

PROGRAMA SANIDAD VEGETAL



III MEETING OF THE TECHNICAL ADVISORY
COMMITTEE OF PLANT PROTECTION

CARACAS - VENEZUELA
NOVEMBER 22-26, 1982

IICA





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**INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE
IICA**

PLANT PROTECTION PROGRAM



FINAL REPORT

**III MEETING OF THE TECHNICAL ADVISORY
COMMITTEE OF PLANT PROTECTION**

**CARACAS - VENEZUELA
NOVEMBER 22-26, 1982**

**MINISTRY OF AGRICULTURE AND LIVESTOCK OF VENEZUELA
M.A.C.**

PLANT PROTECTION GENERAL DIRECTORATE

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- b. Proposal for the Creation of the Inter-American Commission for Cooperation on Plant Protection (Annex 2).
- c. Proposal.... (Revised version) (Annex 3).
- d. Recommendations Adopted in the III Consultation Meeting on Proper Use of Pesticides in America and the Caribbean. Short Time Recommendations (Annex 4).
- e. General Conclusions. First Latin America Workshop on Germplasm in Potato and Cassava (Annex 5).

A G E N D A

Monday 22:

Registration

Inaugural Session

Election of the Officers of the Board

Plant Protection Program of IICA. Program Report
by Mr. Federico Dao, Plant Protection Director

Subject 1: "Black Sigatoka of Banana and Plantain"

Participants: Mr. Clayton Shillingford (DU-PONT)
Mr. Ramiro Jaramillo (UPEB)
Mr. Cristian Koch (IICA)

Discussions and recommendations

Subject 2: "Mediterranean Fruit Fly"

Participants Mr. Orlando Morales (CHILE)
Mr. Patrick Patton (MEXICO)
Mr. Enrique Valencia (PERU)
Mr. Gregor Rohwer (USA)

Moderator: Mr. Hector Ceruso (ARGENTINA)

Discussions and recommendations

Tuesday 23:

Subject 3: "Africanized Bees"

Participants Mr. G. Rohwer (USA)
Mr. Ricardo Gomez (VENEZUELA)
Ms. Gisela Tapia de Rangel (PANAMA)

Discussions and recommendations

Meeting of the Regional Technical Committees

Coordinators: Plant Protection Specialists of IICA

Continuation of the Meeting Regional Technical Committees

Wednesday 24:

Subject 4: "Phytosanitary Situation for Cotton and Cacao"

Participants Mr. Ivan Gallo (NICARAGUA)
Mr. Fabio Aranzazu (COLOMBIA)
Ms. Lilliam de Reyes (VENEZUELA)

Discussions and recommendations

Subject 5: "Citrus Tristeza"

Participants Mr. David Cordas (USA)
Mr. Edmundo Monteverde (VENEZUELA)

Subject 6: "Citrus Canker"

Participant Mr. Mario Boroukhovitch (URUGUAY)

Discussions and recommendations

Subject 7: "Analysis of the Recommendations on Cassava and Potato Germplasm"

Participant Mr. Federico Dao (IICA)

Discussions and recommendations

Subject 8: "Coffee Rust"

Participant Mr. Hugo Penagos (DU-PONT)

Analysis of the opinions by IICA's member countries in relation to the Proposal for the Establishment of the Inter-American Plant Protection Commission.

Thursday 25:

Analysis of the Recommendations from the Consultative Meeting on the Appropriate Use of Pesticides in Latin America and the Caribbean.

Moderator: Mr. Victor Loaiza (MEXICO)

Discussion and recommendations

Visit to the "El Laurel" Coffee Experimental Station

Friday 26:

Analysis of the future action of the Plant Protection Program and Report of the recommendations taken by the Regional Technical Committees.

Final Report of the Meeting

Closing Session

SPEED OF MR. NELSON MORGADO CRESPO, DIRECTOR OF PLANT PROTECTION
MINISTRY OF AGRICULTURE AND LIVESTOCK OF VENEZUELA

I consider it a great privilege to have this opportunity of addressing you at this Inaugural Session of the Third Meeting of the Technical Advisory Committee of the Directors of Plant Protection of America and the Caribbean, including the United States of America and Canada. I wish to express our best wishes for the success of the discussions and recommendations, as well as the conclusions reached at the end of this event, coordinated by IICA; in the knowledge that the result will benefit Plant Protection throughout the Hemisphere. We hope that during your stay in the city of Caracas you will receive the hospitality of its inhabitants in evidence of the affection and fraternity characteristic of the countries of America.

As the majority of those present know, IICA's Plant Protection Program was created in 1979 by a Resolution of the Board of Directors, integrated by the Ministers of Agriculture of the Region. It began operations in January 1980 in San Jose, Costa Rica where it established its objectives, justification, actions and strategies.

The Second Meeting was held in October 1980 in the city of Mexico. As this meeting, the operational program for each of IICA's areas was defined, the immediate and medium-term actions that IICA would support in the region were established, and the mechanisms of coordination with other international institutions, such as FAO, JUNAC, CIP, CIAT, OIRSA were defined. In addition, the communication system was established through CIDIA, and also the publication of the Hemisphere's Bulletin on Plant Protection.

The Plant Protection Program forms part of the strategy of IICA's work in each country and constitutes Program V. The basic objective is to establish a coordinating mechanism between the countries so as to give attention to the economically important phytosanitary problems which limit agricultural production and interfere in trade between the countries due to restrictive, quarantine-type measures.

In this meeting, in the City of Caracas, at the request of the delegates who attended the meeting in Mexico, the Directors of Plant Protection of the Hemisphere are present, together with highly qualified national and foreign researchers who will make presentations on the problems common to the countries of the region; and also specialized representatives from different Venezuelan institutions who are attending as observers. In addition to discussing and evaluating phytosanitary campaigns undertaken in previous years such as those against Coffee Rust, Citrus "Tristeza" and Cotton and Cocoa Diseases, some special presentation will be made on diseases against which Venezuela has to take preventive measures even though they do not exist in this country. Among these I may mention Black Sigatoka in Musaceae, canker in citrus, etc.

Another topic of great importance which is causing concern is that of standard for the Adequate Use of Pesticides in order to reduce to a minimum the problems of environmental contamination and, in some cases, residual effects.

Gentlemen, may I repeat once again our best wishes for the success of this event and a pleasant stay in our capital city of Caracas.

To end, and because we celebrate another anniversary of the birth of Andres Bello on the 29th November, may I close with a short quotation from his writings, taken from "Agriculture of the Torrid Zone":

" Honour the countryside

Honour the simple life of the farmer and his frugal simplicity

Thus freedom will ever dwell within you".

Thank you and may this meeting be a success.

SPEECH OF DR. FRANCISCO MORILLO ANDRADE, DIRECTOR GENERAL OF
THE INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

Our continent of America must today confront and overcome the adverse circumstances of a world economy which principally affects the developing countries, producers of raw materials of agricultural origin, who have to satisfy their own growing domestic needs for food, and at the same time obtain foreign exchange through exporting agricultural products to markets with unfavourable terms of exchange. Under these circumstances, any element which constitutes a negative factor in relation to the availability of food and agricultural products, such as pests, diseases or weeds, must be given priority attention in the activities of national and international organizations who should orient their programs towards the solution of the problems derived from these adverse factors. The quantitative elements on hand indicate that if Latin America could avoid the losses which it presently suffers in its main food and agricultural products in general, the future of food supplies and the economic perspectives of the region would be substantially improved.

It is well known that national institutions of Plant Protection possess a limited capacity to confront the occurrence and spread of pests, diseases and weeds, and in the light of improvements in international facilities of transport and trade, this makes effective control by each country more difficult. We therefore need an increasingly more coordinated international action. Faced with this reality, during the XVIII Annual Meeting of the Board of Directors held in La Paz, Bolivia, in 1979, IICA created the Plant Protection Program. At present the program's objectives are promoting and supporting the efforts of each country to prevent and reduce losses from the effects of pests, diseases and weeds through updating and harmonizing national and international legal provisions and regulations; through planning and implementation of multinational and national projects, and by taking advantage of technical and human resources from other programs of IICA and other coordinating agencies.

Other objectives are the organization and promotion of conferences, seminars and other events such as the one which brings us together today. These contribute guidance and advise for the establishment of a framework for priority research and actions to obtain support for the organization from scientific associations related to Plant Health; and support for the participation and organization of producers, farm workers and the rural population in campaigns of disease and pest control and also in quarantine campaigns.

Following the decision to create the Program of Plant Protection, now in 1982, we have a new IICA, which after 40 years existence has been given a new Convention; in which the Governing Body is the Inter-American Board of Agriculture formed by the Ministers of Agriculture of the continent or their representatives. In their last meeting in 1982, held only a month ago, they repeated and

ratified the high priority and their awareness of the importance of Plant Protection in Latin America, in the Caribbean and throughout the Continent, when they again included the Plant Protection Program within the programs which represent IICA's areas of concentration (these have been reduced to the ten considered to be those with highest priority throughout the Continent). In addition, they have assigned it a priority which signifies that IICA's support will have a multiplier effect through effective actions, particularly of national organisms, complemented by other regional and international institutions.

Gentlemen, participants, I would like to take this opportunity to manifest that we hope that with the passage of time, this program will contribute significantly to overcome this hemisphere's phytosanitary problems; thus collaborating in an effective way with supplying food to the region and strengthening exports from the agricultural sector. In this context, you have IICA's support at the level of both national and regional efforts. We also hope that this meeting will be an important link in the chain of united efforts to achieve our agricultural self-sufficiency.

Thank you and may this meeting be a success.

SPEECH OF DR. NYDIA VILLEGAS DE RODRIGUEZ
MINISTER OF AGRICULTURE AND LIVESTOCK OF VENEZUELA

In the name of my Government, I would like to extend to you a most warm and fraternal welcome. It is truly an honour for Venezuela to be the site of this Third Meeting of the Technical Advisory Committee integrated by the Directors of Plant Protection of Latin America and the Caribbean. May I offer you my country's simple and sincere hospitality. Today more than ever, in a world which is undergoing a temporarily difficult situation from which our Continent is not exempt, the challenge to the agricultural sector to increase production by making it more efficient is ever present. This undoubtedly implies the improvement of all the different elements and factors which participate in the process, especially in relation to technological progress; and, consequently, the modernization and improvement of plant protection activities which serve to protect crops is most necessary.

On the other hand, the growth of methods of communication, the increase of tourism, intercontinental traffic, migration, and imports of agricultural products and materials for plant propagation, have multiplied the risk of the introduction of diseases. All this, combined with intensive agricultural practices, irrigation, and the incorporation of new areas which undoubtedly leads to increasingly more important plant protection problems, lays the foundation for the need to continue to improve the operation of plant protection services.

Thus, among all the varied and important activities of the Inter-American Institute for Cooperation on Agriculture, the Plant Protection Program on the scale of this hemisphere, is located among the top priorities, as the Director General of the Institution has mentioned. This Program cooperates in plant protection campaigns, in training human resources, in pest control, in harmonizing legislation on plant protection, in recommendations regarding the rational use of pesticides, in the coordination of national programs. In brief, in a series of activities of great importance for the conservation of our agriculture.

In Venezuela, at the present time, we are developing extensive programs of plant protection covering aspects of pest/disease diagnosis, plant quarantine, control, research, and extension. Strict plant protection measures have been adopted such as health inspection of authorized imported agricultural products, prohibition on introduction of plants from affected countries, disinfection treatments on products and transport at frontiers. At the same time, we are developing campaigns of information about the damage caused by pests in order to detain their dissemination or entry.

Among the important plant protection campaigns, as Dr. Morgado has already pointed out, the "Coffee-Rust" campaign stands out. Many educational activities were carried out in relation to this disease, alien to Venezuela, and the international cooperation of agencies such as IICA, FAO and JUNAC has been very valuable.

Another disease which is causing concern among the countries of America is the "Banana Black Sigatoka" and an exchange of scientific information and new research on genetic and chemical control are needed.

With regard to existing diseases, we have been carrying out campaigns such as that against the "Citrus Tristeza", another disease alien to us up to 1980 when the first outbreaks appeared. Among the main measures which have to be taken is elimination of diseased plants and replacement of plantations with resistant strains such as Cleopatra and Citrus walkameriana. In 1980 the National Service for Certification of Citric Plants was created. In cocoa, we have implemented campaigns against 'witches broom', moniliasis and rotting caused by Phitophthora palmivora. In potatoes, against white worm, specifically through chemical control and selection and disinfection of seeds from non-infected areas. We have also had campaigns against 'punta loca' in corn; aqueous rot of the pseudo-stem in plantains and banana trees, destruction of 'soca' in cotton, sugar rust and smut and pests control in stored products.

In recent years we have had problems with rodents attacks in the fields and it has been necessary to carry out extermination and information campaigns and research work in order to conserve important crops which are needed for the daily diet of the Venezuelans.

Faced with the considerable losses to agriculture (10-30 per cent) caused by pests and diseases, we need to coordinate efforts on both a national and international scale, in order to exercise a technical, efficient and permanent control; thus contributing to solve the challenge of feeding our people.

Recognizing the usefulness of international cooperation to combat plant and vegetable products diseases, and to prevent their introduction and dissemination across frontiers; and also wishing to ensure a close coordination of the measures taken to this effect, in 1966 Venezuela signed the FAO International Agreement on Plant Protection ratified in Rome since 1952.

In the above mentioned Second Special Meeting of the Inter-American Board of Agriculture held recently in San Jose, Costa Rica, which I had the honour of chairing, the 1983 Program-Budget was approved and Plant Protection was assigned a substantial contribution which will benefit all the countries by permitting them to fulfill the following objectives, among others:

- To offer technical assistance to prevent and reduce economic losses caused by plant diseases;
- To support national plant protection health research aimed at improving infrastructure and services;
- To prepare drafts of laws and procedures and promote these in order to facilitate efficient and coordinated national and regional programs for diseases/pest prevention.

- To promote and support the establishment of a national plant protection information systems.

All these objectives would be carried out within the framework of the close collaboration and participation of all the countries of this Continent.

Gentlemen, participants, while officially inaugurating this Third Meeting of the Technical Advisory Committee integrated by the Directors of Plant Protection of Latin America and the Caribbean, I would like to express my most sincere wishes for the success of the discussions. May God guide us so that from the analysis and debate on the different plant protection problems which afflict our agriculture, the best and most beneficial recommendations may emerge which will contribute to the desired prosperity of our farmers who with their hands hardened by creative work, plow the fields and sow the seed in preparation for the generous harvest.

B O A R D

The Meeting was presided by Mr. Nelson Morgado Crespo, Director General of the Plant Protection Program in Venezuela.

The Vice-presidency had the following order of precedence: Perú, Canada, Nicaragua, Panama, Honduras, Barbados, Bolivia, Uruguay, Dominica, Guyana, Dominican Republic, Suriname, Guatemala, El Salvador, Mexico, Haiti, Trinidad and Tobago, Costa Rica, Ecuador, Grenada, Argentina, Jamaica, Chile, Paraguay, Brazil and United States of America.

The Representatives from Jamaica, L. Walter van Whervin, and Panamá, Gisela Tapia de Rangel, served as Rapporteurs.

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LIST OF PAPER PRESENTED 1/

- A. Subject 1: "Black Sigatoka of Banana and Plantain"
- a. Management of Resistant Populations of Micosphaerella spp. in Banana. Clayton Shillingford (DU-PONT, Latin America) USA.
 - b. Economic Importance of the Musaceas Crop in Latin America and the Caribbean. Ramiro Jaramillo (UPEB) Panama.
 - c. Economic Considerations for the Control of Black Sigatoka of Banana - The Case of Mexico. Christian Koch (CEPI-IICA)
- B. Subject 2: "Mediterranean Fruit Fly"
- a. Mediterranean Fruit Fly (Ceratitis capitata) Program in Chile. Orlando Morales Valencia (SAG) Chile
 - b. Mediterranean Fruit Fly Problematical and Control Program in Peru. Enrique Valencia Tello (MA) Peru
 - c. Mediterranean Fruit Fly Program. Victor M. Loaiza Mercado (SARH) Mexico.
 - d. Summary of the 1980-1982 California Mediterranean Fruit Fly. Gregor G. Rohwer (U.S.A.)
- C. Subject 3: "Africanized Bees"
- a. Scope and Dimensions of the Problem of Africanized Bees in Venezuelan Apiculture. Ricardo Gomez Rodriguez (Venezuela).
 - b. The Africanized Bees in Panama (Apis mellifera adansonii). Gisela Tapia de Rangel (MIDA) Panama.

1/ In accordance with the Meeting Agenda, the Subjects were presented in the indicated order. Copy of those were given to the participants at moment of its presentations. After having heard the subjects, recommendation were discussed and are included in pages number 44 to 48 of this Report.

D. Subject 4: "Phytopsanitary Situation of Cotton and Cocoa"

- a. The Boll Weevil Suppression Pilot Program (Anthonomus grandis Boh.) in Nicaragua. Ivan Gallo Torres (MIDINRA) Nicaragua.
- b. The Cocoa Moniliasis. Fabio Aranzazu H. (ICA) Manizales, Colombia.

E. Subject 5: "Citrus "Tristeza""

- a. The Citrus "Tristeza" Virus Project in California's Central Valley. David Cordas (Dept. Food and Agriculture) Calif. U.S.A.
- b. The Citrus "Tristeza" in Venezuela. Edmundo E. Monteverde. (FONAIAP/CENIAP) Maracay, Venezuela.

F. Subject 6: "Citrus Canker"

- a. The Citrus Canker in Uruguay. A. Brief Narration. Mario Boroukhovitch (MAP) Uruguay.

G. Subject 7: "Analysis of the Recommendations on Cassava and Potato Germplasm". Federico Dao (IICA).

H. Subject 8: "Coffee Rust". Hugo Penagos, (DU-PONT, Latin America) U.S.A.

MEETING OF THE REGIONAL TECHNICAL COMMITTEE (RTC) ANDEAN AREA

The Regional Technical Committee of the Andean Area considered the matters of institutional coordinational, priority activities, plant protection legislation and plant protection policies, and made the following recommendations on each of this points:

1. Institutional Coordination

The Committee indicated the need for the Board of the Cartagena Agreement (JUNAC) to participate in all the meetings promoted by IICA in order to comply with the recommendations made at the First Meeting of the Regional Technical Committee, which aim to coordinate and complement actions, and to avoid the duplication of efforts.

2. Priority Activities

- a. The Committee reiterated that the following priority working areas should receive the support of IICA: the campaigns to prevent and control Black Sigatoka, the Mediterranean Fruit Fly and the Programs on Integrated Control.
- b. The Committee requested that the Advisory Committee adopt the problem of pests in stored grains as a priority action. In the case of Trogoderma granarium, it is essential to give high priority to preventive quarantine programs. For that reason, it is recommended that IICA, in coordination with other agencies and countries with experience in this area, organize training courses and produce teaching materials, manuals and bibliographies on the subject. In order to get an inventory on the status and problems of stored grains underway the Plant Protection Directors will collect pertinent information in their respective countries, to be merged and compiled later by IICA and considered at the next meeting of the Regional Technical Committee of the Andean Area.

3. Plant Protection Legislation

In this regards, the Committee recommends that actions be taken through IICA's programs to begin standardizing and harmonizing the provisions and norms in effect in the countries of the different areas.

In the case of the Andean Area IICA, should coordinate this activity with JUNAC.

4. Plant Protection Policies

A recommendation is made to the Advisory Committee to greater publicize the activities and functions that should be fulfilled by State Plant Protection Programs. This includes, as it most important aspect, the

factor of increasing agricultural production and not of just standardizing and controlling actions. For this reason, the Executive Committee of IICA and the Inter-American Board of Agriculture will be requested to give priority and sufficient financial support to the agricultural health programs, since it is through these that agriculture in the hemisphere will be defended.

Finally, it was agreed that the 1983 Meeting of the Regional Technical Committee for the Andean Area will take place in Santa Cruz, Bolivia.

MEETING OF THE TECHNICAL REGIONAL COMMITTEE (RTC) CARIBBEAN AREA

I. INTRODUCTION

The Third Meeting of the Technical Committee of Plant Protection Directors of the Caribbean Area met to discuss recent progress in the field of Plant Protection in the Caribbean and also to assess future programs.

The countries represented by their respective directors were:

BARBADOS: Dr. E. H. Alleyne, Entomologist, Ministry of Agriculture

DOMINICA: Miss Hannah Clarendon, Pathologist, Ministry of Agriculture

GRENADA: Mr. M.L. Grenade, Cocoa Board

GUYANA: Mr. F. Macdonald, Pathologist, Ministry of Agriculture

HAITI: Mr. Henri Turenne, Plant Pathologist, Department of Agriculture

JAMAICA: Mr. Walter van Wierwin, Entomologist, Ministry of Agriculture

SURINAME: Mr. Frank del Prado, Plant Pathologist, Ministry of Agriculture

TRINIDAD &
TOBAGO Dr. John Pegus, Phytopathologist, Ministry of Agriculture
IICA Dr. Chelston W. D. Brathwaite, Regional Plant Protection
Specialist

OBSERVERS:

FAO: Dr. Mario A. Vaughan, Acting Technical Secretary of Caribbean Plant Protection Commission

O.W.I. Dr. Gene Pollard, Entomologist

SPPC: Mrs. Florece Young, Phytopathologist

Drs. J. Pegus from Trinidad and Tobago, E. Alleyne from Barbados were elected as Chairman and Rapporteur respectively, for this session.

II. Review of Plant Protection in the Region

The IICA Plant Protection Specialist for the region presented his report for the two year period under review 1981 and 1982.

This report was divided into 4 sections:

a) Challenge in Plant Protection in the Caribbean in the 1980's and beyond.

This formed the basis of a paper which was presented as the key note address by the Specialist at the First Meeting of the Society for Plant Protection in the Caribbean, which was held in Kingston, Jamaica in November 22-27, 1981. Among the major challenges listed were the lack of stimulation among professionals of the region, lack of effective communication services, deficiency in the plant quarantine system, overloading of technical and professional staff with administrative responsibilities lack of adequate well trained professional staff and lack of funds for research.

b) Origin, objectives and strategies of the IICA Plant Protection Program

Concern has been shown with regards the increasing incidence of pest and diseases in the region and it was recommended that all possible strategies including legal, quarantine, research, training and coordination with other organizations should be fully explored and exploited in an attempt to lessen the impact of these problems.

c) Strategies and priorities for Plant Protection Program in the Caribbean.
Here reports were made of the First Meeting of Plant Protection Directors in the Caribbean, which was held in Barbados in 1980 and the second meeting held in Jamaica in 1981.

d) Progress Report of IICA Plant Protection Program in the Caribbean for period 1980-1982.

This includes assistance to Jamaica on a surveillance system for the Mediterranean Fruitfly, detection of potato virus and technical assistance on pesticides; to Grenada on the Control of Cocoa Thrips; to Haiti on the control of sugar cane smut and lethal yellowing disease in Cocomut; to Guyana on pesticides and to Trinidad and Tobago, on the detection of pests and diseases in containerised cargo.

III Matters arising from the report of the Regional Plant Protection Specialist

Communication

It was generally accepted that an effort should be made to reduce the amount or duplication of Plant Protection Information as is presented in the Bulletin of CPPC (FAO) and the IICA Newsletter. It was decided that the representatives of the organizations responsible for collection and dissemination of this information, should get together and reach an acceptable compromise.

Training

Lack of trained personnel in both Plant Quarantine and other aspects of Plant Protection was another matter which occupied the attention of Plant Protection Directors of the Caribbean Area. Although satisfaction was expressed with the assistance received in the last 2 years, it was felt that regional governments should be encouraged to give more assistance in these endeavors. It was felt that a permanent training centre should be set up within the Caribbean, similar to the one located in Malaysia which presently serves the Asian region. It was further agreed that a very strong recommendation should be channelled from Governments through IICA to USAID/AID for the setting up of such a facility.

The possibility of having plant quarantine training programs in various Caribbean Islands was also explored, as was the setting up of a post-entry quarantine Station in Jamaica. The need for diagnostic assistance was also expressed and IICA should be requested to assist in procuring the services of relevant specialists.

Technical Assistance

Satisfaction was expressed with the general level of technical assistance provided by IICA to the region. It was noted with some gratification that increasing use was being made of Caribbean professionals and there was the wish to see this feature encouraged and perhaps intensified, Dominica, specifically extended thanks to those Caribbean professionals who had been assisting in plant protection training in Dominica. Member countries who had received such assistance during the last two years, notably Grenada expressed its gratitude to IICA, the regional plant protection specialist and the consultants involved in these programs, for the degree of success resulting from the recommendations.

Status of Plant Protection including specific and urgent pest and disease problems

The present countries discussed the plant protection problems which they regarded as being of most immediate concern.

BARBADOS

1. Spoilage of Onions in Storage

Onions are becoming of increasing importance as an export commodity. Temperate varieties still continue to be used and despite acceptable yields, unacceptable levels of spoilage continue to be experienced.

2. Damage in Sweet Potatoes

The West Indian Sweet Potato Weevil, Euscepes postfuscatus continues to inflict severe losses to tubers. This food crop is important both as

a local food source, as well as an export commodity.

3. Sugar Cane Thrips (*Fulmekiola serrata*)

This insect arrived in the Caribbean in 1980 and has been spreading through Barbados as well as the other islands. The effect is most pronounced in young plants.

DOMINICA

Some of the problems existing are as follows. One case of red ring was identified near to the airport. Two cases of Cedrus Wilt were identified in 1982. Citrus Weevil continues to be a problem in grapefruit. Efforts being made to get information on insecticides being used in Florida. Tanya buring disease is being investigated by CARDI, INRA and Ministry of Agriculture. Three fungi have been isolated Fusarium, Sclerotium, Pythium.

Projects in Plant Protection

Plant Quarantine Project
Pesticide residue monitoring

General Crops Protection (service projects) submitted to IICA for consideration of funding.

GRENADA

1. Moko Disease in Bananas

Moko disease continues to destroy the banana industry, and despite eradication efforts made through FAO assistance, the problem intensifies, IICA has been requested to arrange for cooperation between Grenada and Honduras, in which much work has been done on eradication.

GUYANA

1. Control of Banana Borers (*Cosmopolites sordidus*), on Plantain Bananas
2. Biological control strategies on *Brassolis sophorae* of coconut and development of management strategies for large scale production: Azteca Ants, Weeds, etc.
3. Moko disease investigation in plantains and bananas. Biotype characterization, pathogenicity tests and control studies.
4. Development of technology for large scale production with respect to Cowpea production (Minica 1).

HAITI

1. Sugar Cane Smut: need for technical assistance.
2. Blue Mold of Tobacco
3. Other concerns of less importance are:
 - i) Lethal yellowing disease of coconuts;
 - ii) Coconut mite; and
 - iii) Bird damage in rice.

JAMAICA

1. Plant Quarantine Systems
 - i) Port-entry facilities
 - ii) Strengthening of Plant Quarantine facilities at the Airports and seaports.
2. National Rodent Control Program

IICA Regional Specialist agreed to contact CACP (Consortium of American Universities), with headquarters in California, for assistance.

SURINAME

1. Hartrot Disease of Coconut and African Oil Palm
2. Moko Disease of Bananas
3. Foot rot disease of citrus
4. Castnia Control

TRINIDAD AND TOBAGO

In addition to those areas highlighted in previous reports, the following pest and disease problems presently demand attention:

- a. Leaf Cutting Ants
- b. Coconut Mite
- c. Moko Disease
- d. Web Blight of Beans
- e. Phytophthora Fruit Rot on Pumpkins

Plant Quarantine systems continue to demand and attract urgent attention. Pesticide regulations are being up-dated.

IV Statement by Regional and International Organizations

Dr. Mario Vaughan FAO Representative, suggested a more concerted effort should be made to coordinate IICA programs with those of FAO, so as to avoid duplication and overlap.

Dr. Gene Pollard, of the University of the West Indies, hoped that greater use would be made of the University facilities, particularly with regard to root crops since there was presently a very good program going on.

V. Analysis of Program Goals and Activities for 1983

Primary Proposals

1. Plant Quarantine training. The second training program to be held possibly in Barbados.
2. Regional Newsletter and Meeting of the Society for Plant Protection in the Caribbean:

It was felt that the format should perhaps contain more information on regional agricultural research programs and less emphasis put on plant quarantine information since this is adequately covered by the FAO Caribbean Plant Protection Commission Bulletin.

Trinidad was suggested as the possible venue for the next meeting of the Society of Plant Protection (SPPC) in the Caribbean.

3. Proceedings of the First Meeting of SPPC should be distributed and the proposed bibliography on entomology in the Caribbean completed. It was suggested that those persons involved in the compilation of this bibliography should coordinate their efforts so that duplication is avoided.

4. Technical assistance with respect to urgent plant and disease problems.
5. Proposal for a Sigatoka (both yellow and black) disease plan.

An effort should also be made to revitalize the banana breeding program which is not presently operative.

Other Proposals

1. An analysis of plant protection in Dominica. An appropriate response to this analysis is presently being considered by IICA.
2. Investigations in Hartrot disease of Coconut in Suriname. An analysis of the situation with respect to Hartrot disease of Coconut in Suriname has already been conducted by Dr. Alberto Salinas of the Centre for Project Formulation and Identification (IICA).
3. The establishment of a Plant Protection Information Centre in the Caribbean. Although the bibliography of plant pathology already published and that of entomology now being compiled go a long way in accumulating information on the two plant protection disciplines, it is felt that more agricultural information on agricultural, particularly that relevant to the Caribbean Area, should be available in the region. IICA Regional Specialist could explore the avenues available for further documentation on available information.
4. Meeting on Harmonization Pesticide Legislation. Meetings of Harmonization of Pesticide Legislation has already been held in the Northern and Andean Areas. It is suggested that the possibility of holding such a meeting in 1983, possibly in Jamaica, should be explored. It was further by IICA and circulated to member countries. This document should be a concise appraisal of the pesticide regulations already developed in the region.

VI Recommendations

The Plant Protection Directors attending the 3rd Meeting of the Technical Advisory Committee of Plant Protection Directors of Latin America and the Caribbean, have considered the report of the IICA Plant Protection Specialist and having discussed the problems and needs of the region, recommend that:

- 1) IICA continues its training Program on Plant Quarantine, making it a yearly occurrence, until there is a much higher level of plant quarantine competence in all IICA's member countries of the region.

- 2) That immediate consideration be given to the procuring of a Plant Protection Specialist to assist the Regional Specialist, for whose services there is an increasing demand. In order for fuller use to be made of his specialised services, it is necessary that he be provided with an assistant.
- 3) IICA assist the banana growing countries with respect to Moko disease which is presently devastating the industry in Grenada.
- 4) Pesticides: a comprehensive pesticide program involving registration, labeling regulations, safety measures, quality control, residue analyses and environmental efforts should be started immediately. Although there are a few countries in the region which presently possess some legislation, there is need for harmonization.

PROCEEDING OF THE THIRD MEETING OF THE REGIONAL TECHNICAL
COMMITTEE OF PLANT PROTECTION DIRECTORS-CENTRAL AREA

On November 23, the Plant Protection Directors of Canada, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, México, Nicaragua, Panama and the United States of America met in a working session in the city of Caracas, Republic of Venezuela. The Members of the Regional Technical Committee unanimously approved the agenda, resolutions and recommendations as follows:

- Introduction
- Election of the Chairman and Rapporteur
- Report on the activities implemented by IICA's Plant Protection Program in the Central Area.
- Plant Protection Report of the Countries.
- Proposal of activities to be carried out by IICA's Plant Protection Program in the Central Area during 1983.

Introduction:

The Coordinator for IICA's Central Area presented to the delegates and observers the objectives of this working meeting.

Election of the Chairman and Rapporteur

The Directors Mr. Manuel M Peralta from the Dominican Republic and Mr. Jorge A. Escobedo M., from Guatemala were elected Chairman and Rapporteur of the Meeting, respectively

Activities Report of IICA's Program in the Central Area

CONSIDERING:

That the Report of Activities was received and studied, and that the Report on the fulfilment of goals and objectives is satisfactory considering the resources available;

RESOLVES:

1. To approve the activities report on presented by the Coordinator Dr. Julio Sequeira.

Plant Protection Reports from the Countries

CONSIDERING:

That the Reports by the Delegates of the countries demonstrated the efforts made by the Governments to prevent and check the negative impact of pests and diseases on agriculture, and that despite these efforts, current losses reduce the available food capacity to the population of the area, and affect the imbalances of international trade;

That in some countries, the registry and control of pesticides, fertilizers and similar products is regulated by entities not related to the productive agricultural process, and that this produces functional and operative problems in the efficient control of pests and diseases, and which has a detrimental effect on farmers and the economy in general.

RESOLVES:

1. To stress to IICA authorities the importance of its Plant Protection Program to national programs, and to recommend that its budget be strengthened with specific founding in accordance with its priorities, and from other sources, including the pesticides industry which is interested in the appropriate use of its products and in stabilizing its supply.
2. To stress that the registry and control of pesticides, fertilizers and similar products is the specific jurisdiction of the agricultural authorities of the countries through their Plant Protection Offices.

Proposal of Activities for the 1983 Program

CONSIDERING:

That the activities proposes for the 1983 fiscal period are framed by the resolutions approved at the Second Meeting of the Regional Technical Committee, which was held in Panama City, from November 30 to December 2, 1981;

That the Africanized Bees has spread to the territory of the Republic of Panama and that it is estimated that during this decade it will have invaded the Central American Isthmus, causing a severe threat to agricultural production in the region and a potential threat to the health of its inhabitants;

That in order to prepare a plant protection diagnosis of the Central Area, the Coordinator of the Area sent a questionnaire to related national institutions in order to collect information, without satisfactory results;

That the registry and inadequate use of pesticides continues to be a serious in the efficient control of pests, environmental contamination and the limitation of markets as a result of biological residues;

That since adequate facilities exist in the Republic of Costa Rica to produce parasites, predatory animals and for breeding and sterilizing the Mediterranean Fruit Fly.

RESOLVES:

1. To approve the activities proposed in the working plan for the 1983 fiscal year and to support the recommendations of the Second Meeting of the Committee which took place in the Republic of Panama, with an appeal that recommendation Number 5 issued at that meeting, be considered by IICA's other Areas.
2. That IICA's Operative Program, in coordination with institutions interested in confining, studying and taking efficient and safe advantage of the Africanized Bee, organize courses and seminars on how to detect, control and take advantage of the bee, as well as publicize the results of the studies and experiences gained in the countries already co-existing with this insect.
That seminars and courses organized at the local level be the responsibility of interested national institutions.
3. That those countries that have not yet sent the information requested by the Regional Coordinator do so as soon as possible in order to make it possible to comply with the proposed objectives.
4. That IICA's program, with the cooperation of specific and competent authorities of the United States of America and the direct participation of the countries, maintain an up-to-date reference consultation list on:
 - Pesticides registry in each country of the zone.
 - Pesticide registry in the United States of America and their specific uses.
 - Unregistered pesticides and their causes in each country.
 - Residue tolerance margins accepted for the pesticides and their contaminants in the zone.
5. To recommend that the Government of the Republic of Costa Rica be encouraged to seek the means necessary for implementing the operation and production of parasites and predators, and for sterilizing the Mediterranean Fruit Fly.

MEETING OF THE REGIONAL TECHNICAL COMMITTEE (RTC) SOUTHERN AREA

In accordance with the Proceedings of the Meeting of the Regional Technical Committee of the Southern Area held in Buenos Aires on September 29 and 30, 1982, to establish priority lines of activity, and:

CONSIDERING:

That the reason for calling this meeting is included in the general program;

That at present, despite the fact of having partially fulfilled the proposed objectives and recommendations, there is a series of points that have yet to be carried out because of a number of different circumstances, which include limitations of a financial nature and which have had to be faced;

That the formulation of an institutional policy should include a programming and budgetary mechanism based on agreement reached with the countries and which seeks to concentrate efforts in meaningful activities within IICA's scope of action;

That on the basis of the concept of institutional policy of IICA's Plant Protection Program, it is considered timely to reaffirm to the Institute and to the member countries at the hemispheric level, the following priority lines for the Plant Protection Program:

1. Program Policy

To seek to establish a program to prevent and reduce plant protection risks for agriculture in the Area and from third countries, which does not interfere with the dynamics and movement of the commercial exchange of plant products between the countries.

Its actions should seek to maintain and preserve the plant protection of production and reduce food loss as a result of the presence and action of pathogenic agents.

2. Priority Actions

The lines of action described below aim to generate mechanisms that will make it possible to adjust and orient the human, physical and financial resources of the organizations that work in the field of plant protection. In this context, the following lines of work have been studied and are recommended:

2.1 Exchange and harmonizations of legal instruments and quarantine procedures

The purposes of the work in this line is to standardize actions and to ensure an expeditions trade that at the same time reduces

notably and systematically the incidence of new harmful agents to the agriculture of the countries of the Area.

2.2 Strengthening quarantine systems

Simultaneously with and parallel to the above-mentioned point, efforts should be made to create a solid base for quarantine services, especially those of the international barriers for importing, exporting and shipping of plant products through the ongoing training of technical personnel. In addition, this training should seek to upgrade the quality of inspectors and the means to developing their action.

2.3 Structuring a surveillance system and a plant protection diagnosis

In order to achieve a permanent and real understanding of the presence and spreading of pests and diseases within the region and to act with the promptness required by any plant protection action, it is necessary to recommend that a surveillance and diagnostic system be established in each country that will make it possible to detect, identify and evaluate their negative economic impact and to report on their occurrence to the rest of the countries, and on control and prevention measures to be adopted.

This surveillance system should begin at the borders, with the implementation of interception records which indicate the pressure exerted by the different pathogenic agents and their means of introduction. This information would make it possible to adopt timely quarantine reinforcement measures at the national and regional levels, and should be incorporated into a computer system in order to ensure its rapid dissemination and utilization.

2.4 Campaigns to control pests of economic importance

It is considered of priority that IICA encourage and support actions and programs that provide integrated control in one or more countries, of those pests that limit the expansion and trade of regional agriculture, and which are designed at the initiative of the affected countries. IICA's action should be framed by an institutional policy that seeks to procure resources and other means provided by international agencies specializing in this subject, in order to complement the efforts of the respective countries.

2.5 Encouraging bilateral meetings

Considering the experience gained in the Area with regards to this type of meeting and which have produced highly positive agreements

and actions not only for the countries involved but also for the region, the Regional Technical Committee on Plant Protection for the Southern Area considers that this system should continue to be encouraged in order to solve quarantine problems and others regarding the commercial trade of plant products between member countries.

It is considered advisable that these meetings and the implementation of agreements be provided support by specialized institutions or international agencies working in the region.

2.6 Support from specialized and/or international agencies

Considering that different agencies in the Area work in the field of plant protection, and that their aims are intimately related to plant protection matters, and in order to increase available resources, especially in terms of critical professional mass, this Committee recommends that IICA implement mechanisms that will make it possible to coordinate and join efforts and means in order to carry out the different actions planned in the area of regional plant protection.

2.7 Pesticides

- a. Considering the importance of a correct and appropriate determination of pesticide residues in crops treated and products obtained, in the effort to ensure the preservation of the health of the consumer population, the Plant Protection Directors of the Southern Area consider it of priority to strive to facilitate, through agreements and contracts, access to reference laboratories for analyzing pesticide residues, not only in order to establish the presence of residues but also for using the labs as in-service training centers.
- b. Given the diversity of active principles used at the present time, it is considered appropriate to seek to standardize the requirements and procedures for registry in the different countries of the Area. In addition to establishing similar tolerances at the regional level for a given agricultural product and active principal, framed within a correct agricultural practice. For this reason, it will be necessary to hold a technical working meeting during the first quarter of 1983.

2.8 Publicizing, Prevention and Control Measures

In order to increase the awareness of all pertinent sectores operating directly or indirectly in the exchange and trade of products at the regional level and between third countries, it is necessary

to establish a system of dissemination that makes it possible to transmit clearly and concisely the plant protection requirements established by each country for introducing products of plant origin. Special emphasis should be given to the extremely harmful consequences of the introduction of pest to the agriculture of a country.

This dissemination should not only include the commercial aspects, but also tourism which is one of the most important factors in the introduction of agricultural pests.

On the basis of these considerations, it is requested that IICA's Plant Protection Program prepare models of basic instructional materials for focusing on and alerting transporters, tourists and the public in general of the risk of introducing pests and the limitations against the indiscriminate entry of plant products.

2.9 Research and Information

The leadership of the Plant Protection Program should, together and in cooperation with IICA's Information and Documentation Program, compile research findings made in the area of plant protection that have to do with the biological control pathogenic of agents that are harmful to agriculture in the countries of the Area. In this way, the Offices of Plant Protection will have available new means and criteria for preventing and controlling pests.

2.10 Ties between the different Areas of the Plant Protection Program

It is considered fully appropriate that the different Areas be informed of Plant Protection Program activities and projects developed in each of these Areas, in order to provide them with an overall vision of the plant protection problems at the hemispheric level.

For this reason, it is requested that the Program Office implement mechanisms for achieving the most rapid transmission of pertinent information as possible, by sending out the reports, publications and plant protection bulletins as they are produced.

This work will certainly benefit the hemispheric program by increasing its integration.

3. Human, Physical, and Financial Resources

Taking into consideration the experience gained during the three years since the Hemispheric Plant Protection Program was implemented, and considering that its purposes are to contribute as far as possible to reducing

the negative impact of pests in agriculture (which in general involves an approximately 30 percent reduction of the potential production value) and of trying to prevent spreading to areas free of them, it is considered of the primary importance to provide maximum attention to providing and correctly distributing the human, physical and financial resources that may be available.

To this end, it is recommended that:

- 3.1 The distribution of financial resources allocated to the program reflect its importance and the added value obtained through the achievements made.
 - 3.2 In like manner, the physical means (equipment, machinery, etc), available at the moment, and those that may become available in the future, should be provided to the program, whether from IICA itself or from the national or international institutions directly or indirectly involved with the Program.
 - 3.3 Special emphasis be placed on channelling human resources to the Program from IICA or other national or international institutions that share the Program's objectives and goals. Likewise, it is also recommended that IICA try to channel the support of experts or technical specialists from national organizations of the countries themselves, and that this take place through special and temporary hiring.
 - 3.4 Given the sustained growth in program activities, it is considered important that during the coming budgetary period (1984-1985) allocations be made to hire two additional specialists, and that they preferably be selected from the countries of the Area.
4. Cooperative Agreement with the United States Department of Agriculture

The Directors in the countries of the Area studied the recommendations made in November 1981 by the Regional Technical Committee for Plant Protection in the Southern Area, regarding the highly positive plant protection work of APHIS/PPQ in some of the countries.

In order to generalize this action at the Area level for matters of quarantine and for standardizing the corresponding actions, data banks dealing with the distribution of pests of interest to the USDA; disseminating information for helping the different user sectors, it would be very advisable to implement the draft agreement made.

This would be considered valid regardless of the actions that may be produced by already-existing bilateral agreements and in this case serves the purpose of providing greater involvement and participation for all the countries in the Area.

Likewise, the Directors considered of special importance the technical support that APHIS/PPQ can provide in implementing the recommendations resulting from bilateral or multilateral agreements that have to do with the objectives pursued by the USDA and IICA. Therefore, it is requested that the proposal made at the time of the above-mentioned meeting be carried out and thus make it possible to implement actions through a tentative two-year program.

5. Complementing FAO Activities with the Plant Protection Program

Considering that FAO has a strategy and a plan of action for the 1982-1984 period for improving plant protection in the region, and given that the Regional Technical Committee for Plant Protection in the Southern Area has arrived at the conclusion that these actions should be oriented to develop projects like: providing quarantine assistance at the post-entry level in Chile; to analyse pesticide residues in Uruguay; to estimate harvest losses in Argentina; to study durable varietal resistance in Brazil, and integrated control or other actions of critical importance in Paraguay; the Committee recommends:

- That IICA's Plant Protection Program complement these activities in order that they may be taken advantage of by the rest of the countries in the Area in the nearer future.

6. Compilation of the list of quarantine pests and diseases in each country and in the Area

The Plant Protection Directors considered that the implementation of this initiative would create the basis for the exchange and measurement of the terms for preventing and reducing plant protection risks between the member countries and from third countries.

On the basis of the information been received, the Program's Regional Coordination, with the support of the Office of Agricultural Protection in Chile, prepared and presented a tentative regional list of quarantine pests which could be revised and merged at the next meeting of the Regional Committee.

7. Projection of the Plant Protection Program by IICA's National Offices

In order to improve the integration and representation of the Plant Protection Program in the Institute's Offices in each of the member countries, the Plant Protection Directors of the Southern Area would like to see program action be projected through constant activities and in direct relation with the national programs at this level. This action should be provided with the technical and infrastructure support

available to these units, and which could be offered as the counterpart to the action of national plant protection organizations.

RECOMMENDATIONS OF THE PLANT PROTECTION ADVISORY COUNCIL APPROVED
IN ITS THIRD MEETING HELD IN CARACAS, VENEZUELA
NOVEMBER 26, 1982

a. Recommendation No.1 'PROGRAM REPORT'

After having heard the Report presented by the Program Director, the Countries approved it and recommended the following:

1. That the report be circulated among Member States so that national delegates be informed of all the activities carried out by the Program in the different regions. In this way, they can submit suggestions which shall contribute to a better development of the actions which are currently underway.
2. Request that the Program Director's Report also include information regarding the way in which the recommendations approved during the previous meeting have been undertaken.

b. Recommendation No.2 'BLACK SIGATOKA'

Regarding this problem, which has caused serious losses and jeopardizes banana and plantain production, the Committee recommended:

1. That IICA, in coordination with international financing agencies, carry out negotiations to obtain the support of research projects on genetic resistance and chemical control. Likewise, it requested that private banana and plantain investigation centers be contacted, in order to obtain the necessary information, and for personnel training.
2. IICA could also advise plant quarantine services, to help diminish the dispersion and impact of Black Sigatoka among the banana and plantain crops in the Hemisphere.

c. Recommendation No.3 'MEDITERRANEAN FLUIT FLY'

As regards the Mediterranean Fruit Fly problem, the following considerations arose, after the papers had been presented:

1. The success of the eradication campaigns carried out in Chile, Mexico, the United States, and Northern Guatemala, by the use of diverse control techniques

2. Peru's interest in carrying out a control program on the national level.
3. That in all successful eradication program, besides the effective application of the appropriate techniques, the joint efforts undertaken between countries and international agencies proved to be decisive.
4. That in accordance with the above, and due to the seriousness of the pest as a restrictive factor in both fruit production and international trade of these countries, it is recommend that IICA, through the Plant Protection Program, coordinate all measures to ensure that the efforts undertaken by these countries and international agencies involved be transferred to other areas where the application of this type of joint campaign might be feasible. To this end, IICA should give priority to the offers presented by Mexico, the United States and Chile for personnel training in all chemical and biological control aspects.

d. Recommendation No.4 "AFRICANIZED BEES"

1. Rather than a pest, Africanized Bees should be considered a cultural and genetic management problem, which, adequately channelled, could help increase honey production, as well as benefit the agricultural sector, due to their high polinizing capacity.
2. The danger represented by these bees to the human population should be taken into account when drawing up prevention and educational campaigns.

It is therefore recommended:

1. That IICA promote and organize courses and seminars in the training of technicians specializing in identification, detection, and protection of the human and animal populations; the management of Africanized Bees, and the introduction of genetic material. The United States Department of Agriculture is willing to participate in these programs.

e. Recommendation No.5: "CITRUS CANKER"

1. After hearing the description of the current situation regarding this problem in the Southern Area, of the campaign carried out by Uruguay and the measures undertaken by Argentina, the Committee emphasizes and recommends that bilateral agreements should be made in order to promote Regional Work Programs. In accordance with

each country's activities, joint measures would be undertaken to control, contain, and eventually eradicate this disease.

2. In order to solve these problems, the Committee recommends that IICA promote bilateral agreements through the meetings between countries and Areas, whenever phytosanitary problems exist on their borders.
3. It is especially recommended that meetings and agreements be held during 1983 and 1984, between countries in the Southern and Andean Areas, so as to solve the problems of the Mediterranean Fruit Fly, Citric Canker, Black Sigatoka, and Cocoa Moniliasis.

f. Recommendation No.6: " POTATO AND CASSAVA GERMPLASM EXCHANGE

The Committee studied the conclusions arrived at by the First Latin American Workshop on Potato and Cassava Germplasm, and decided:

1. To acknowledge the request made by CIP and CIAT to carry out a Phytosanitary identification and mapping of countries bordering on the edaphoclimatic areas and the estimation of losses incurred due to the problems arising in the above-mentioned crops.
2. Likewise, the Committee shall notify CIP and CIAT of Guatemala's request, so that these agencies can establish and maintain frequent contact with the institutions which carry out research in the various countries, as well as with the Plant Protection Offices, so as to coordinate and speed up the germplasm introduction and exchange measures.
3. Guyana and Peru expressed their interest in being part of the cassava germplasm introduction programs, should it be necessary for IICA to undertake the required steps to obtain this objective.

g. Recommendation No.7 "INTER-AMERICAN COMMISSION FOR COOPERATION ON PLANT PROTECTION"

The Technical Advisory Council of Plant Protection Directors discussed the proposal submitted by the Director of the Program, to establish an Inter-American Commission for Cooperation on Plant Protection. This proposal was modified, and the revised version is included.

After a thorough exchange of criteria, the Plenary

RECOMMENDS:

1. That the Program Office send all member countries a report

including the original draft proposal for the establishment of a new Commission, with all the additions and amendments suggested, as Append.

2. That within a reasonable period, about 90 days, IICA shall prepare and mail the draft regulation on the Commission's performance.

h. Recommendation No.8 "STANDARDIZATION OF REGULATIONS ON THE APPROPRIATE USE OF PESTICIDES"

The Document which resulted from the III Meeting of the Committee on the Adequate Use of Pesticides in America and the Caribbean, held in Mexico, was presented in order to start the discussion on this subject.

Emphasizing that IICA was in charge of coordinating and promoting meetings to discuss this subject in the other regions, the Committee was informed of the following:

1. In accordance with the recommendations made by the Meeting held in Mexico City, the Meetings held in Contadora and Cartagena were convened. The standardization of rules regarding labelling, registry and procedures for the control of pesticides in Central America countries, Panama and the Andean Region, were the result of said meetings.
2. The Southern Area expressed its marked interest in initiating measures to achieve the standardization of norms on pesticides. In April 1983, a meeting will be held to study the above-mentioned matters.
3. The achievements made in the american countries with respect to the standardization of regulations were adopted as a world example at the II FAO Meeting on Pesticides held in Rome.
4. The Delegate from El Salvador requested that important aspects which were studied and approved be included in the English version of the final document of the Contadora Meeting, such as the specific colors for each category, and the sizes of the labels, of the manufacturer's brand-name of the products.
5. The Delegate from Dominican Republic requested that, in view of the fact that his country is presently part of the Central Area, all the information and background on the previous meetings be handed to him, in order to carry out the necessary steps so that his Government may adopt and standardize the regulations on pesticides which were already approved for this Area.

6. The Committee recommended that IICA carry out a research and diagnosis of the Pesticide Analysis Laboratories which exist in various countries of the Hemisphere, so as to spread information regarding availability, resources and technical and physical requirements.
7. The United States Delegation ratified their interest and willingness to assist countries in all aspects of pesticide use. In accordance with the study to be undertaken by IICA, they will give technical assistance to laboratories in order to standardize and improve procedures and techniques for pesticide analysis.

ACKNOWLEDGE

The Delegates present at the III Technical Advisory Committee Meeting on Plant Protection wish to acknowledge the hospitality given by the Government of Venezuela, and its valuable help, given both during the organization, as well as during the meeting itself.

We would especially like to thank the Ministry of Agriculture and Livestock, the General Office for Agricultural Development and the Plant Protection Office, as well as all the Venezuelan personnel who contributed to the success of the meeting.

ACKNOWLEDGE

In view of the numerous tasks carried out in order to organize and carry out the IICA Plant Protection Program; of the efforts undertaken to develop this Program, using its reknown professional abilities and its experiences in plant protection problems in the Hemisphere, and the strengthening of the reciprocal cooperation between countries achieved with Program support: The Technical Advisory Committee of the Plant Protection Directors, during its III Meeting, wishes to acknowledge the excellent work carried out by the Director of the IICA Plant Protection Program, Dr. Federico Dao, who has given all the assistance necessary to ensure to continued progress of the Program.

SITE OF THE FOURTH MEETING OF THE TECHNICAL ADVISORY COMMITTEE ON
PLANT PROTECTION

The representatives of each country said they would consult their governments about the site of the Fourth Meeting of the Technical Advisory Committee on Plant Protection and advise any decision to the General Directorate of the IICA.

The representative of Jamaica proposed that the Meeting could be held in his country, subject to consulting his Government.

IICA's Office of the Plant Protection Program proposed that the Meeting could be held at IICA's Headquarters in San Jose, Costa Rica, should there be no firm offer from any country.



A N N E X E S

PLANT PROTECTION PROGRAM OF IICA

PROGRESS REPORT

By: Mr. Federico Dao, Director
Plant Protection Program

During the Second Meeting of the Technical Advisory Committee of Plant Protection Directors, held in Mexico City in October 1980, I presented the first Progress Report on the first year of activities of the Plant Protection Program.

It is once again a great satisfaction for me to report to you on our actions, at both the regional and hemispheric levels, of the past two years.

I would like to repeat the concern I expressed on the first occasion, that we credit plant protection with the importance it merits in the continent's agriculture. We must insist on this priority, and work together with decision to stop the pests and diseases that ravage our agriculture, and work alongside those entities that wage a day-to-day struggle in their effort to obtain greater and better food production.

I want to take this opportunity to thank the Government of Venezuela, and the Honorable Minister of Agriculture and Livestock, Dr. Nydia Villegas de Rodríguez and her colleagues, for having made this meeting possible.

I also want to thank the Director General of IICA, Dr. Francisco Morillo Andrade; the Inter-American Board of Agriculture of IICA; the Offices of Plant Protection of the Ministries of Agriculture of IICA's member countries; the national, regional and international agencies, and all of those who cooperated in some way with the Plant Protection Program, for their support, and for making the success we have achieved to date possible.

I would now like to summarize for you our actions during the past two years:

1. Program Headquarters

The General Directorate of the Institute has temporarily assigned the Plant Protection Program to be focused in Costa Rica. This will help us provide continuous support to the actions of orientation, follow-up objectives and goals at the area and country level.

2. Staff

Four Plant Protection Specialists, one assigned to each of IICA's four geographic areas, are working for the Program. As a result, better attention is given to problems as they come up and constant contact is maintained with the Plant Protection Offices in the countries of the region. The specialists travel to the different countries for purposes of supervision, organizing courses and meetings, and cooperating with the institutions as needed. They are also involved in providing technical training for the prevention or eradication of pests considered of importance to agriculture.

During the past year, budgetary constraints obliged the Program Office to reduce its number of trips to the areas for purposes of supervision and follow-up and for making contact with the officials of the institutions and agencies working in the field of plant protection.

The Inter-American Board of Agriculture has approved the funds necessary to give continuity to the Program's actions during the coming year.

It has been a challenging task to maintain interest in our activities, but I feel very pleased to be with you today. Your presence here shows that the effort has not been in vain, and this is a positive response to our concern that we must forge ahead and expand the scope of our actions.

3. Report on actions taken in response to recommendation IV "Proposal for a Hemispheric Agreement", approved at the Second Meeting of the Technical Advisory Committee

In accordance with this recommendation, the Plant Protection Program, with the assistance of the IICA's Legal Advisor, prepared a draft proposal which was submitted to the consideration of the Plant Protection Directors. They were requested to make observations and suggestions, which would be used in writing the final proposal.

We will discuss the matter during this meeting, and your collaboration and participation will help us achieve the ends we proposed.

4. Mechanisms of coordination with regional and international agencies

We have complied with the matter of coordinating efforts with international and research agencies, by inviting them to attend and by attending international meetings, where papers on the Program's actions on the following were presented:

- The movement of germplasm.
- Technology transfer (information on Blue Mold of Tobacco and Witches Broom of Cacao).

- Training program on Plant Quarantine was established with APHIS/PPQ (Department of Agriculture), and initial actions were taken with the Government of Denmark for courses on Seed Quarantine, offered through the Seed Institute (DANIDA), both for the Caribbean Area.
- Plant Protection Specialists in the countries have cooperated by providing consultation to other countries as needed.
- In order to prevent a duplication of efforts made at the hemispheric level by other regional and international agencies, a meeting is being planned for agencies working in Plant Protection (Research Institutes) in order to coordinate these efforts in programs operating in Latin America and the Caribbean. The meeting will be sponsored by IICA with the direct collaboration of FAO, WMO (World Meteorological Organization) and EPPO (European and Mediterranean Plant Protection Organization), and will be held at IICA's Central Office in San Jose, Costa Rica, in June 1983.

5. Coordination of work on Pesticides

Two regional meetings and one hemispheric meeting on the appropriate use of agrichemicals took place between September 1981 and August 1982. At the regional level, a first attempt was made to standardize the labeling, registration and quality of pesticides, and at a meeting organized by OIRSA, in coordination with IICA's Plant Protection Program, and with the participation of the Plant Protection Directors of the Central Area (Central America and Panama), it was agreed that the countries of that area would standardize criteria on the above-mentioned points. Later, at the Third Meeting on the Appropriate Use of Pesticides (hemispheric level), held in Mexico in March 1982 with the collaboration of the Government of Mexico and FAO, a number of recommendations were made on the use and appropriate management of pesticides. One of these urged IICA to follow-up on the recommendations made at the meeting held in Contadora-Panama in 1981.

To this end, IICA called a meeting for the Andean Area, which was attended by the Plant Protection Directors and the Heads of Pesticides Registration. The meeting was held in Cartagena, Colombia, with the support of the Pesticides Industry of the United States of America, and the standardization of criteria on pesticide labeling, registration and quality was agreed to at the time.

6. Technical and Scientific Information and Dissemination

Eight bibliographies were drawn up dealing with different aspects of pests and diseases. Two new bibliographies on Blue Mold of Tobacco and Witches Broom of Cacao are scheduled for publication next year, in addition to two publications on the economic aspects of the control of Black Sigatoka in Banana and Plantain in Costa Rica and Mexico.

7. Activities of the Plant Protection Specialists in each of IICA's Areas during the past two years

A summary of activities by Area is presented below

ANDEAN AREA

1981

During 1981, the actions of the Plant Protection project in the Andean Area were carried out within the framework of the Program's general objectives, and in accordance with the Operative Program recommended by the Regional Technical Committee at its First Meeting. These activities focused on:

- Institutional reinforcement.
- Promoting projects on recognition and diagnosis, mapping, evaluation studies and quantifying loss.
- Professional training.

These activities also aimed to support the promotion of joint plant protection control campaigns between the countries.

Concrete results of institutional reinforcement through the consultation services provided to Bolivia, Ecuador and Peru, can be seen in the structural changes that occurred in their Offices of Plant Protection. These sought to create the minimum organization necessary for implementing and carrying out the basic responsibilities of quarantine, recognition, plant protection campaigns and pesticide control.

The projects underway in Colombia and Peru produced two important results in 1982, in terms of recognition and diagnosis. Originally, the achievements had been set as goals:

- a. To demonstrate working methods for evaluating loss in agriculture caused by pests.
- b. To present a mapping model and a model of geographic and epidemiological distribution that can be developed and expanded to cover the entire Andean Area.

The project also achieved significant results in matters of staff training through national courses, and especially the First International Course on the Recognition and Diagnosis of Plant Pests. The course was institutionalized, and the event served to increase the number of professionals in the Area trained in the main aspects of plant protection.

1982

Following is a summary of the progress made during 1982 by the Plant Protection Project of the Andean Area. The work followed general Program guidelines and the recommendations of the Regional Technical Committee.

a. Institutional Support

In this Area, the Program contributed especially to the Office of Plant Protection in Peru and the National Plant Protection Program in Ecuador, where significant organizational change took place as a result of Program support. In Peru, the Office of Agricultural and Livestock Protection, which encompassed both Plant Protection and Animal Health, was reorganized and given the name of Office of Agricultural Protection, with specific functions relating to quarantine, recognition and diagnosis, and pesticide use. The most important change occurred in Ecuador, where the Department of Plant Protection was raised to the level of a National Program.

During 1982, the Program's support focussed on promoting the strengthening of these organizations through training, and in cooperating in writing the regulations for the Law on Agricultural Development in Peru, and the regulations on the use of pesticides in agriculture, in Ecuador.

b. Support to Professional Training

This aspect of the Program's action is closely linked to institutional support, and has aimed to train professional staff from the offices of plant protection, in order to upgrade their personnel in the functions and responsibilities of plant protection. In addition, it promoted the implementation of projects and research studies in the field of plant protection.

Also pertinent to training, personnel were given financial and other support for pursuing studies abroad and in regional courses. The recommendations of the Regional Technical Committee in this regard were followed, and focused on matters of interest to the Area, such as integrated control, biological control, Black Sigatoka and Mediterranean Fruit Fly.

c. Specific studies of recognition and diagnosis, epidemiology, mapping and loss evaluation

These studies were supported for two reasons: first of all, they help spread information and procedures that show the importance of plant protection to agricultural production, and secondly, they demonstrate method for the recognition and diagnosis of pests and diseases and for evaluating loss to agriculture caused by pests.

The final objective is to have a complete map of the Area which indicates the geographic distribution of pests, and the importance of developing programs dealing with prognosis and indexing in the future. The projects underway in Colombia and Peru, and for the projects agreed to this year in Ecuador and Venezuela were designed with this in mind.

Work also begun this year on the matter of pesticides, as a result of the Meeting of the Regional Technical Committee which took place in Cartagena. The First Workshop Seminar on the Use, Management and Application of Pesticides in Agriculture was held in October in Lima.

d. Recommendations from the Second Meeting of the Regional Technical Committee on Plant Protection (Medellin, Colombia, 1981)

i. Recommendation No. 1 - Bulletin and Plant Protection Information

The interest in and need for the Plant Protection Bulletin was reiterated, and it was agreed that information would be sent in punctually for the publication of the hemispheric and regional editions. It was also recommended that as of 1982, the Regional Plant Protection Bulletin would be published biannually.

ii. Recommendation No.2 - Cooperation of International Institutions with IICA's Plant Protection Program

It was agreed that, once the USDA Quarantine Office was set up in Lima, IICA would work with the person in charge to coordinate feasible joint projects between the countries of the Andean Area and to inform the countries.

iii. Recommendation No.3 - Discussion on the Advisability of Creating Working Groups

It was decided that the creation of specific working groups focusing on priority plant protection problems of interest to the Area was useful and advisable. It was recommended that IICA procure resources to finance their operations and that a fund be made available for dealing with emergency situations together with the working groups. Such groups were recommended for the following priority problems: Black Sigatoka, Sugar Cane Rust and Smut; Mediterranean Fruit Fly; Plant Protection Problems of Cacao; the Pests affecting Stored Grains; Integrated Control; Rodents, and the Use and Management of Pesticides.

It will be necessary to establish the functions of each of these groups before proceeding to their creation, and to achieve this end, the Program will conduct a census to determine the number of specialists working in the countries, and the professional training needs required in the specific fields mentioned above.

iv. General Recommendation - Round Table on the Responsibilities of the Government and Private Enterprise in the Area of Plant Protection

The participants in the Round Table made the following recommendations:

- a. To increase the dissemination of the activities and functions that government plant protection programs should fulfill, in order to erase the idea that their functions are only restrictive and regulatory.

- b. To propose the use in plant protection terminology of the term "plant protection" instead of "control" in order to contribute to eliminating the mistaken concept referred to in point a.
- c. To elicit the economic support of private enterprise in plant protection agreements and programs operated by the Government, by presenting projects of interest to that sector. The terms of the relations between the Government and Private Enterprise should be clearly defined in the Agreements, to ensure that the proposed objectives or goals are attained.
- d. To establish a true regional integration in matters of plant protection between the different countries of the Area, in order to prevent the spreading of pests and diseases, and to have available a means of communication for reporting on all plant protection news.
- e. To increase research into basic aspects of plant protection, including on the microorganisms that caused disease, and the insects, in order to contribute to developing better plant protection methods, with an emphasis on integrated control.
- f. To step up the exchange of research findings between the countries of the Area, and to encourage greater participation in these activities by international technical assistance agencies like IICA, FAO and others.
- g. To request IICA to compile and publish a bibliography on current plant protection problems affecting the forest species in the Area.
- h. To encourage international agencies to increase the priority they give to projects dealing with the integrated control of pests, as part of the support and reinforcement offered to national programs in the countries of the Area.

CARIBBEAN AREA

1. TRAINING

Lack of trained sub-professional staff in Plant Protection and plant quarantine is recognised as a contributing factor to the low-level of pests and disease control in the region. During the period, here considered, activities related to improving the skill of sub-professionals in plant protection were as follows:

1.1 Participation in the 4th Plant Protection Training Course in Guyana

The specialist visited Guyana from May 3-7th, 1981. He presented the feature address at the opening of the Plant Protection Course and held discussions with participants and lecturers.

Dr. G. V. Pollard, entomologist attached to the Department of Biological Sciences of the University of the West Indies was contracted by the program to give two lectures on pest management and on the control of leaf cutting ants as part of the program of the course.

The specialist was very impressed with the content and approach taken in the course and has held discussions with officials of the Ministry of Agriculture with a view to making the course a regional training program in plant protection.

1.2 Seminar on Integrated Pest Management of Tropical Crops

In collaboration with CARDI, UWI, Faculty of Agriculture and the Consortium for International Crop Protection (CICP), a two week training program on integrated pest management was held at the Faculty of Agriculture, University of the West Indies, St. Augustine, Trinidad, from August 10-21st, 1981. The seminar was attend by 21 participants from 13 countries in the region and together with participants from Trinidad and Tobago there was an average daily attendance of thirty-five persons. Lecturers were drawn from the Consortium for International Crop Protection, the University of the West Indies, Ministry of Agriculture of Trinidad and Tobago, The Commonwealth Institute of Biological Control, the Caribbean Agricultural Research and Development Institute, Caroni Limited and IICA. The course dealt with the basic concepts of integrated pest management and their application to the solution of pest and disease problems of crops grown in the Caribbean. While most participants expressed a high level of satisfaction with the training programme, it was the opinion of all that a more sustained effort and long term training in this area was necessary. Certificates were presented at the end of the course.

1.3 Seminar on Post Harvest Losses in the Caribbean

A seminar on post harvest losses in the region was held at the University of the West Indies, St. Augustine from July 19-24, 1981. The seminar was co-sponsored by the Commonwealth Secretariat and the University of the West Indies and included participation from a wide range of regional and international bodies involved in Agriculture including IICA. The seminar examined the extent of post harvest losses in the region and outlined strategies to reduce these losses. The seminar recognised that marketing and agricultural institutions lack planning units and do not give sufficient priority to post harvest problems and suggested, among other things, that losses can be reduced by reducing the steps in the marketing process. The seminar was attended by participants from throughout the region.

1.4 Plant Quarantine Training Program

The need for training in plant quarantine was emphasized at all meetings of the program. Accordingly, the specialist initiated during 1981 steps to hold a training program for plant quarantine inspectors in the region in 1982. The proposed course was held from October 18th to 30th, 1982 in Port-of-Spain, Trinidad and Tobago. Thirteen participants from the Caribbean attended the course.

1.5 Participation in Training Programmes in the Andean Region

The specialist participated in two training programs in the Andean Region. There were (1) the first regional course on diagnosis of pests, held in Cali, Colombia from May 14-19, 1981; and (2) the second regional course held in Maracay, Venezuela from April 26-29, 1982. At both courses, the specialist presented lectures on the "Method of assessing crop losses due to pests and diseases".

2. COMMUNICATION

2.1 Caribbean Plant Protection Newsletter

A Regional Plant Protection Newsletter entitled Caribbean Plant Protection Newsletter was initiated. The newsletter was designed to facilitate communication among plant protection personnel in the region and disseminate recent research findings. Two editions of the newsletter were produced. Volume 1, No.1 in 1981 and Volume 1 No.11 in 1982. Four hundred and fifty copies of each newsletter were distributed to individuals and organizations, throughout the region. The general response has been one of satisfaction and suggestions for improvement. The publication is generally considered as filling a most important need in plant protection.

2.2 Society for Plant Protection in the Caribbean

The Society for Plant Protection in the Caribbean was established at the 2nd Regional Directors of Plant Protection Meeting held in Mexico City. Immediately after its formation, the Regional Plant Protection Specialist as Interim Secretary travelled widely in IICA Member States of the region and held meetings with Plant Protection personnel in the various Ministries of Agriculture. Letters were also written to many Ministries of Agriculture, commercial enterprises and organizations associated with the agricultural sector in the region, to inform them of the existence of the Society.

As a result of these efforts and those of the members of the Executive Committee, 112 persons and 9 organizations are members of the Society. Urgent plant pest and disease problems in Caribbean Agriculture, was the theme of the first meeting of the Society for Plant Protection in the Caribbean which was held from November 22-27th in Kingston, Jamaica. The meeting was organized by the Plant Protection Program with assistance from the Ministry of Agriculture, Jamaica, private firms and the logistic support of the IICA Office in Jamaica. Technical papers presented and discussed at the meeting were:

- The epidemiology and integrated management of coffee borer.
- The economic importance and problems in the control of coffee berry borer in Jamaica.
- Strategies for the control of leaf cutting ants in the Caribbean.
- Status and control of rust and smut diseases of sugarcane in the Caribbean.
- Present status of research on Hartrot of coconut in Suriname and proposals for a regional strategy for control.
- Growth and yield response of Negro yam (Dioscorea rotundata) to controlling Pratylenchus coffeae in planting material.
- Growth and yield response of yellow yam (Dioscorea cayenensis) to controlling Pratylenchus coffeae in planting material and in the field.
- Virus diseases of crops in Montserrat.
- Introduction of exotic parasites for biological control of Spodep-tera spp, in the Lesser Antilles.
- The status of Moko Disease in Grenada and approaches to its control.

- Problems in the control of Moko Disease of bananas in Grenada.
- The control of Moko Disease of banana in Guyana.
- Control of Sigatoka disease in banana in the Caribbean and Latin America.
- Susceptibility of sugarcane varieties in Barbados to Thrips sylvanus and the effect of insecticides on insect populations.

The proceedings of the meeting is currently being prepared and should be released soon.

2.3 Exchange visits

As part of the communication process, the program initiated the exchange of technical personnel between countries of the region. Dr. E. H. Alleyne, Head of Plant Protection, Barbados, visited Trinidad from June 1-5th, 1981. The objective of this visit was to observe Afro-Brazilian bees and Frog-hopper in Trinidad.

The Ministry of Agriculture, Lands and Food Production in Trinidad and Tobago welcomed Dr. Alleyne's visit and arranged a program for his stay. Dr. Alleyne noted in his report that the visit was worthwhile and that it clearly indicated that there was much relevant information in the region which was not disseminated. In addition to seeing Africanized bees and frog-hopper, Dr. Alleyne was able to hold useful dialogue with entomologists in Trinidad.

2.4 Heads of Plant Protection Meeting

The second regional meeting of Heads of Plant Protection in the Caribbean was held in Kingston, Jamaica, on November 26 and 27th, 1981.

3. TECHNICAL ASSISTANCE

3.1 Assistance to Jamaica in the establishment of a surveillance system for Mediterranean Fruitfly

Mr. E. L. Ayers and Eng. J. Reyes were contracted by IICA to assist Jamaica in setting up a system for the early detection of Mediterranean Fruitfly. This assistance was provided at the request of the Ministry of Agriculture. The following activities were carried out by the consultants:

- Ministry of Agriculture personnel were trained in Mediterranean Fruitfly trapping procedures.

- 110 Jackson traps were installed between September 23-26 around sea ports, airports, population centers and along major highways circling the island.
- Observation was made as to host availability and desirability of climate in Jamaica and it was determined that Jamaica has an ideal climate for rapid reproduction and that preferred hosts such as Tropical almond, star apple, guaba and oranges are well distributed throughout the island.
- The 110 Jackson traps previously installed were inspected September 28 and 29th, with negative findings indicating apparent freedom from Medfly infestation in Jamaica. However, trapping over six months will be needed to confirm this since populations very greatly depend upon the season.
- A seminar on Medfly was presented on September 30, with the participation of the Ministry of Agriculture, Customs and Public Health officials.
- A four part document was prepared giving a brief history of Medfly invasion in Central and North America. Trapping techniques, trapping recommendations and technical diagrams.

3.2 Assistance to Grenada in the control of thrips of cocoa

Thrips have been recognized as a severe problem in cocoa production in Grenada. The Government sought the assistance of IICA and Dr. Eslie Alleyne, Entomologist, was contracted by IICA to provide technical assistance to Grenada. Dr. Alleyne spent the period June 8-12 in Grenada. Sr. Alleyne's recommendations for the control of thrips in Grenada have been taken seriously by the Ministry of Agriculture authorities and the Chief Plant Protection Officer has now been seconded to the Grenada Cocoa Association to manage the thrips problem on a full time basis.

3.3 Technical assistance to Haiti in control of smut of sugarcane and lethal yellowing disease

Information on the methodology for screening sugarcane plants for resistance to smut disease was provided to Haitian authorities. This assistance was provided by the specialist on the basis of his experience with sugarcane smut and information obtained from Caroni Limited, Trinidad and Tobago. In addition, arrangements were being made for Haitian authorities to visit Jamaica to obtain first hand information on the control of lethal yellowing disease of coconuts.

3.4 Technical assistance to Jamaica in the detection of potato viruses

The Director of Plant Protection in Jamaica visited the International Potato Center, Lima, Peru, from February 22-26, 1982. The director also participated in the Bicentennial Congress on Potato in the year 2000.

3.5 Technical assistance to Trinidad and Tobago in the detection of pests and diseases in Containerised Cargo

Two officers of the Plant Quarantine service of Trinidad and Tobago visited the ports of New York, U.S.A. and San Juan, Puerto Rico during the week August 15-21, 1982, for training in the detection of pests and diseases in containerised cargo. The training was carried out by personnel of APHIS.

3.6 Technical assistance to Guyana and Jamaica in Pesticides

Arrangements were made for delegates from Jamaica and Guyana to attend a meeting on pesticides held in Mexico in March, 1982.

3.7 General Technical Assistance

During the period, the Plant Protection Specialist provided assistance and service which does not normally depend on official requests. These include:

- a) Technical assistance to the Plant Protection Division, Ministry of Agriculture, Jamaica, on the design and analysis of plant protection experiments.
- b) Suggestions for strengthening plant quarantine in Guyana.
- c) Diagnosis of diseases of sugarcane in Haiti.
- d) Suggestions for studies on yellow spot diseases of sugarcane, Caroni Limited, Trinidad and Tobago.
- e) General advice to Plant Protection Personnel in the region on quarantine and other problems.

3.8 An analysis of plant quarantine systems in the Caribbean

The Regional Plant Protection Specialist and Mr. John Thaw, Section Leader, International Training Section of the Animal and Plant Health Inspection Service of USDA, visited Barbados, Grenada, Guyana, Jamaica and Trinidad and Tobago in May 1982, to observe the plant quarantine systems in these islands as a basis for preparation of the first course for plant quarantine inspectors in the region.

4. PUBLICATIONS

4.1 An Introduction to the Diagnosis of Plant Disease

This 30 page booklet was prepared by the specialist to provide plant protection personnel with an introductory handbook for the practical study of plant diseases. The book outlines the basic steps, facilities and procedures which are necessary for the accurate diagnosis of plant diseases. The book outlines the basic steps, facilities and procedures which are necessary for the accurate diagnosis of plant diseases.

This publication is especially valuable to students who are being introduced to Plant Pathology for the first time, to give them the rudimentary principles and techniques which are required for plant disease diagnosis.

4.2 A Bibliography of Plant Disease Investigations in the Commonwealth Caribbean 1880-1980

This publication which contains references to over 3,000 publications on plant disease work in the Caribbean, is intended to serve as a reference source for plant pathologists, nematologists, agronomists, research students and other persons interested in agriculture in the Caribbean.

The bibliography covers all aspects of plant diseases and their control, including diseases caused by fungi, bacteria, viruses and nematodes. The geographic area covered by the references includes all the territories of the Commonwealth Caribbean. The material covered by the bibliography dates from the 1880's to 1980.

The entries were compiled mainly from primary sources, many of which have not been indexed previously. It would be impossible to list all the titles searched; however, the main sources of information were Agriculture News, Tropical Agriculture, West Indian Bulletin, the Journal of the Jamaican Agricultural Society, the Journal of the Agricultural Society of Trinidad and Tobago, and the Annual Reports and Publications of the Departments and Ministries of Agriculture throughout the region. The secondary sources included regional bibliographies on agriculture and related topics and computerised literature searches of the Commonwealth Agricultural Bureau data bases.

5. PARTICIPATION IN MEETINGS

The Specialist represented IICA at the following meetings:

- a) Sixth Meeting of the Caribbean Plant Protection Commission held in Suriname from May 18th to 23rd, 1981.

- b) Sixth meeting of the North American Plant Protection Organization held in New Orleans, U.S.A., from October 11th to 14th, 1982.
- c) Meeting of the Technical Consultative Committee for the Andean Region, Cartagena, Colombia, from August 23rd to 26th, 1982. This meeting also considered the harmonization of pesticide legislation in Latin America and the Caribbean.
- d) Attended meeting on Agromedicine and the agromedical approach to pesticide management held in Trinidad in August 1982.

6. OTHER ACTIVITIES

6.1 Supervision of postgraduate students at the University of the West Indies

The specialist continued to supervise two postgraduate students for the M.Sc. degree in Plant Pathology of the University of the West Indies. One student is working on seedborne pathogens of pigeon pea and the other on resistance to smut disease of sugarcane.

6.2 Member of Smut Research Committee

The specialist continued to be a member of the Government of Trinidad and Tobago Smut Research Committee. The Committee monitors the work on sugarcane smut in Trinidad and Tobago.

6.3 Communication with membership of the Society for Plant Protection in the Caribbean

The specialist communicated with members of the Society on a number of issues and sent information relative to the operations of the Society to members

6.4 Radio programs, Newspaper reports, Lectures, etc.

The specialist used the media in Barbados, Grenada, Guyana and Montserrat to give information of IICA plant protection programme and the Society for Plant Protection in the region.

6.5 The following lectures were given

a) The diagnosis of plant diseases

Practical skills course at the Field Station of the Faculty of Agriculture, University of the West Indies, August 3, 1983.

b) Nematode control

Presented at the University of the West Indies, Final year class in agriculture at the University of the West Indies.

c) The diagnosis and control of diseases in root crop and vegetable production

Presented at a seminar on the Marketing of Root Crops and Vegetables which was held in Grenada.

CENTRAL AREA

1981

1. ACTIVITIES UNDERTAKEN DURING 1981

The activities of the Plant Protection Program in the Central Area began in the month of June. Time was a limiting factor to the achievements that could be made that year. Nevertheless, with the cooperation and guidance of the Program Office and IICA's Offices in the Area, especially Panama, a working plan was drawn up, and the first steps taken to implement it.

1.1 Meeting of the Regional Technical Committee

The first meeting of the Regional Technical Committee was held in late November and early December 1981. The regional work plan was studied, and pertinent adjustments taken into consideration. Strategies for implementation were also discussed. Plant protection problems of importance to the region were identified, and the need to begin inventories of pests and diseases, beneficiary agencies and geographic distribution was also discussed.

1.1.1 Principal recommendations from the meeting

- That the following be set as priority objectives for the regional program: technology development (plant protection diagnoses); information on how to integrate control practices (biological, cultural, chemical, etc.), and the use and control of pesticides that have an impact on the ecosystems of the region. Emphasis was placed on coordinating efforts between OIRSA and IICA in order to make efficient use of the physical, human and financial resources of both agencies.

- That the support provided by the international agencies in America towards the solution of plant protection problems not be limited to promotional and transfer efforts at the management and operative levels. Rather, they should seek to strengthen the political guidelines at the top hierarchical levels of each country, in order to upgrade the rank of plant protection organizations in the Ministries of Agriculture.
- That the following be included among the pests that will be targeted for priority action: slugs (Vaginulus plebeius); field mice (Sigmodon hispidus); and Apion godmani

1982

1. ACTIVITIES UNDERTAKEN DURING 1982

During the course of this year, some of the actions planned were carried out, while others were postponed because of financial constraints. The changes in the structure and personnel of some Plant Protection Offices in a number of countries had an adverse impact on the implementation of program actions.

1.1 Training in Plant Protection

- Training course on Rice Production, emphasizing the recognition and control of pests and diseases.
- Training course on the detection and control of Black Sigatoka of Banana and Plantain.
- Training course on Plant Protection, with emphasis in Plant Quarantine
- Training course on Integrated Management of Cotton Pests.

1.2 Compilation and publication of Plant Protection Legislation

During 1981 and 1982, the plant protection legislation from all the countries of the Area, including the Dominican Republic, was compiled. The end goal of this effort is to standardize and compare formats, for later publication and distribution. Also compiled was the legislation regulating the registration, sale and use of pesticides in the Area, for purposes of publication as well.

1.3 Preparation of a Manual on Procedures for Plant Protection Inspectors

A list of exotic pests and diseases affecting principal crops in its final stages of preparation. In addition, important publications dealing with procedures are also being collected.

1.4 Information on African Killer Bees

As soon as African Killer bees were detected in Panama, the countries were alerted to adopt necessary measures. In addition, with the cooperation of other regional specialists, legislation governing beekeeping in countries that have experienced this problem was collected, and will be distributed to the plant protection institutions.

1.5 Dominican Republic included in the Central Area

Once the Dominican Republic was included in the Central Area, a visit was made to the Department of Plant Protection in that country, and a meeting held with the management of that Office to identify its technical assistance needs. Four of that institution's projects were reviewed: project to install a control laboratory for pesticide formulae; project to establish a plant bacteriology laboratory; plant protection project for banana crops; project to eradicate bacterial blight of Cassava (Xanthomona manihoti).

1.6 Actions in other Central Area Countries

- Technical assistance was provided to the Salvadoran Institute for Training and Technology Transfer, for establishing an Integrated Cotton Pest Control Program, and a training program was designed on the integrated control of these pests.
- In Mexico, the Department of Biological Control of the General Office for Plant Protection agreed to supply parasites of citrus blackfly (Aleurocanthus woglumi) for its control in Panama and Nicaragua.
- Actions are being taken to implement a project on the integrated control of pests affecting food crops in Panama, between the Agricultural Research Institute in that country and IICA's Plant Protection Program.
- Actions have begun to provide training in the control of vertebrate pests in agriculture, to personnel working with the Plant Protection Institutions in Guatemala, Costa Rica, El Salvador, Nicaragua and Honduras.
- Information on the appropriate use of pesticides, especially those that are dangerous to the health of the field operators that apply them, was obtained and distributed.
- An effort has been made to strengthen policy guidelines at the top hierarchical levels of each country, in order to upgrade the rank of the plant protection organizations in the Ministries of Agriculture.

SOUTHERN AREA

1981

a. Coordination of Regional Meetings

Two meetings were held in Montevideo, in June and November, attended by the Directors of Plant Protection of the Southern Area. The main points to be covered during the second and third meetings of the Technical Regional Committee were discussed; and the foundation was laid for the work to be done during 1981. In addition, the changes needed for projecting actions to 1982 and 1983 were also dealt with.

b. Coordination of the Plant Protection Program in the Southern Area

A number of activities were carried out, based on the hemispheric and regional programs approved at the Second Meeting of the Technical Advisory Committee for Plant Protection, which was held in Mexico in October, with the full participation of national agencies responsible for plant protection in their countries.

The following points were taken into consideration:

At the Hemispheric Level

- A proposal was prepared by the Program Office on the creation of an Inter-American Commission for Cooperation on Plant Protection.
- A survey is being made of agricultural exports utilized by farmers at the hemispheric level.
- A study is underway on the appropriate use of agrichemicals in Latin America and the Caribbean, in response to the Resolution adopted in Mexico, in March 1982, in support of the Advisory Meeting held to discuss this subject.

At the Regional Level

- Support was provided to the Ad Hoc Technical Committee on Plant Protection for the Southern Area. The internal regulations governing the operation of this Committee were discussed.
- Cooperation and reciprocal information took place on activities of mutual interest to OAS-CIES, NAPP0, APHIS-PPQ and FAO.
- IICA participated as an observer agency in the meeting of the Working Group of Basic Area 3, of the Inter-Governmental Coordinating Committee for the Countries of the Plata Basin. The meeting dealt with citrus cancrrosis and predatory birds.

- Mr. Mario Boroukhovitch, Assistant Director General for Agricultural Services and President of the Ad Hoc Technical Committee on Plant Protection, was provided with help in making a presentation to the European Economic Community (EEC) and the European and Mediterranean Plant Protection Organization (EPP0) on the purposes and scope of the work of the Ad Hoc Technical Committee and the Plant Protection Program in this Area.
- Technical support was provided to the "Las Brujas" Experimental Station in Uruguay, for its work on tomato varieties resistant to tomato spotted wilt.
- Current legislation in the Southern Area was collected.
- A list was compiled of quarantine pests of interest to the area.
- Support was provided to the countries of the Area in organizing bilateral meetings for dealing with: border problems with certain agricultural products; the foundations for an information system on the epidemiological evolution of pests affecting principal crops; an information exchange on the progress made by campaigns to eradicate pests of mutual interest; the bases for developing a communication system for exchanging information on the above subjects.
- A project was prepared to strengthen the Plant Protection Division of the Ministry of Agriculture and Livestock in Paraguay, with the collaboration of the Ministry of Livestock and Fisheries of Uruguay.
- Joint efforts took place between the IICA Office in Argentina with the APHIS/PPQ delegates to that country, in order to discuss subjects of mutual interest with the Ministry of Agriculture of that country and the USDA.

c. Establishment of a Plant Protection Information and Documentation System

Following is a summary of the Plant Protection Program's most important actions in the area of information and documentation in the Southern Area:

- Cooperation was provided to the Plant Protection Program Office in publishing materials at the hemispheric level.
- Regional materials were published, like the documents from the first and second regular meeting, and the first special meeting of the Ad-Hoc Committee on Plant Protection for the Southern Area.
- Documents were published from the Second and Third Meetings of the Regional Technical Committee for Plant Protection.
- A list was drawn up of the associations and private companies working in the area of plant protection.

- A list was made of the Universities involved in Plant Protection activities.
- Information was compiled and disseminated on: discoveries made on pests and diseases in the region, plant protection events, and legislation on pesticides.

e. Training Courses on Information and Documentation in Plant Protection

Four courses were offered on the subject in : Brasilia, Buenos Aires, Montevideo and Viña del Mar (Chile). Eighty-eight technical personnel and specialists from media offices, experimental stations, universities and the national plant protection services of these countries attended the courses.

1982

The following actions were carried out during 1982:

a. Implementation of a Regional Mechanism for Coordination

Cooperative activities took place between the countries of the Area, APHIS-PPQ and IICA

- Information was exchanged regarding quarantine measures, plant protection inspection and geographic dispersion of pests.
- The foundation was laid for a human resource training program on plant protection inspection and campaigns to control and eradicate the fruit-fly.

b. Exchange of Lists of Pests of Concern to Quarantine Activities

Lists that will contribute to the effectiveness of quarantine measures, both for institutions and for the Program, were exchanged as a result of the bilateral and multilateral meetings.

c. Standardization of Criteria for Plant Protection Inspection and Surveillance

The foundation has been laid at the regional and bilateral level, for a program to inspect merchandise in ports and for plant protection permits, which deal with pests and diseases, such as citrus cancrisis and Mediterranean Fruit-fly. IICA was requested to draft a working profile for drawing up a manual on pertinent procedures.

d. Support to the Plant Protection actions of the Inter-governmental Coordinating Committee (CIC) for the countries of the Plata Basin

The Program has shown a high degree of interest in the actions of Working

Group 3 of the CIC, as pertains to depredatory birds and citrus cancrrosis. The Program participated as an observer in the working meeting held in Asuncion last October.

e. Promotion of Information and Dissemination System

- Meeting to coordinate information and documentation activities in Plant Protection for the Area.
- Information system on plant protection and surveillance and diagnosis for different pests and diseases that affect principal crops: Situation of the pests (cancrosis, depredatory birds and bacterio is in potato) in border areas, and interception of high risk merchandise in ports.
- Preparation of lists in cooperation with the Regional Committee for distribution to institutions, individuals involved with the plant protection program, and plant protection specialists.

f. Analysis at the National Level of the Situation and Development of Operative Skills in Plant Protection

The Program provided support through different actions to Argentina in an effort to deal with their problems with stored grains. A decision was made to design a working program together with national authorities and APHIS/PPQ and IICA, to raise their operative skills in the area of plant protection.

g. Assistance to the Ad-Hoc Technical Committee on Plant Protection

Support continues to be provided to the Ad-Hoc Technical Committee.

h. Status and Standardization of Plant Protection Legislation

Actions underway to update the Area's Plant Protection Offices, continued through cooperation with the members of the Regional Technical Committee. Changes in legislation of the Area are communicated to Area Directors.

i. Analysis of the Current Norms Governing the Use of Pesticides

- Cooperation was provided for making a regional study of the status of pesticide residues and standards for their application. As a result, the bases were lain for making a regional diagnosis on the situation of pesticide, residues and standards.
- A working agenda was prepared for the bilateral meetings between Argentina, Brazil and Uruguay.
- Current legislation on pesticides was collected, which will be published in the near future. The Plant Protection Offices of the countries of the Area cooperated in this activity.

- The Program was requested, in the bilateral meetings, to hold a technical meeting for standardizing the criteria and procedures governing the use of pesticides.

PROPOSAL FOR THE CREATION OF THE
INTER-AMERICAN COMMISSION FOR COOPERATION ON PLANT PROTECTION

Foreward:

In accordance with Resolution IICA/RAJD/Res.94(18/79), adopted by the Board of Directors of the former Inter-American Institute for Agricultural Sciences, today's Inter-American Institute for Cooperation on Agriculture (IICA), conducts a Program of Plant Protection, in an effort to support and coordinate efforts dealing with plant protection problems of economic impact in the Hemisphere.

The intensification of commercial relations among countries because of the growing demand for agricultural products, facilitated by international communications and transportation, has increased the risks of introducing and spreading the pests and diseases associated with plants and plant products. At the same time, the increased use and greater diversification of pesticides generates problems of intoxication to users, the contamination of agricultural products, damage of the environment and the endangering of human and animal health.

At the same time, institutional performance, legislation, infrastructure and procedures affect the efficiency of quarantine and plant protection services, and obstruct the supply and international exchange of agricultural products, in the terms and quality required.

These circumstances generate serious economic, social, technical and institutional problems, and their solution is of common interest to the countries of the Hemisphere.

Some regional agencies, like the North American Plant Protection Organization (NAPPO), the Regional International Organization of Plant Protection and Animal Health Care (OIRSA), the Caribbean Plant Protection Commission (CPPC) and the Board of the Cartagena Agreement (JUNAC), through the Andean Agricultural Health System, are tackling some of these problems within their respective areas of jurisdiction.

Nevertheless, it appears that the time has come for encouraging integrated plant protection throughout the Hemisphere, with a coordinating mechanism established by the countries themselves that promotes legislative, technical and administrative measures that can deal more broadly with plant protection problems.

The attached preliminary draft proposes establishing an Inter-American Commission for Cooperation in Plant Protection, which would create a basis for strengthening mutual cooperation and coordinating the efforts of the countries and the regional agencies in the Hemisphere, in the field of Plant Protection.

Since IICA is the specialized agency of the Inter-American System for Agriculture and Rural Development, equipped with technical and administrative infrastructure for implementing its Plant Protection Program, it will be able to provide the services of an Executive Secretariat.

DRAFT: INTER-AMERICAN COMMISSION FOR COOPERATION IN PLANT PROTECTION

Whereas:

Crop pests and diseases, besides having a significant economic impact on the levels of agricultural production in the Hemisphere, cause problems that interfere with the international trade of agricultural products;

The preservation of the environment and the protection of the lives and health of humans and animals requires the concerted action of all the countries to make rational use of agricultural pesticides and to market uncontaminated agricultural products;

Institutions, legislation, infrastructure and procedures affect the efficiency of quarantine and plant protection services, as well as create problems in the supply and international exchange of agricultural products;

The International Agreement on Plant Protection has stimulated cooperation between governments for establishing regional plant protection organizations, such as the European and Mediterranean Plant Protection Organization; the Plant Protection Commission for Southeast Asia and the Pacific Region; the Caribbean Plant Protection Commission and the Inter-African Phytosanitary Commission;

FAO, at its Seventh Regional Conference, recommended that the governments maintain existing organizations and coordinate their activities, as a prerequisite to the integration of plant health activities in Latin America;

By Resolution IICA/RAJD/Res.94(18/79), adopted by the Board of Directors of the former Inter-American Institute of Agricultural Sciences, today's Inter-American Institute for Cooperation on Agriculture, IICA conducts a Plant Protection Program which supports and coordinates efforts confronting plant protection problems of economic impact in the Hemisphere.

INTER-AMERICAN COMMISSION FOR COOPERATION ON PLANT PROTECTION

CHAPTER I

NATURE AND PURPOSES

Article 1^o. - The Inter-American Commission for Cooperation on Plant Protection, (hereinafter the "Commission") consists of a permanent and voluntary institutional mechanism. It will promote, stimulate and maintain close ties of cooperation and coordination over efforts to implement the legislative, technical and administrative measures needed to prevent the introduction and spread of pests and diseases affecting plants and products, and to control or eradicate them in the American and Caribbean countries.

Article 2^o. - The purpose of the Commission are to promote, stimulate and support coordinated actions to:

- a. Organize and strengthen plant protection and quarantine services;
- b. Coordinate cooperative relations with national institutions and international and regional agencies in order to upgrade their actions in the field of plant protection;
- c. Establish an information system on the outbreak of dangerous pests and diseases, as well as other important aspects of plant protection;
- d. Standardize and improve quarantine measures for preventing the introduction of exotic pests and diseases, and for preventing the spreading of pests and diseases already present in the countries of the Hemisphere;
- e. Eradicate and control pests or diseases that cause serious economic damage to agriculture in the region;
- f. Standardize regulations on pesticides to promote their rational use, as well as preserve the environment and protect human and animal health;
- g. Train human resources at different levels;
- h. Conduct research into plant protection problems and the generation of technologies that are economical, effective and less dangerous for preventing and controlling pests and diseases;
- i. Exchange knowledge, as well as germplasm and other relevant materials in the field of plant protection.

CHAPTER II

THE COMMISSION

Article 3^o. - The Commission will be formed by the Directors of Plant Protection of the American and Caribbean countries.

Article 4^o. - Its functions will be:

- a. To serve as a permanent forum for consultation, orientation and coordination of policies, plans and programs related to the development of Plant Protection.
- b. To identify and evaluate the factors limiting the growth of Plant Protection in the American and Caribbean countries, in order to devise country, regional and hemispheric-level guidelines for action.
- c. To receive and approve the reports of the Executive Secretariat.

Article 5^o. - Regional Committees of the Commission will be created for stimulating actions of mutual interest to groups of countries, as follows: the Northern Regional Committee; the Andean Regional Committee, the Southern Regional Committee and the Caribbean Regional Committee, which will be identical to the working areas established by the Inter-American Institute for Cooperation on Agriculture, hereinafter the Institute.

CHAPTER III

THE EXECUTIVE SECRETARIAT

Article 6^o. - The Institute will serve as the Executive Secretariat of the Commission, through its Office of Plant Protection. The main office of the Commission will be located at Institute Headquarters in San Jose, Costa Rica, where the Director of Plant Protection at the Institute will serve as its Executive Secretary, receiving the support of Plant Protection Specialists serving the Institute at Headquarters or in its member countries.

Article 7^o. - The executive Secretariat will have the following duties:

- a. To work together with the Offices of Plant Protection, in promoting and procuring technical or financial assistance for conducting studies, and for preparing and implementing Plant Protection projects;

- b. To procure and contract resources for implementing the technical tasks of the Commission and the Regional Committees;
- c. To administer the financial resources obtained for conducting the technical work under the aegis of the Commission;
- d. To support the Offices of Plant Protection in carrying out the agreements subscribed to by the Commission in the respective countries.

CHAPTER IV

MEETINGS

Article 8^o.- The Commission shall meet regularly every two years in the country agreed upon, following a convocation issued by the Executive Secretariat 60 days prior to the meeting.

Article 9^o.- The Regional Committees shall meet annually and shall coincide with the Regional Plant Protection Meetings organized by the Institute's Office of Plant Protection. Expenses incurred by the annual meetings of the Regional Committees will be financed by the Executive Secretariat.

CHAPTER V

THE CONTRIBUTIONS OF THE OFFICES OF PLANT PROTECTION

Article 10^o.- The Offices of Plant Protection will contribute 1 per cent of their respective budgets to the operation of the Commission. These funds will be paid to the Institute in the equivalent of United States of America currency at the corresponding official rate.

The Office of Plant Protection of the country hosting the biennial meeting of the Commission will procure the pertinent financial resources for this purpose. The travel expenses of the remaining participants in these meetings will be covered by each of Plant Protection.

CHAPTER VI

COOPERATING ENTITIES

Article 11^o.- Regional or international entities involved in Plant Protection will be invited to participate as Cooperating Entities of the

Commission, in order to ensure their assistance, support and collaboration in the actions being developed. Efforts will seek to ensure that actions are complementary and coordinated in order to achieve the objectives pursued by the Commission.

CHAPTER VII

ESTABLISHMENT OF THE COMMISSION

Article 12^o. - The installation meeting of the Commission will take place during 1982, after at least fifteen (15) Ministers of Agriculture of the American and Caribbean countries or their representatives, have signed this document.

(REVISED VERSION)

INTER-AMERICAN COMMISSION FOR COOPERATION ON PLANT PROTECTION

GOALS (PURPOSES) AND FUNCTIONS

1. The Inter-American Commission for Cooperation on Plant Protection (hereinafter "the Commission") has the purpose to promote relationships for cooperation and coordination, aiming at the implementation of measures of plant protection nature, of common interest in the Hemisphere.
2. The Commission shall have the following main functions:
 - a. To serve as a forum for consultation, the exchange of information and experiences, as well as to assist the Inter-American Board of Agriculture and the General Directorate of the Institute in the field of plant protection;
 - b. to carry out periodical identification of the most important problems related to plant protection in the Hemisphere, setting the corresponding priorities to the actions agreed to be developed on regional or sub-regional basis;
 - c. to foster and concert relations with and among international and regional organizations for the purpose of strengthening and coordinating actions of technical and financial cooperation in the field of plant protection, at a multinational level, taking into account the priority given to those problems;
 - d. to promote the development of plant protection information systems with the cooperation of national and international organizations carrying out activities of this kind;
 - e. to emphasize efforts for the strengthening of plant protection services, the plant protection research, and the development and training of human resources at different levels in the sector.

THE INTEGRATION

3. The Commission shall be composed by the Directors of Plant Protection Services of Member States of the Inter-American Institute for Cooperation on Agriculture (hereinafter "the Institute").

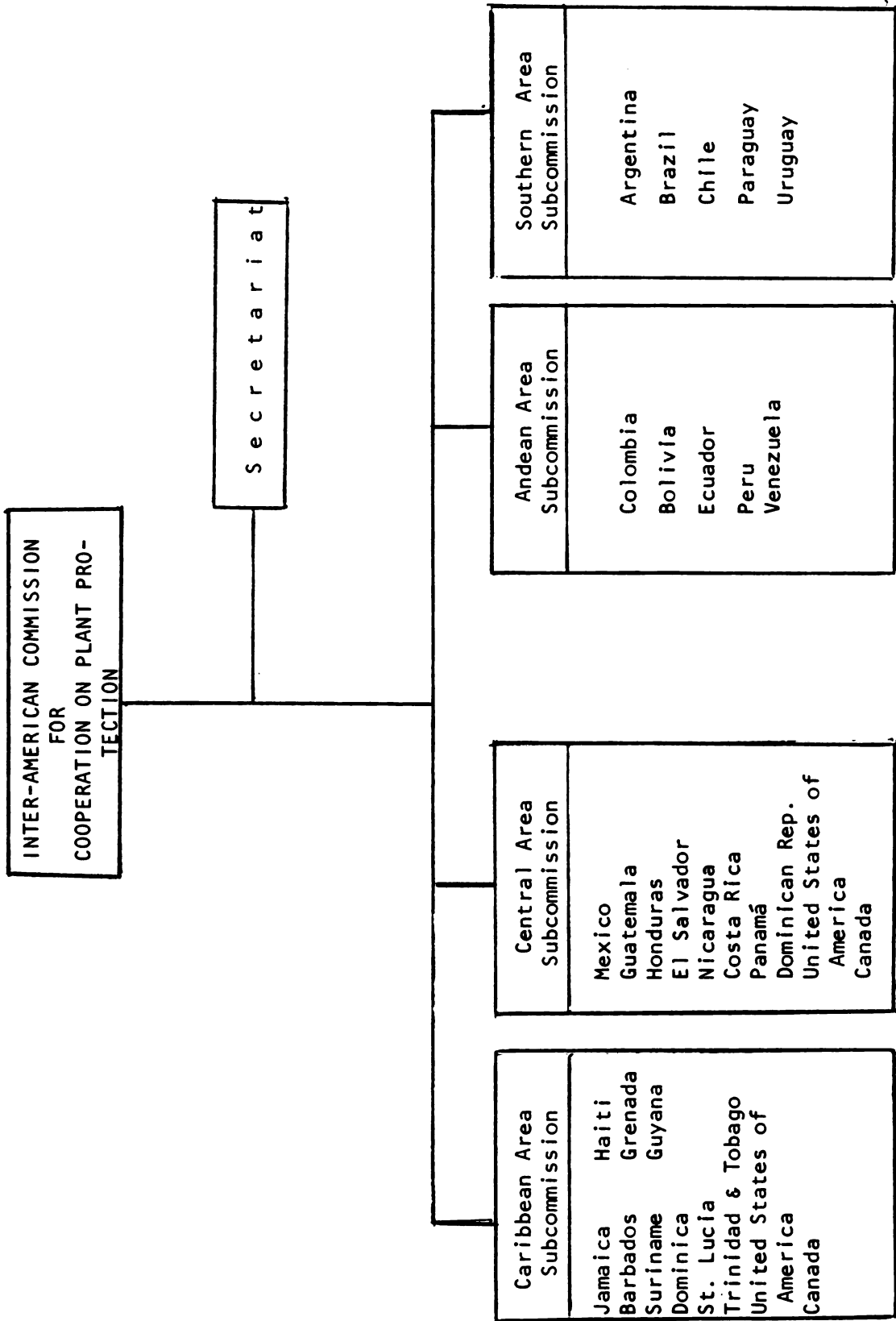
4. The representatives of international and regional organizations carrying out plant protection programs in the Hemisphere may participate. The Institute's Permanent Observers and the representatives of governmental and intergovernmental financial entities may join as Observers.

THE SUBCOMMISSIONS

5. Regional subcommission shall be established for each of the Areas provided for in the organization of the Institute for the purpose of paying attention to problems of common interest and to concert the corresponding actions. A subcommission consisting of the regional and international organizations involved in plant protection work can be established.

THE SECRETARIAT

6. The Institute will serve as the Secretariat through its Plant Protection Office. The site of the Secretariat shall be located in the Institute's Headquarters, in San Jose, Costa Rica. The Secretary shall be the Director of the Institute's Plant Protection Program. The Institute's Plant Protection specialists shall cooperate and give support to the Secretariat, and shall be the secretaries to the Regional Subcommissions.



INTER-AMERICAN COMMISSION
FOR COOPERATION ON PLANT
PROTECTION

S e c r e t a r i a t

Regional and Inter-
National Organiza-
tions Subcommiss.

CPFC
FAO
NAPPO
OIRSA
Etc.

Regional
Subcommission
Central Area

Canada
Costa Rica
El Salvador
United States of
America
Guatemala
Mexico
Nicaragua
Panama
Dominican Rep.

Regional
Subcommission
Andean Area

Bolivia
Colombia
Ecuador
Peru
Venezuela

Regional
Subcommission
Caribbean Area

St. Lucia
Barbados - Surinam
Canada - T. & T.
Dominica
United States of
America
Grenada
Guyana
Haiti
Jamaica

Regional
Subcommission
Southern Area

Argentina
Brazil
Chile
Paraguay
Uruguay

RECOMMENDATIONS ADOPTED IN THE
III CONSULTATION MEETING ON PROPER USE OF PESTICIDES
IN AMERICA AND THE CARIBBEAN

SHORT TIME RECOMMENDATIONS

1. Believing that all countries should have the means to control the importation, production, formulation, transport and use of pesticides in its territory, the meeting recommends that, as appropriate, member countries should enact relevant legislation as soon as possible to ensure these objectives. Such legislation should be reviewed regularly. In the interests of harmonization, countries should base the requirements of such legislation on the recommendations of international bodies such as FAO and WHO.
2. The meeting considered that it is advisable that the registration of pesticides should be managed by a central organization, within a country, supported and advised, as appropriate, by all departments with an interest in safe and efficient handling and use of pesticides.
3. The meeting supports the adoption and use of the recommendations of the 1977 Government Consultation on the Standardization of Pesticide Registration Requirements (FAO, Rome, 1977). In particular, countries should adopt the definitions in the Report and require the registration of the compounds included in such definitions.
4. The meeting recommended the formation of regional working groups on registering requirements and pesticide labeling, as well as other relevant activities based on the evaluation of the Consultation Report (FAO, Rome, 1977) in the light of the needs and views of individual countries of America and the Caribbean.
5. The meeting recommended that consideration should be given by governments to legislation of the commercial application and advertising of pesticides.

The Licencing and training of commercial applicators is desirable.

6. Noting that there was already a well-established international system for harmonizing maximum residue levels of pesticide residues in food in the FAO/WHO Codex Committee on Pesticide Residues (CCPR), the meeting recommended that all countries actively consider the adoption of the limits recommended by the Codex Alimentarius Commission. The Ad-Hoc Working Group of Developing Countries at the CCPR currently provides a working forum for member countries problems on pesticides residues (Recomm. 5.4).

7. Recognizing that the ultimate responsibility for the safe and efficient use of pesticides lies with the user, the meeting recommended that high priority be given to regional collaboration in programs for education and training. In order to execute such programs a regional working group should be established as soon as possible to organize and carry out this extremely important task. Such programs must include training on:
1) Registration systems, 2) Labeling elaboration, 3) Pesticides applications and 4) Analytical procedures for quality control of pesticide formulations and residue analysis (Recomm. 5.4).
8. The exposure of field workers to pesticides should be studied by appropriate epidemiological monitoring techniques and incidents and results validated and coordinated by National Poisons Information Centers. Such Centers should be established, as appropriate, in member countries.
9. The meeting agreed that IICA in conjunction with OIRSA as appropriate should be responsible for coordinating further actions on recommendations from this meeting. This responsibility should include the collection and dissemination of all related information, beginning with an actual list of registered formulations as well as successive in pesticide legislation.

Because of the general lack of knowledge and wide misunderstanding of the pesticides and their use, the meeting recommended that consideration be given to the use of mass media in promulgation information of adequate use of pesticides.

GENERAL CONCLUSIONS

FIRST LATIN AMERICA WORKSHOP ON GERMPLASM IN POTATO AND CASSAVA
CALI, COLOMBIA, JANUARY 25-29, 1982

The participants in the First Latin America Workshop on "Germplasm" in Potato and Cassava, resolved in plenary session and unanimously, to classify the conclusions reached by the Workshop in six categories:

1. Quarantine regulations

Participants recognized the sovereignty of each country with regard to their decisions in view of each country's knowledge of what is advisable or not for the welfare of their citizens.

However, the Workshop indicated that in the case of the potato it was dangerous to make distinctions between the three importation headings; potato for human or industrial consumption; commercial seed; and potato to be used in research. Legislation should facilitate the importation of vegetable matter for research proceeding from countries where strict phytosanitary conditions are demanded and applied. On the contrary, potato for human or industrial consumption -hadled above all by traders and without due quarantine control- presents the greatest danger for dissemination of pests and diseases.

Finally, it was indicated that quarantine regulations should be reviewed frequently in order to keep them abreast of scientific advances, so that they become a flexible service and not a factor hindering scientific exchange.

2. Maps of phytosanitary problems

The desirability of carrying out reconnaissance of pests and diseases was recognized, so that phytosanitary maps of each country could be drawn up. On these maps edaphoclimatic zones would be shown and the degree of severity and level of economic harm caused by the principle problems. The map would also show areas exempt from phytosanitary problems but vulnerable to them because of favourable environmental conditions should a pest or pathogen be introduced into the area. The inventory of these maps would mean that the potential of the danger of germplasm introduction could be calculated in advance so that the necessary precautions could be adopted; it would also be very useful for all countries interested in importing seed.

As this initiative is of general interest, the meeting unanimously request IICA to take charge of the project, and stressed the need to implement it on a continental scale as each country would give greatest attention to its economically important crops. It was decided that CIP and CIAT would design a simple but complete form for distribution to all the Latin American countries by IICA in order to collect data for drawing up the maps.

3. Germplasm availability

One of the main objectives and responsibilities of both CIP and CIAT is to have at their disposal promising genetic materials for national potato and cassava institutions and programs. Consequently, both centres maintain active germplasm banks which operate as such. The depositors are the countries who have contributed their native varieties and the users are those who need this material either in its original state, or transformed into a improved material through selection and modifications effected by plant geneticists.

4. Germplasm exchange

Although the purpose of plant geneticists is the introduction of genetic resistance to the principle pests and diseases, it would be utopic to hope to obtain varieties resistant to all problems in the field. The absence of phytosanitary problems in genetic material which is exchanged can be achieved, with minimum risk, through in vitro cultivation of meristematic tissues.

Sexual or botanic potato seed and tubers can also be exchanged, with some risk, provided the latter have been produced under special conditions of isolation. Sexual seeds and cuttings of cassava can also be exchanged. The former is very safe from a sanitary point of view and offers great genetic variability which is very useful to the researcher in local programs of variety improvement. The cutting should come from a programme of certified seed which starts from cultivation of meristems which have been sown in isolated fields or in regions free of phytosanitary problems.

It was pointed out that the greatest risk in germplasm exchange, although shared between the sender of the material and the receiver, is incurred by the latter.

In conclusion, although the cultivation of meristematic tissues in vitro is at present one of the safest ways of germplasm exchange, other methods which may be improved or diversified with the advance of science should not be excluded.

5. Germplasm negotiation

It was agreed that the international centers should negotiate specific exchanges of genetic material separately with each importing or exporting country.

6. Availability of information

The plenary session recognized unanimously that both CIP and CIAT had considerable information about cultivation of potato and cassava respectively; and that they merit the praise of all the countries in the region for the efforts made to increase production and productivity of these two crops. It therefore corresponds to the national institutions to spread their information among the farmers so that the latter may thereby obtain the hoped for benefits.



