



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



caribbean food crops society

19

**Nineteen
Annual Meeting
August 1983**

PUERTO RICO

Vol. XIX



**caribbean
food
crops society**

**Nineteen
Annual Meeting
August 1984**

PUERTO RICO

Vol. XIX

CARIBBEAN FOOD CROPS SOCIETY

NINETEENTH ANNUAL MEETING
PUERTO RICO
SEPTEMBER 11-17, 1983

PUBLISHED WITH THE COOPERATION
OF THE
UNIVERSITY OF PUERTO RICO
MAYAGUEZ CAMPUS

1984

VOLUME XIX

CONTENTS

	<u>Page</u>
OFFICERS 1982-83 -----	1
LOCAL ORGANIZING COMMITTEE -----	2
 ADDRESSES	
Remarks of Dr. Alejandro Ayala at the Opening Session -----	3
Welcome Address at the Opening Session Prof. Salvador E. Alemany Chancellor University of Puerto Rico, Mayaguez Campus -----	5
Technology Transfer: The Key to Unlock the Agricultural Potential of the Caribbean Dr. Alejandro Ayala President, CFCS -----	9
Message at the Closing Ceremonies Hon. Carlos S. Quirós Secretary of State of the Commonwealth of Puerto Rico --	16
 BUSINESS MEETING	
Report of the President -----	20
Report of the Secretary -----	24
Report of the Treasurer -----	26
 TECHNICAL PAPERS	
Cropping systems research involving banana and food crops on farmers' holdings in the Windward Islands - M. M. Rao and J. E. Edmunds -----	27
Lineamientos estratégicos para la transferencia de tecnología - Ing. Rolando Sanchez Diez e Ing. Julio Santamaría -----	40
Introduction of a seed collection program in Aruba, and its relation to agriculture extension - Ing. Ivan A. Nicolaas -----	52
Nutrient uptake by five intensively managed tropical food crops - Heber Irizarry, José Vicente-Chandler and Edmundo Rivera -----	62

Page

Respuesta del pimiento a varios niveles de N y P en un Oxisol - Agenol González y Alberto J. Beale -----	78
Studies on hardening off methods and starter containers for giant Cavendish banana explants shipped into St. Croix, U.S.V.I. - C. Ramcharan -----	89
Flowering and plant height of thirty pigeon pea (<u>Cajanus cajan</u> (L.) Millsp.) in response to three sowing dates in Barbados - B. A. Clarke -----	97
Response of corn (<u>Zea mays</u> L.) to planting dates in Puerto Rico - S. Torres-Cardona and A. Sotomayor-Ríos -	112
A survey on algal infestation in rice fields in Puerto Rico - Lii Chyuan Liu and Ramón Seda del Toro -----	126
La competencia del arrocillo (<u>Echinochloa colonum</u>) con la batata (<u>Ipomea batatas</u>) - Nelson Semidey-Laracuente, Lii Chyuan Liu, Luis Almodóvar-Vega y Horacio Ortiz ---	132
Evaluación preliminar de herbicidas preemergentes en apio (<u>Arracacia xanthorrhiza</u> Banc.) en Oxisol - Luis Olivier y Alberto J. Beale -----	141
Efecto de la competencia de las malezas en el rendimiento final del ñame habanero (<u>Dioscorea rotundata</u> Poir) J. A. Cortés y Alberto J. Beale -----	146
A preliminary evaluation of field-planted Maricongo and Dwarf plantains grown from explants, using nematicides, standard cultivation and fertilizer practices - C. Ramcharan and W. I. Knäusenberger -----	155
Residuos de plaguicidas en cultivos tropicales - Rafael Montalvo Zapata -----	165
Genetic variability and correlations of yield components and resistance to <u>Phytophthora infestans</u> , <u>Alternaria solani</u> , and <u>Meloidogyne</u> spp. in tomato - Alfredo Valiente and Linda Wessel Beaver -----	181
Enfermedades bacterianas del tiquisque (<u>Xanthosoma</u> spp.) en Costa Rica - Irma Laguna, Luis Salazar y Fernando López -----	194
Evaluación de una población seleccionada de <u>Phaseolus coccineus</u> inoculada con los virus causantes del mosaico dorado del frijol, mosaico común del frijol, y mosaico del caupí en Puerto Rico - Mildred Zapata y George F. Freytag -----	208

Page

Les noctuelles (<u>Lepidoptera noctuidae</u>) nuisibles aux cultures industrielles et vivrières en Guyane Francaise - The noctuids (<u>Lepidopter noctuidae</u>) dangerous to food and industrial crops in French Guiana - J. F. Silvain and F. Thiberville -----	217
El daño económico de <u>Diaprepes abbreviatus</u> (L.). (Coleoptera: Curculionidae) en un campo de caña de azúcar - Economic Losses of the sugar cane weevil (<u>Diaprepes abbreviatus</u>) on sugar cane - Edwin Abreu and Carlos Cruz -----	240
Identification of quality characteristics of sweet potato used as a staple food in the Caribbean - Franklin W. Martin -----	249
Evaluation of dry beans grown locally - José R. Cruz, Edelmiro J. Rodríguez, Isabel B. de Caloni and José Badillo -----	255
Suitability of communal rearing for performance testing of tilapias - Andrew S. McGinty -----	259
Comparative studies on proximate composition of <u>Tilapia nilotica</u> in relation to diet type - J. M. Kubaryk -----	267
The sorghum conversion program - A. Quiles-Belén and A. Sotomayor-Ríos -----	273
Tanier tissue culture in Puerto Rico - Lii Jang Liu, Evelyn Rosa Márquez and María Luisa Biascochea -----	280
Alternative uses for sugarcane in the Caribbean basin - Alex G. Alexander -----	281
Energy-integration and environmental-compliance concepts for tropical dairy farming - Alex G. Alexander -----	295
A systematic approach to improved yam production methods in Barbados - Frances L. Chandler, Syed Q. Haque and Patrick Bethell -----	306
Technological progress and crop production in Jamaica 1968 to 1976 - Herman I. Brann and George Morris -----	320
Rendimiento de la papa china (<u>Colocasia esculenta</u> Schott) en el trópico perifímedo en función de sistemas y distancias de siembra - Nelson Gómez Arias -----	338

	<u>Page</u>
Germoplasma de aráceas comestibles en Colombia - Nelson Gómez Arias -----	342
Validación, difusión y adopción de prácticas agrícolas nuevas - Rodrigo H. Rodríguez -----	350
El talón de Aquiles de la difusión de innovaciones agrícolas en Puerto Rico - Samuel O. Vélez Delgado -	365
Búsquedas computadorizadas de información en el campo de la agricultura - Iraida O. Padovani y Luisa Vigo Cepeda -----	370
Characteristics of successful agricultural technol- ogy transfer systems with special reference to CARICOM countries - Warren M. Forsythe -----	379
Human resources needs and development for extension - Bernard L. Pollack -----	397
WORKSHOPS RECOMMENDATIONS .	
Caribbean Food Crops Society Workshops Recommendations -----	400

CARIBBEAN FOOD CROPS SOCIETY OFFICERS

CARIBBEAN FOOD CROPS SOCIETY OFFICERS - 1982-83

President

DR. ALEJANDRO AYALA
Dean and Director
College of Agricultural Sciences
University of Puerto Rico
Mayaguez Campus
Mayaguez, Puerto Rico 00708

Vice-President

RICHARD BRATHWAITE
Department of Crop Sciences
University of West Indies
St. Augustine, Trinidad

Board Members

JOHN P. W. JEFFERS
P. O. Box 505
Bridgeton, Barbados

Ms KAY DONAWA

Director of Caribbean Programmes
Partner of the Americas
Caribbean Regional Office "Noranda"
L. R. Collymore Rock
St. Michael, Barbados

PATRICK DALY

B. P. 427
Fort-de France, Martinique

I. A. NICHOLAAS

Ministry of Agriculture
Aruba, W. I.

JOSEPH R. SUAH

CARDI Jamaica
OWI - Mona Campus, Jamaica

HORARIO STAGNO

IICA - Apartado 711
Sto. Domingo, Rep Dominicana

POLIBIO VARGAS

Calle C - No. 4 Apto. 3
Ensanche Serralles
Sto. Domingo, Rep. Dominicana

LOCAL ORGANIZING COMMITTEE

LOCAL ORGANIZING COMMITTEE

Alejandro Ayala, President

Roberto Vázquez

Beriberto Martínez

Israel Cordero

Rafael Montalvo Zapata

Miguel González-Román

Carlos Cruz

Havdée Jirau

Jorge Luis León

Pedro Meléndez

Douglas Pool

Antonio Vélez Ramos

Miguel A. Lugo-López

Provi Ayala

Juan Padilla Marrero

Samuel Vélez

Luz B. Santisteban

Carlos Pérez