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Integrated Soybean Pest Management;
ICA/INTSOY Soybean Production Course

Michael E. Irwin

ISR-80-30

November 1980

International Soybean Program, INTSOY

College of Agriculture
University of Illinois at Urbana-Champaign
113 Mumford Hall, Urbana, Illinois 61901 U.S.A.

College of Agricultural Sciences
University of Puerto Rico, Mayaguez Campus
Mayaguez, Puerto Rico 00708

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INTERNATIONAL SOYBEAN PROGRAM (INTSOY)
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
UNIVERSITY OF PUERTO RICO, MAYAGUEZ CAMPUS

TRIP REPORT -- Colombia

NAME: Michael E. Irwin, Associate Professor, Agricultural Entomology and Plant Pathology

PERIOD OF TRAVEL: November 24-27, 1980

ITINERARY:

November 24 Champaign/Chicago/Miami/Barranquilla/Cali
 Leave CMI 6:30 am; arrive Cali 7:00pm
November 25 At ICA, Palmira; afternoon at CIAT
November 26 At ICA, Palmira; Cali/Bogota/San Juan, Puerto Rico
 Leave Cali 6:00pm, arrive San Juan 9:00pm
November 27 San Juan/Atlanta/Chicago/Champaign
 Leave San Juan 9:00am; arrive CMI 4:00pm.

PURPOSE:

To present seminars on aspects of integrated pest management and soybean entomology to the ICA/INTSOY Soybean Production Course participants. These presentations are in Spanish and the course is being held at the ICA Experimental Station, Palmira.

INSTITUTIONS AND PERSONS CONTACTED

Instituto Colombiano Agropecuario (ICA), Palmira

Dr. Gilberto Bastidas, Course Coordinator
Dr. Jorge Victoria, Head of Plant Pathology
Dr. Fulvia Garcia, Head of Entomology
Ing. Bertha Alomia de Gutierrez, Entomologist
Ing. Raul Varela, Plant Breeder in Legume Program
Ing. Francia de Agudelo, Nematologist

Centro de Investigacion de Agricultura Tropical, (CIAT)

Dr. John Nickel, Director General
Dr. Douglas R. Laing, Head of Crops Research
Dr. Anthony Bellotti, Entomologist in Cassava Program
Dr. Aart van Schoonhoven, Leader of Bean Program
Dr. Cesear Cardona, Entomologist in Bean Program

Universidad Nacional, Medellín

Dr. Raul Vélez, Entomologist visiting ICA Palmira

International Soybean Program (INTSOY), Peru Program

Dr. Luis Camacho, INTSOY Plant Breeder at the course

RESULTS/ACCOMPLISHMENTS:

1. I gave four hours of lecture in Spanish to the course participants. They were from diverse backgrounds but seemed to be genuinely interested in the concept of pest management and its practice. A list of participants (Attachment A) accompanies this report.
2. I had several conversations with members of ICA entomology and plant pathology groups about the project on machismo disease of soybeans. On the entomology side, several of the species of leafhoppers commonly found in soybeans were found not to breed on soybean under laboratory conditions: Tylozygus fasciatus, Hortesia similis, Sanctanus fasciatus, Gypoha arandus, Draculacephala clipeata, and Oliarus sp. They are maintaining a colony of Scaphytopius fuliginosus in the laboratory and have not tested Empoasca krameri yet.

One of the members of the plant pathology team, Francia de Agudelo, is interested in coming to UIUC for advanced training in virology and/or nematology.

Upon conversing with Dr. Julio Victoria, I found out that the seeds sent by Bob Goodman have not yet arrived. Jorge feels the best time to plant out the lines for testing resistance to machismo disease is May-June with symptom development in August-September. The second best time is to plant in December-January with symptom expression in March-April. The second timing will not produce as high a level of infection. Julio also suggested the possibility of increasing the seed and expanding to three regional trials.

I asked Dr. Victoria if there was a possibility of detecting the presence of the microplasma like organism causing machismo disease soon after infection. Symptom expression takes 40-45 days which is very late for following spread patterns in epidemics. He said if he had some supplies, he could probably produce an antiserum.

He also reported to me a severe outbreak of machismo disease in soybeans near El Espinal, Tolima. This is the first report of the disease in a valley other than the Cauca Valley.

3. Luis Camacho and I talked with Doug Laing and John Nickel about the interest CIAT has in closer ties with INTSOY.
4. One of the course participants, Jorge Mejia Quintana of Colombia, told me of an attack by termites on soybean cv. Davis in Codazzi. He gave me a sample of termites to get identified. To my knowledge this is the first time termites have been reported as a pest of soybean plants.

FOLLOW-UP ACTION

1. Make some copies of several slides to send to Jorge Victoria.
2. Have Bob Goodman send, via John Santas, xerox of shipment documents for seeds sent to ICA.

3. Get the termites identified and send determination to:

Jorge Mejia Quintana
ICA - TIBAITATA
AA 151123 EL Dorado
Bogota D.E., Colombia

COMMENTS:

I wish to express sincere thanks to those of ICA and CIAT that spent time discussing soybean production and entomology with me. Especially, I wish to thank Gilberto Bastidas for making everything flow smoothly while I was in Colombia.

ATTACHMENT:

A list of participants attending the Second International Course on Soybean Production, ICA Palmira, Colombia.

12-5-80sjm

ATTACHMENT A

SEGUNDO CURSO INTERNACIONAL DE SOYA
 CURSO INTENSIVO DE ADIESTRAMIENTO EN PRODUCCION DE SOYA
 CENTRO NACIONAL DE INVESTIGACIONES AGROPECUARIAS PALMIRA
 ICA - INTSOY

LISTA DE PARTICIPANTES

<u>NOMBRE</u>	<u>PROCEDENCIA</u>
ERNESTO ZELARAYAN	ARGENTINA
NESTOR JORGE OLIVERI	ARGENTINA
PEDRO MANUEL FIGUÉIRA DE OLIVERA MONTEIRO.	BRASIL
JORGE BALDERRAMA	BOLIVIA
ADONIAS SARMIENTO	COLOMBIA
RAFAEL MURGAS	COLOMBIA
GUSTAVO OCHOA TORO	COLOMBIA
JORGE MEJIA	COLOMBIA
MANUEL J. OCAMPO	COLOMBIA
HECTOR MORA	COLOMBIA
JOSE RAMIREZ	HONDURAS
FERNANDO PIZARRO FERNANDEZ	MEXICO
ARTURO GARCIA LASSO	MEXICO
JOSE LUIS LEAL MANUJANO	MEXICO
HUMBERTO DE LA FUENTE	MEXICO
MARIO RIVERA DE LABRA	MEXICO
PABLO LOPEZ	NICARAGUA
MAXIMINO CHAVEZ	PANAMA
ROBERTO CASACCIA	PARAGUAY
FELIX RAMON QUINTANA	PARAGUAY
VICTORICO SOTO CHAVEZ	PERU
ANDRES BRAULIO SERQUEN RODRIGUEZ	PERU
HERMES VELASQUEZ ARAUJO	PERU
RICARDO SALDARRIAGA LUNA	PERU
ANIBAL MONTENEGRO SAMAME	PERU
CESAR TIO TIO	PERU
EDUARDO CERVANTES HUAMANI	PERU
GUNTER PIZARRO TORRES	PERU