix 5.

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FINAL EXAMINATION

A final examination was held. A copy of the examination paper is given in Appendix 6. All participants sucessfully completed the examination with five of the thirteen getting a mark of over 80%.

CLOSING SESSION

Dr. E. Patrick Alleyne, presented certificates a sample of which is shown in Appendix 7, to all participants and the course ended on Friday 29th October, 1982.

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PROGRAMME: FIRST REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS IN THE CARIBBEAN

APPENDIX I

MONDAY, 18th OCTOBER, 1982

8.00 - 9.00 a.m.	REGISTRATION	
9.00 - 10.00 a.m.	OPENING CEREMONY	
	Chairman:	**Dr. Ronald Barrow** *Director of Crop Research* *Central Experiment Station* *Ministry of Agriculture, Lands and Food Production, Trinidad and Tobago*
	Introductory Remarks	**Dr. Warren Forsythe** *Acting Director* *IICA Office in Trinidad and Tobago*
	Opening Address	**The Hon. Kamaluddin Mohammed** *Minister of Agriculture, Lands and Food Production, Trinidad and Tobago*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 11.00 a.m.	The importance of plant quarantine training in Caribbean Agriculture	**Dr. Chelston W.D. Brathwaite** *Regional Plant Protection Specialist* *IICA Office in Trinidad and Tobago*
11.00 - 12 noon	The history and principles of plant quarantine	**Mr. John Thaw**, *Leader* *International Training Section* *APHIS/USDA*
12 noon-1.30 p.m.	LUNCH	
1.30 - 2.30 p.m.	The international plant protection convention and plant quarantine systems in various parts of the world	**Mr. John Thaw** *APHIS/USDA*
2.30 - 3.30 p.m.	The legal framework of plant quarantine systems and plant quarantine laws and regulations in the Caribbean	**Dr. Winston Small** *Plant pathologist* *Systems, Barbados*

APPENDIX 1 cont'd

MONDAY, 18th OCTOBER, 1982 *(Cont'd)*

3.30 - 4.00 p.m.	COFFEE BREAK	
4.00 - 5.00 p.m.	Plant quarantine laws and regulations in the Caribbean — Discussion Session	**Dr. Winston Small** *Moderator*

TUESDAY, 19th OCTOBER

8.30 - 10.00 a.m.	The preparation of a plant quarantine Manual	**Dr. Winston Small** *Plant Pathologist Systems, Barbados*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	The importance of records and systems of record keeping in effective plant quarantine	**Mr. John Thaw** *APHIS/USDA*
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	Public relations and the image of the plant quarantine inspector — Discussion session	**Dr. C.W.D. Brathwaite** *Coordinator*
3.00 - 3.30 p.m.	COFFEE BREAK	
3.30 - 4.30 p.m.	Plant Quarantine and Customs — Discussion Session	*Coordinator* Mr. S. Lewis *Agricultural Officer (Plant Quarantine) Central Experiment Station Centeno, Trinidad*

WEDNESDAY, 20th OCTOBER

8.30 - 10.00 a.m.	Insects of plant quarantine significance in the Caribbean	**Dr. Gene V. Pollard** *Entomologist University of the West Indies*

APPENDIX 1 cont'd

WEDNESDAY, 20th OCTOBER, 1982 *(Cont'd)*

10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	The taxonomy of insects using a simple key	**Dr. G.V. Pollard,** *UWI and* **Mr. John Thaw,** *APHIS/USDA*
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	Symptoms of insect damage and the nature of insect forms likely to be encountered by plant quarantine inspectors	**Dr. G.V. Pollard,** *UWI*
3.30 - 5.00 p.m.	Discussions on insects	**Dr. G.V. Pollard,** *Moderator*

THURSDAY, 21st OCTOBER

8.30 - 10.00 a.m.	Mites of plant quarantine significance	**Dr. Ronald Barrow** *Central Experiment Station Centeno, Trinidad*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	Nematodes of plant quarantine significance in the Caribbean	**Mr. George Bala,** *Nematologist Central Experiment Station Centeno, Trinidad*
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	The detection and treatment of nematode infested cargo	**Mr. George Bala** *Central Experiment Station Centeno, Trinidad*
3.00 - 3.30 p.m.	COFFEE BREAK	
3.30 - 4.30 p.m.	The control of plant parasitic nematodes	**Dr. C.W.D. Brathwaite** *IICA*

APPENDIX 1 cont'd

FRIDAY, 22nd OCTOBER

8.30 - 10.00 a.m.	Plant diseases of plant quarantine significance in the Caribbean	**Dr. Chelston W.D. Brathwaite** *IICA*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	The detection of plant diseases in cargo (seeds, plant material, nursery stock, etc.)	**Miss Gita Persad,** *Plant Pathologist Ministry of Agriculture, Centeno*
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	Controlling plant diseases	**Miss Gita Persad** *and* **Mr. Garth Rajnauth** *Ministry of Agriculture, Centeno*
3.00 - 3.30 p.m.	COFFEE BREAK	
3.30 - 4.30 p.m.	Discussion on plant diseases	**Miss Gita Persad,** *Moderator* **Garth Rajnauth** *and* **Chelston W.D. Brathwaite**

MONDAY, 25th OCTOBER

8.30 - 10.00 a.m.	Plant quarantine treatments - methodologies, safety monitoring	**Mr. John Thaw** *APHIS/USDA*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	Fumigation - methodology and techniques	**Mr. John Thaw** *APHIS/USDA*
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	The use of pesticides in plant quarantine safety measures	**Mr. John Thaw** *APHIS/USDA*
3.00 - 3.30 p.m.	COFFEE BREAK	

APPENDIX 1 cont'd

MONDAY, 25th OCTOBER, 1982 *(Cont'd)*

3.30 - 4.30 p.m.	Discussion on pesticides	Mr. John Thaw *APHIS/USDA*

TUESDAY, 26th OCTOBER

Field trip to ports of entry in Trinidad and Tobago and discussion on plant quarantine in Trinidad and Tobago	*Coordinators* - Dr. R. Barrow *and* Mr. S. Lewis *Ministry of Agriculture, Trinidad*

WEDNESDAY, 27th OCTOBER

Laboratory sessions/field trip on diagnosis of pests and diseases	Miss G. Persad Dr. G.V. Pollard Mr. G. Rajnauth Mr. S. Lewis Mr. G. Bala

THURSDAY, 28th OCTOBER

8.30 - 10.00 a.m.	Plant pests and diseases which threaten Caribbean agriculture from regional sources	*Coordinator* - Dr. C.W.D. Brathwaite
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	Plant pests and diseases which threaten Caribbean Agriculture from regional sources (continued)	*Coordinator* - Dr. C.W.D. Brathwaite
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	Pests and diseases which threaten Caribbean agriculture from extra-regional sources	Dr. C.W.D. Brathwaite, *IICA* Mr. John Thaw, *APHIS/USDA and* Mr. R. Montoya, *IICA*
3.00 - 3.30 p.m.	COFFEE BREAK	

APPENDIX 1 cont'd

THURSDAY, 28th OCTOBER, 1982 *(Cont'd)*

3.30 - 4.30 p.m.	Pests and diseases which threaten Caribbean agriculture from extra-regional sources (continued)	**Dr. C.W.D. Brathwaite,** *IICA* **Mr. John Thaw,** *APHIS/USDA and* **Mr. R. Montoya,** *IICA*

FRIDAY, 29th OCTOBER

8.30 - 10.00 a.m.	The phytosanitary certificate	**Mr. John Thaw,** *APHIS/USDA*
10.00 - 10.30 a.m.	COFFEE BREAK	
10.30 - 12 noon	Sources of information in plant quarantine	**Dr. C.W.D. Brathwaite**
12 noon-1.30 p.m.	LUNCH	
1.30 - 3.00 p.m.	Review and evaluation	**Mr. John Thaw,** *APHIS/USDA and* **Dr. C.W.D. Brathwaite,** *IICA*
3.00 - 3.30 p.m.	COFFEE BREAK	
3.30 - 4.00 p.m.	Closing session	*Chairman* - **Dr. C.W.D. Brathwaite**
	Presentation of Certificates and closing remarks	**Dr. Patrick Alleyne** *Permanent Secretary Ministry of Agriculture, Lands and Food Production, Trinidad and Tobago*

APPENDIX 2

REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS IN THE CARIBBEAN

CASE STUDIES

1. A traveller arrives into your country with fruitfly-infected fruit. The fruitfly is the same species as one currently in your country. What action would you take and why?

2. A scientist from abroad has applied to your government to carry out research on a disease of apples in your country. The crop is not grown in your country and there are no known hosts of the pathogen in your country. Prepare an outline indicating what advice you would give to your government in response to this application.

3. A former english literature teacher has joined the plant quarantine division of your Ministry, you have been assigned responsibility for his/her orientation, write out the first speech which you will give him/her on the importance of plant quarantine as it relates to regional trade and regional travel.

4. You were the plant quarantine inspector who confiscated citrus plants in soil from an importer. The importer has taken the case to court insisting that the citrus plants were not infested with pests, prepare a statement for your lawyer quoting the relevant section of the law under which you acted and give details of the observed or suspected pests which led you to act as you did.

FIRST REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS
IN THE CARIBBEAN

APPENDIX 3

LIST OF PARTICIPANTS

NAME	WORK ADDRESS	HOME ADDRESS
ALEXANDER, WINSTON	Ministry of Agriculture St. George's GRENADA	Grand Bacolet St. Andrew GRENADA
AZIZ, MOHASAN	Plant Quarantine Division Ministry of Agriculture TRINIDAD & TOBAGO	Sangre Chiquito Sangre Grande TRINIDAD
BALTHAZAR, SAINPHOR	Service Recherche Agricole DARNDR, Port-au-Prince HAITI	Ave Martin-LutherKing Impasse Bien Aruie 43 Port-au-Prince HAITI
EMMANUEL, CHARLES	Plant Quarantine Division Ministry of Agriculture TRINIDAD & TOBAGO	Thompson Road Palmiste Village TRINIDAD
HUNTE, EVERTON	Plant Protection Division Ministry of Agriculture BARBADOS	"Everose" Congo Road St. Philip BARBADOS
OMADATH, CHURAMAN	Plant Quarantine Division Ministry of Agriculture TRINIDAD & TOBAGO	Ramoo Trace Las Lomas No. 2 Arouca TRINIDAD
POMPEY, CALEB	Plant Quarantine Division Ministry of Agriculture GUYANA	Timehri, Eastbank Demerara GUYANA
PREVATT, ANTONIO	Plant Quarantine Division Ministry of Agriculture TRINIDAD & TOBAGO	5, Petunia Ave Coconut Drive Morvant TRINIDAD
RAGOO, PATRICK	Department of Crop Science Faculty of Agriculture University of the West Indies St. Augustine TRINIDAD & TOBAGO	79 El Dorado Road Tunapuna TRINIDAD

SIMPSON, JASCINTHA	Plant Protection Division Ministry of Agriculture Hope Gardens JAMAICA	Richmond Park P.O. Clarendon JAMAICA
SINGH, RAGOOBIK	Plant Quarantine Division Ministry of Agriculture TRINIDAD AND TOBAGO	19 Thomasos Terrace Road Arima TRINIDAD
TEVREDE, HARRYSON	Plant Quarantine Inspector Department of Agriculture Paramaribo SURINAME	Ie Moengo Projekt 58 Middenpad Kwatta Distrikt SURINAME
THOMAS, MICHAEL	Agricultural Assistant Botanical Gardens Roseau DOMINICA	14 Solomon Lane Goodwill Roseau DOMINICA

LECTURERS

DR. RONALD BARROW

Director of Crop; Research
Ministry of Agriculture, Lands & Food Production
TRINIDAD AND TOBAGO

DR. CHELSTON W.D. BRATHWAITE

Regional Plant Protection Specialist
IICA, 3A Queen's Park West
Port of Spain
TRINIDAD AND TOBAGO

MR. COLVIN PADMORE

Training Officer III
Central Training Unit
Personnel Division
GOVERNMENT OF TRINIDAD & TOBAGO

MR. GEORGE BALA

Nematologist
Ministry of Agriculture, Lands & Food Production
TRINIDAD AND TOBAGO

MR. SHERWIN LEWIS

Agricultural Officer (Plant Quarantine)
Ministry of Agriculture, Lands & Food Production
TRINIDAD AND TOBAGO

MISS GITA PERSAD

Plant Pathologist
Ministry of Agriculture, Lands & Food Production
TRINIDAD & TOBAGO

DR. GENE V. POLLARD

Entomologist
Department of Biological Sciences
University of the West Indies
St. Augustine
TRINIDAD AND TOBAGO

DR. WINSTON SMALL

Plant Pathologist
Systems
BARBADOS

MR RAMON MONTOYA

Regional PLant Protection Specialist
IICA Office
Lima
PERU

MR. GARTH RAJNAUTH

Agricultural Officer (Plant Pathology)
Ministry of Agriculture, Lands &
Food Production
TRINIDAD AND TOBAGO

MR. JOHN THAW

International Training Section Leader
Animal and Plant Health Inspection
Service, U.S.D.A.
195 Thomas Johnson Drive
Frederick, Maryland
U.S.A.

APPENDIX 4

EVALUATION OF REGIONAL PLANT QUARANTINE COURSE

EVALUATION NO. I

INSTRUCTIONS:

Place an X under the class that you think the lecture or presentation falls into. More than one X can be used for a particular lecture e.g. a lecture may be good to know and relevant to your work and you would like to have spent more time on the subject. With respect to the presentation category use the following ratings

1 - Boring
2 - Could be improved
3 - Adequate
4 - Very Good
5 -, Stimulating

Material were Good Bad (B)

have spent more time on this subject

(3)

(a.

COMMENTS:-

(b) To improv and treatm Caribbean A

excellent

COMMENTS:-

FIRST REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS
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PPENDIX 5

VALUATION NO. 2

herever in this evaluation the category "could be improved" is marked lease give comments and suggestions for improvement.

1) General Organization of the Course

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

(2) Sequence and Organization of the Material of the Course

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

(3) The extent to which the course achieved its objectives

(a) To develop and foster among Plant Quarantine Inspectors of the region an awareness of their mutual responsibility to keep the Caribbean free from foreign pests and diseases.

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

(b) To improve the skills of Plant Quarantine Inspectors in the detection and treatment of plant pests and diseases which pose a threat to Caribbean Agriculture from either regional or extra-regional sources.

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

EVALUATION NO. 2

(c) To improve communication between Plant Quarantine Inspectors of various territories of the region.

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

(d) To form the basis for the preparation of a Caribbean Plant Quarantine Training Manual.

- [ ] could be improved
- [ ] good
- [ ] excellent

COMMENTS:-

APPENDIX 6

FINAL EXAMINATION FOR FIRST REGIONAL COURSE FOR PLANT QUARANTINE INSPECTORS IN THE CARIBBEAN HELD IN TRINIDAD ON OCTOBER 29TH, 1982

1. Throughout the course, references have been made to six quarantine strategies employed by countries to protect their agriculture.
   (a) State the six strategies
   (b) State which strategies are used by your country and indicate the extent to which they are used (heavily dependent upon, only used occasionally, etc.)
   (c) How might it be beneficial to your country to incorporate those strategies not now used, (give hypothetical examples) or increase the use of only sporadically used strategies?

2. Using the attached label for Diazinon AG500 and any materials given to you during this course to answer the following:
   (a) What precautions should you take to
      (1) Clean equipment _____
      _____
      _____
      _____
      (2) dispose of empty containers _____
      _____
      _____
      (3) dispose of unused pesticide _____
      _____
      _____
      _____
   (b) What class of pesticide is this? _____
   _____
   (c) Which of the following pesticide(s) would you store Diazinon AG500 with?
      1. Malathion
      2. Paraquat
      3. Aldicarb
      4. Pyrethrum

3. Given a hypothetical situation, where you are required to inspect a shipment of fruits and rootcrops (including bananas, avocadoes, yams and sweetpotatoes) from a neighbouring Caricom island-

   What would you do if:-

   (a) The yams and sweet potatoes show signs of rottings

   (b) The root crops are packed in dried banana leaves

   (c) The avocado fruits are bruised and soft

   (d) There is soil still attached to the sweet potatoes

4. Outline the five (5) principles of public relations which should guide the plant quarantine inspector in the execution of his duties.

5. A fellow plant quarantine inspector calls you from his/her country and tells you by telephone that a ship is on its way to your country and the cargo contains the following pests and diseases.

   1. Mites
   2. Woodborers
   3. Leaf cutting ants
   4. Lethal yellowing disease
   5. Fruit flies
   6. Tristeza
   7. Coffee rust
   8. Black Sigatoka
   9. Khapra Beetle
   10. Giant African Snail

   In which of the following commidities would you expect to find these pests and what symptoms or signs would assist you in your investigation. (Planting materials, fruit, packing material, seeds, general cargo, food)

Pest or disease	Commodity	Symptoms or signs

6. A shipment of yams infested with mealy bugs arrives from a neighbouring country and must be fumigated. What treatment would you recommend and why (finding out how long etc.)

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APPENDIX 7

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