Intsormil

TRIP REPORT
PHILIPPINES

BY

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TEXAS A&M UNIVERSITY

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☆ International
Sorghum/Millet

☆ Collaborative Research
Support Program
(CRSP)

A Research Development Program of the Agency for International Development, Participating Land-Grant Universities, Host County Research Agencies and Private Donors.

Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln

Traveler: R. A. Frederiksen, Professor, Plant Sciences, Texas A&M University

Purpose: To participate in the Final Oral examination of INTSORMIL trained graduate student, Marina Natural and review INTSORMIL program in the Philippines.

Places and Organizations Visited.

IRRI
PCARRD (Philippines Council for Agricultural Resources, Research and Development)
University of Philippines, Los Baños, Institute of Plant Breeding and Department of Plant Pathology.

Persons Contacted.

INTSORMIL - Jerry Maranville
PCARRD - Ramon Valmayor, Ex. Deputy Director General
Dely Gapasin - Director Crop Research
UPLB - Emil Q. Javier, Chancellor
Cledualdo B. Perez, Jr. Dean, College of Agriculture
UPLB/IPB - Ricardo Lantican
Dr. Sammy Dalmacio - sorghum improvement leader and pathologist
Dr. Diday del Rosario - Physiologist sorghum
Dr. A. L. Cardena - plant breeding
Dr. L. M. Engle - plant breeding
Miss Elsa P. Padfres - graduate student in plant pathology
Miss Araceli R. Pua - graduate student in plant pathology
UPLB/
Dept. of Plant Pathology - Dr. T. Reyes, Head
Dr. F. Orillo (Former Dean of Agriculture)
Dr. L. Ilag
Dr. O. Exconde
Dr. X. Quimio

IRRI - Dr. Pandey - cropping systems
Dr. Hibino - virology
Dr. M. Bonman - plant pathology

Itinerary

Departure: May 19, 1983, 6:40 a.m.
Arrival: Manila, Philippines, May 20, 1983, 11:00 p.m.

May 21, 1983: Spend day with Sammy Dalmacio.
Reviewed sorghum pathology program
Sorghum breeding
Toured local cropping program (Los Baños area)
Met with Dr. O. Exconde for update on Downy Mildew Program

May 22, 1983: Spent day with Dr. Maranville. He briefed me on his program and met Clay, Cole, Case, and Donna.

May 23, 1983: In the morning I participated in the examination of Dr. Marina Natural. In the afternoon, took tour of IRRI facilities and met pathology group. Discussed potential research problems relating to host plant resistance.

May 24, 1983: Met staff at IPB (Ricardo Lantican) discussed continued INTSORMIL collaboration. In the afternoon, toured IRRI cropping sequence plots with Maranville. Met IRRI Farming Systems specialist, Dr. Pandey. In the evening, attended special ceremony for Dr. Maranville at PCARRD. Met Dr. Ramon Valmayor, Deputy Executive Director PCARRD, Dr. Dely Capasin - Director Crops Research PCARRD.

May 25, 1983: Flew to INTSORMIL TC Meeting in Kansas City.

May 26, Attended TC meeting.
Returned to College Station.

Major Observations and Accomplishments.

1. Marina Natural completed her Doctorate and has been appointed to the faculty of Plant Pathology at UPLB. Her appointment will be as an Assistant Professor of bacterial diseases.

2. Examined sorghum nurseries and research directed by Dr. S. Dalmacio. Local nurseries had good bird resistance.

3. Review progress of INTSORMIL sorghum research with staff at PCARRD and IPB. There is little present interest in sorghum because of declining acreage.

4. Review cropping systems work with Drs. Maranville and Pandey. Exciting work that supports the concept of sorghum following rice.

Narrative of Observations.

1. Dr. Natural joins an already gifted faculty of Plant Pathology, for example, Dr. Exconde has received two Presidential awards for research and is internationally recognized as a leader in downy mildew research. He has shifted his research program to bacterial stalk rot because of his confidence that the downy mildew problem has been solved. Dr. Orillo, former Dean of Agriculture, has slipped down to a teaching position. Drs. Ilag & Reyes, co-chairman of Dr. Natural's committee and Department Head, also provide strong leadership in the Department. In the Philippines there is a need for additional graduates in both plant pathology and Plant Protection, particularly at the graduate level. The pathology labs at IPB were adequately, although not overly well equipped. It appears the support for teaching is poor. We should be able to support graduate training of Philippinos at both UPLB and among U.S. institutions.

2. Dr. Dalmacio needs both high levels of disease resistance and bird resistant cultivars. Currently he is evaluating sorghum for resistance to grey leaf spot, tar spot and rust. A few entries with resistance to each of these diseases has been located. Concurrently research is underway to determine potential recurrent lines as to ascertain suitable agronomic traits. The plants should be high yielding and resistant "storm proof" early maturing and possess disease resistance. Females from tropically adapted US material and those from ICRISAT look good at Los Baños. Dr. Maranville and Purdue scientists have determined that the Philippines bird resistant sorghums are relatively low in tannins.

3. The work underway by Dr. Maranville demonstrated the value of collaborative work. Part of the value is the training of US Scientists and bringing them on line with

problems in developmental agriculture. In the Philippines, I believe Dr. Maranville demonstrated his ability to interact with scientists from several disciplines and to foster such cooperative work among agronomist. This experience, in my opinion, makes him a much more valuable INTSORMIL scientists. The loss in interest in sorghum by PCARRD is said to be caused by several factors, but among the more important may be the loss of reliable seed supplies and marketing of sorghum grain. I have no details on the marketing problem, but the seed supply is related to the termination of sorghum seed sales by a major supplier. (They may have dropped out of the market because of their cultivars did not have sufficient levels of disease resistance).

A proposal developed by IPB was submitted by Ricardo Lantican. It represents a small, but sound program of sorghum research for the next year. I urge its acceptance by the TC and recommend its funding.

Dr. Dalmacio expects to travel to the US on or about June 12, and return July 16. He will want to visit with:

Georgia:	Ronny Duncan's program.
Texas A&M:	Teetes, Frederiksen, Miller, Rosenow, Odvody.
Texas:	Hybrid breeding programs.
Nebraska:	Maranville and colleagues.
Purdue:	Axtell and Butler.
Iowa:	Annual meetings of the American Phytopathological Society.

4. The cropping systems work at IRRI impressed me by its breadth and in part because of Dr. Pandey's interest in sorghum. Both Dr. Maranville and Pandey were satisfied with its potential in a rice paddy culture.