

IICA



COTTON AND YAMS
IN
BARBADOS

A SELECT ANNOTATED BIBLIOGRAPHY

Compiled by
Marcia Nurse

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TOWN, BARBADOS

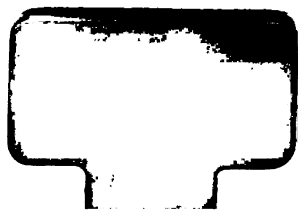
IICA

1988

Miscellaneous Publication Series No.

A2/BB-88-011

ISSN-0534-5391



COTTON AND YAMS IN BARBADOS:

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Prepared and compiled

by

Marcia Nurse

BRIDGETOWN, BARBADOS

1988

*Published by the Inter-American Institute for Co-operation on
Agriculture (IICA), in collaboration with the Ministry of
Agriculture, Graeme Hall, Christ Church.*

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no. 88-011

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ACKNOWLEDGEMENTS

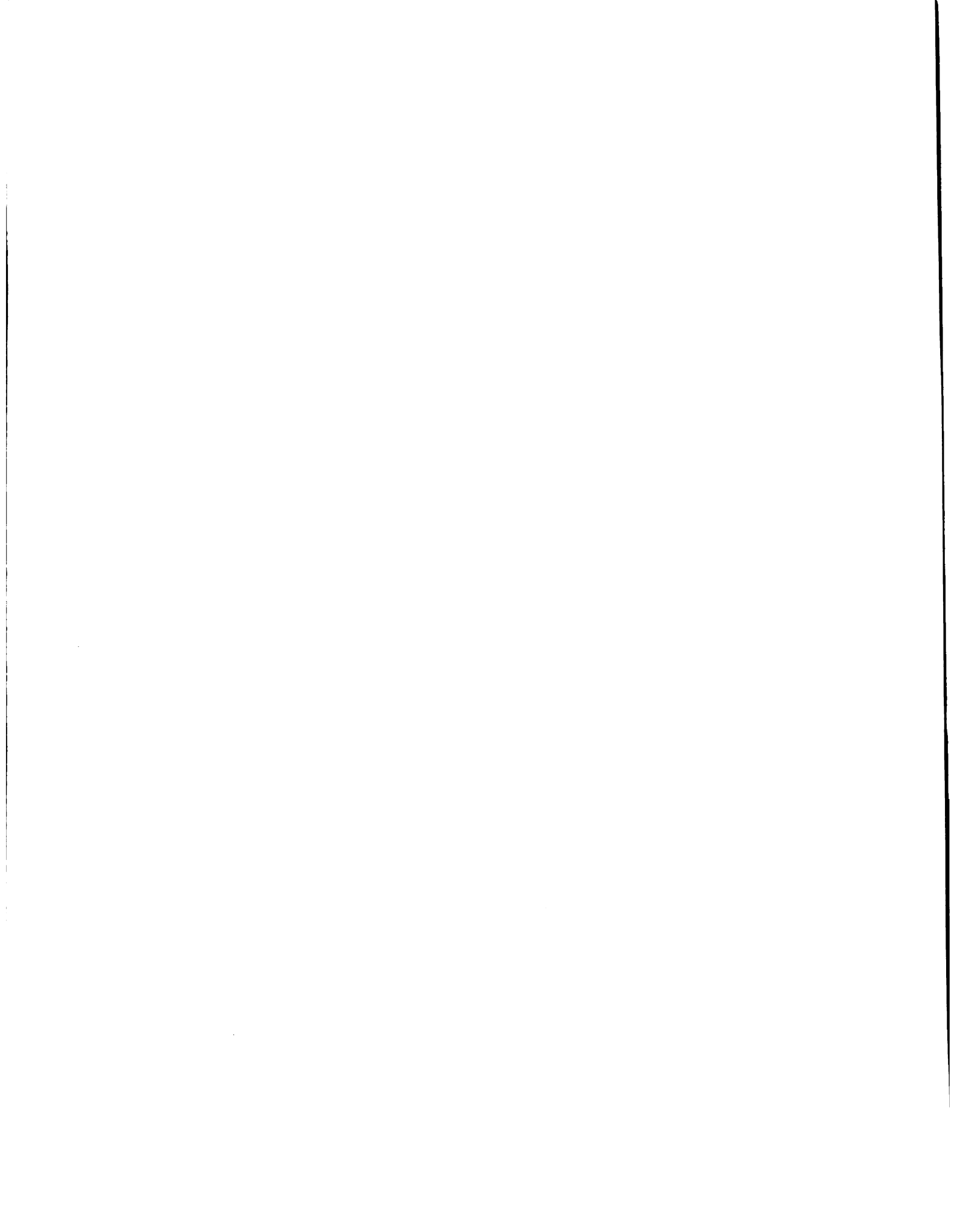
The preparation of this bibliography presented me with difficulties of various kinds. The co-operation however, and generosity of a number of persons lightened the task and made it possible for me to enjoy the exercise.

I wish to thank the staff of all the organizations cited in this work. Especial thanks however, are conveyed to Francis Chandler and Mr. Pollard of CARDI ; George Bailey of the Ministry of Agriculture and Keith Springer of the National Library Service. Their efforts in ferreting out information reduced much of the tedium associated with this phase of the project.

I wish also to record my gratitude to graphics artist Trevor Pollard of the Ministry of Agriculture.

My sincere thanks to Mr. Marvel O'Neal who provided the technical expertise which enabled me to utilise the software package Microisis for the production of the bibliography.

Finally I extend my warm appreciation to Neville Millington and Leonard Nurse who accepted the onerous task of proofreading and executed it with dilligence.



FOREWARD

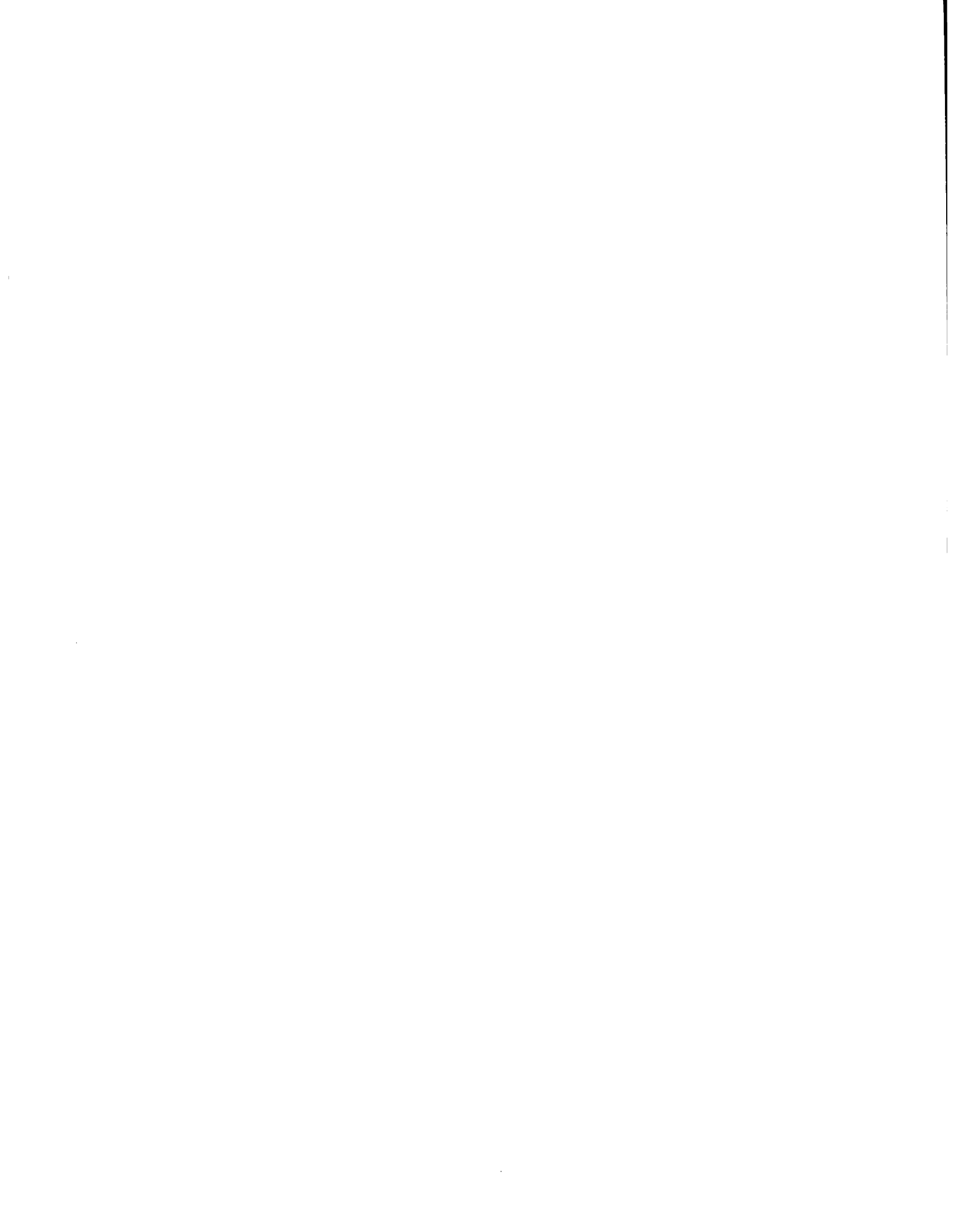
Diversification and modernization of agriculture in Barbados are considered two key policy watchwords. They reflect the need to stimulate domestic food production, and expand non-sugar agricultural exports. Cotton and yams are considered crops of major importance in the diversification effort.

The Inter-American Institute for Cooperation on Agriculture in collaboration with the Ministry of Agriculture, Food and Fisheries offers this bibliography to facilitate the work of researchers and practitioners in their tasks of improving cotton and yam production and marketing in Barbados.

This work should be viewed as a first step in a continuing effort. Future initiatives to update this bibliography will be facilitated because this information contained in this document has been incorporated as part of a computer data base.

IICA is particularly pleased to have participated in this effort and wish to express its appreciation to the Ministry of Agriculture, Food, and Fisheries for the cooperation received. It is hoped that this bibliography will save both time and effort by those who are asked to work on cotton or yam development in Barbados.

Michael J. Moran



INTRODUCTION

Agricultural research in Barbados and the Caribbean has contributed significantly toward overall improvements for many crops. All too frequently however, research findings are not adequately recorded and consequently this results in retarding advancements in particular subject areas as researchers expend valuable time on ground already covered, through lack of information.

The Inter - American Institute for Co-operation on Agriculture (IICA), in collaboration with the Ministry of Agriculture, Food and Fisheries offer this bibliography as the first step in what hopefully will be a continuing effort toward the bibliographical control of information in the field of agriculture.

An attempt was made to capture as far as possible, all available documents. This goal however was not realised due to time constraints. The fact that the bibliography was generated from the computer will facilitate update operations and it is hoped that in time a truly comprehensive coverage will be achieved.

The bibliography is arranged in two sections - Cotton and Yams. These are then filed by author and title and numbered sequentially by master file number (MFN). There is an author and subject index and reference is made from both of these to the bibliography through the (MFN) which is the second component of both indexes. For example "Yams 056" refers to an entry in the bibliography which is numbered 056 and is listed sequentially.

In those few cases where documents had abstracts, these were used and recognition is herewith paid to the authors. This bibliography as was stated, is intended to be manipulated on-line and this is reflected to some degree in the printed version. Selected keywords and phrases in the abstract are bracketed < >. This indicates that these terms can be used for searching in an on-line environment. In addition, all except non-significant words in titles can be used for retrieval purposes.

Finally, during the collection phase of this project, it became distressingly evident that some documents are poorly housed and inadequately recorded and consequently are in danger of being "lost" to research. It is hoped that those organizations concerned will soon implement steps to preserve their valuable resources for posterity.

EXPLANATION OF ABBREVIATIONS USED IN BIBLIOGRAPHY

AGRIC	Barbados. Ministry of Agriculture, Food and Fisheries
AGRIS	Agricultural data base of the DIALOG Retrieval Service
BADC	Barbados Agriculture Development Corporation
BSIL	Barbados Sugar Industry Limited
CARDI	Caribbean Agricultural Research and Development Institute
CDB	Caribbean Development Bank
FAO	United Nations. Food and Agricultural Organization
IICA	Inter-American Institute for Coopera- tion in Agriculture
NLS	National Library Service
TCL	Tissue Culture Laboratory, CARDI, St. Philip



BARBADOS AGRICULTURAL DEVELOPMENT CORPORATION

Agricultural diversification project. Isreal, Agridev, 1985.

44p. :charts.

Availability: AGRIC.

The need for crop <diversification> as an economic urgency is demonstrated in the co-operation between the Ministry of Agriculture and farmers in the execution of <research> projects. Consultants from Isreal worked with local authorities on <experiments> on <machine planting>; use of <herbicides>; <spacing> and <plant density>; <fertilization>; <pest> control and the mechanization of sorting and the <acid delinting> of <cotton> <seeds> to improve quality of local seeds. Annex B4 shows fertiliser experiments using rainfall as a parameter.

001

BARBADOS. DEPARTMENT OF SCIENCE and AGRICULTURE

Cotton. /Department of Science and Agriculture. Bridgetown, Dept. of Sci. & Agriculture, 1974.

12p. - (Pamphlet no.4).

Availability: AGRIC.

A handbook for farmers on the cultivation of <cotton> in <Barbados>. The basics - planting season; <land preparation>; <fertilisers>; spacing; seed rate and use of windbreaks are covered. The issue of pests is discussed in terms of rigid adherence to regulations set up for control. Diseases of the cotton <angular leaf spot> <black arm> and <bacterial boll> disease are discussed with regard to symptoms; <transmission> and <prevention>.

002

BARBADOS. MINISTRY OF AGRICULTURE and FISHERIES

Annual report 1985: cotton development program. /by Michael Grant. Graeme Hall, Ministry of Agriculture, 1985. 28p.

Availability: AGRIC, FAO, NLS.

This report discusses the role and efforts of the Ministry of Agriculture in improving the quality of <cotton> produced in <Barbados>. The report analyses the operations of the Ministry for 1985 in some detail. These include <close season> activities, crop establishment - planting dates; <germination> and emergence; details of research -



spacing <trials> <NPK trials> <defoliation> of cotton and extension details. Recommendations for the successful development of the industry are given.

003

BARBADOS. MINISTRY OF AGRICULTURE, FOOD and FISHERIES

Annual report for 1984. /M. St. E Grant. Graeme Hall, Ministry of Agriculture, 1984.

7 leaves.

Availability: NLS, AGRIC.

The failure to observe <close season> regulations is a threat to the <cotton industry>. Tests were carried out on seeds imported from Antigua of the <MSI> variety. The need for proper storage viewed as an important factor. <Weedicides> and <insecticides> seen to be most effective when used in combinations (<cotoran> <treflan> and <karmex>). Research for the period investigated the cost, production and spacing of cotton at <Graeme Hall> using MSI seeds to determine (a) the cost of production of one acre of cotton (b) the effect of spacing on height of plant.

004

BARBADOS. MINISTRY OF AGRICULTURE, FOOD and FISHERIES

Annual report 1986: cotton development program. /by M. Grant. Graeme Hall, Ministry of Agriculture, 1987.

24p.

Availability: AGRIC.

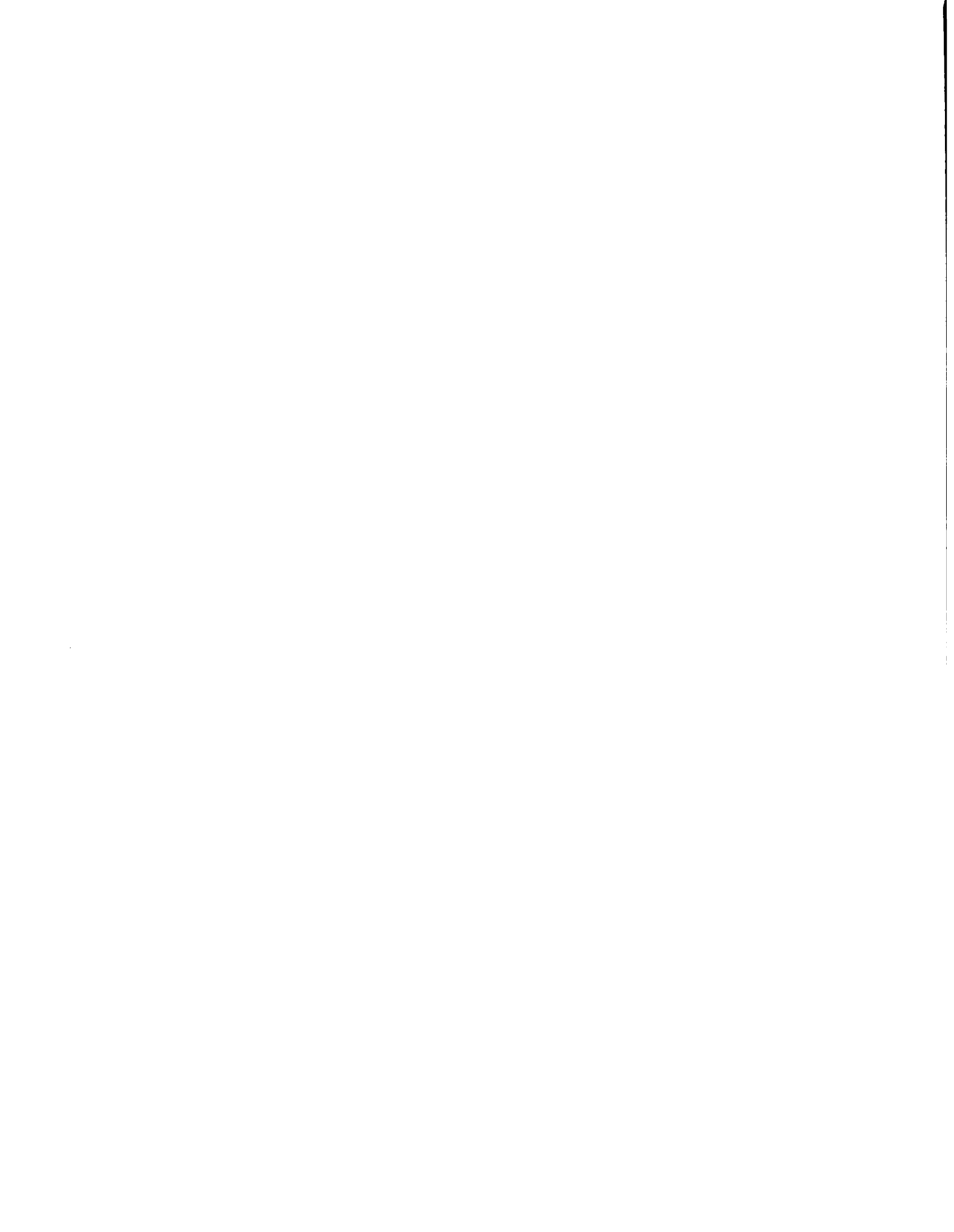
After a period of no production, <Sea Island Cotton> growing has revived during 1983-84 with good yields being realised in 1985-86 due to good rainfall distribution and few pests-related problems. The 1986-87 crop suffered poor seed <germination> and drought as well as inadequate drainage, poor <crop management> and incomplete <harvesting>. This report examines the <eradication> effort, seed technology, rainfall, cotton acreage and various aspects of crop management from <planting> through harvesting and <ginning> activities.

005

BARBADOS. MINISTRY OF AGRICULTURE, FOOD and FISHERIES

Cotton entomology in Barbados: progress report 1st July 1976-30 June, 1977. /W. R. Ingram. London, Centre for Overseas Pest Research, 1978.

55p.



Availability: AGRIC.

An indepth examination of <cotton> <pests> on various plantations in <Barbados>. The study evaluates the occurrence and effect of pests on the cotton industry. Pests - <Bollworms>; <Red spider mite>; are studied and methods for control - natural, chemical are discussed. <Trials> are analysed using <meteorology> as a parameter to determine the effectiveness of various <spraying> techniques. The effect of different <insecticides> on combined <infestation> is assessed.

006

BARBADOS. MINISTRY OF AGRICULTURE, FOOD and FISHERIES

Cotton research report 1986 - 7. /by Adrian R. Estwick. Graeme Hall, Ministry of Agriculture, 1987.
13 leaves.

Availability: AGRIC.

During 1986-7 research through the execution of field trials was carried out at various plantations on the island. The <agronomic> areas covered were <plant dates>; <herbicides> and <Plant Growth Regulators> <(PGR)>. This report gives the results of trials by location and at various time intervals. E.g. two weeks after treatment; six weeks after treatment, thus making for useful comparisons. A general discussion evaluating the results obtained is given.

007

CARDI

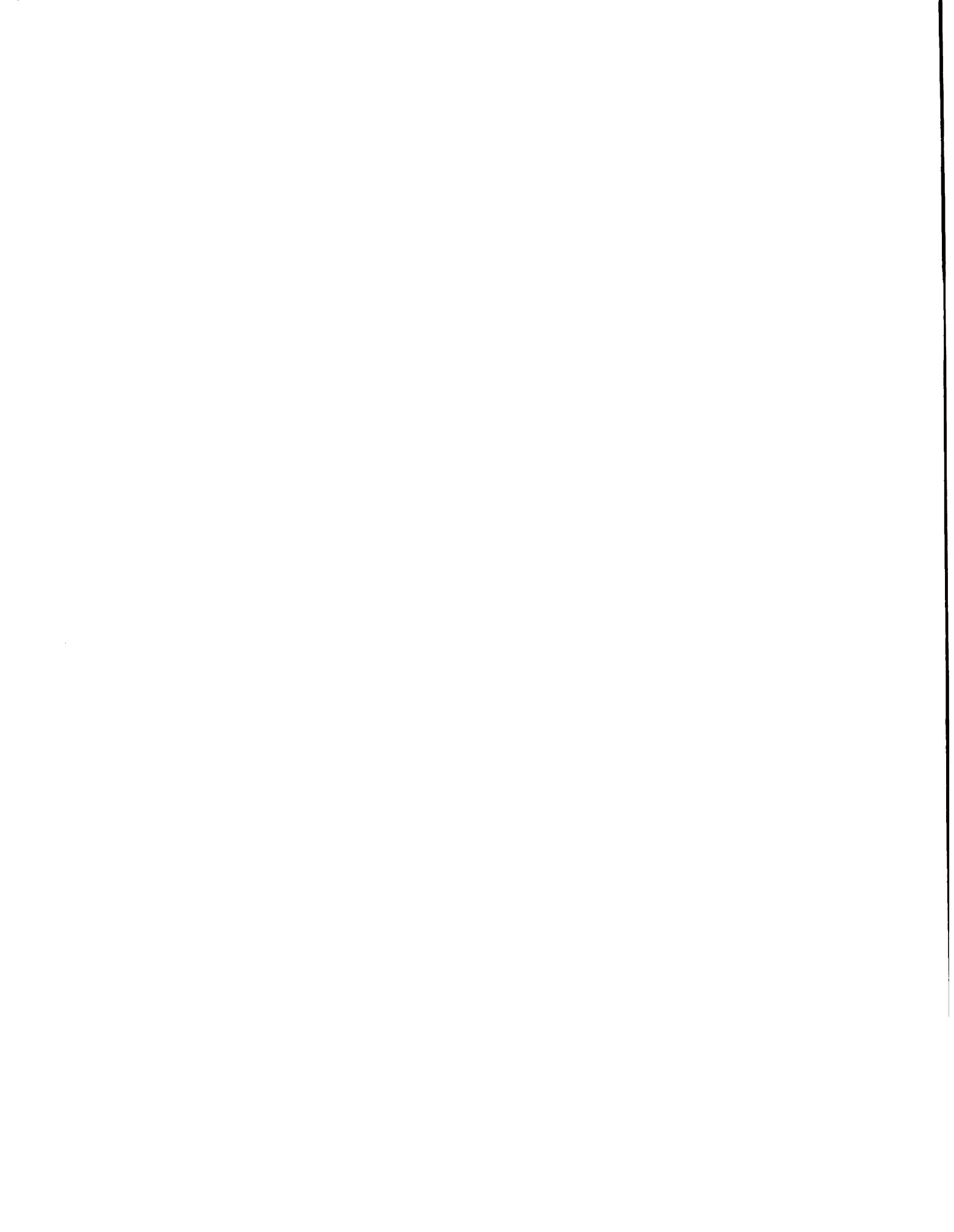
Other crops programme [sugarcane (*Saccharum officinarum*), cotton (*Gossypium* spp.), plantain (*Musa* spp.), and oilseed crops]. /CARDI. UWI, St. Augustine, CARDI, 1983.

pp. F1-F14.

Availability: CARDI.

Work on the biological control of the moth-borer and other sugarcane pests in Barbados and the Eastern Caribbean is described. <Sea Island Cotton>/peanut and cotton/corn <intercropping> trials in Nevis are described. In on-farm trials, gross income was increased by intercropping by an average 38 percent over pure stand <cotton>. <Fertiliser>, <herbicide> and integrated <pest> control studies were also carried out on cotton.

008



COOK, A.A

Diseases of tropical and subtropical field, fiber and oil plants. /A.A. Cook. London, Macmillan, [n.d].
pp. 10-51.
Availability: FAO.

This extract should be very useful for persons tracking down <diseases> of the <cotton> plant, many of which are pertinent to the local situation. The article details the effects of thirty-four(34) diseases and includes an extensive bibliography. Among diseases covered are: <Erwinia Spp.>; <anthracnose>; <Tobacco mosaic> and <Fusarium wilt>.

009

FARNUM, RALPH and MICHAEL GRANT

A guide to cotton cultivation in Barbados. /by Ralph Farnum and Michael Grant. Graeme Hall, Ministry of Agriculture, 1985.
8 leaves.
Availability: AGRIS, AGRIC.

Sea Island Cotton of excellent quality is grown in Barbados for export to Japan. Detailed guidelines are given for its commercial <cultivation> including environmental requirements, <planting> <dates> and rates; <land preparation>, <weed control>, <fertilization>, <harvesting> and <field sanitation>. <Control> methods for the common <pests> - <Pink Bollworm> <(Pectinophora sp.)>, <army worms> <(Spodoptera sp.)>; <cotton leaf worm>; <leaf worm>; <(Alabama argillacea)>; <lesser leaf worm>; <(Anonus impesta)>; <Aphis gossypii>; <bollworms> <(Heliothis sp.)> and <Red Spider Mite> are given.

010

INGRAM, W.R

Cotton entomology in Barbados 1974-1978: Final report. /W.R. Ingram. London, ODM & Ministry of Agriculture, 1979.
Availability: CDB.

Report seeks to evaluate various <pesticides> in both <low-medium volume> and <ULV> formulation in an effort to control <Alabama>, <Spodoptera>, <Plusia> and <Bucculatrix>. It also assesses the various methods of crop residues destruction with regard to the carrying-over of <Pectinophora>. It covers experimental work done on <cotton> <spraying>; <motorised knapsack mist blowers>; and

<skiprow planting>. Recommendations based on experiments are given. Cotton <pests> are examined i.e, history and damage, and for each, methods of <control> are discussed. Analytical data cover figures for <Sea Island Cotton> <production> 1974-1979.

011

INGRAM, W.R.

Pests of West Indian Sea Island cotton. /W.R, Ingram.
London, Centre for Overseas Pests, 1981
35p; 8p. of colour plates.
Availability: FAO.

An examination of some twenty-two (22) <pests> - <bollworms>; <stainers>; <blister-mites> etc in the region, including <Barbados>. Researchers should find the organization into <distribution> ; <hosts plants>; <damage> <pests status>; <life history> and <control> useful. It provides a ready reference on the pest under study. The discussion on control treats the <chemical>, cultural and <biological> aspects. It also examines the effects of <herbicides>; <spraying>; and <natural enemies>. Has bibliography appended.

012

LUCAS, C.H

A review of the 1970/80 cotton season in Barbados.
/by C.H. Lucas. Bridgetown, Ministry of Agriculture, 1980.
20p.
Availability: AGRIC.

The <cotton> acreage for the island continued its downward trend leaving its fate as a economic crop uncertain. An analysis of the cotton production compares the performance of cotton on four <hand-planted> <fields> with that on three <machine-planted> fields. Experiments are being carried out on the effects of <intercropping> of cotton and <corn> in one instance and cotton and <cane> in another. The industry is plagued by <mirids>; <army worms> and the <Pink bollworm>, a situation which is aggravated by acute labour shortages.

013

MICHAEL GRANT, ADRIAN ESTWICK and J.R. SPENCE

Background paper on cotton. /prepared by Michael Grant, Adrian Estwick and John Spence. Graeme Hall,

Ministry of Agriculture, 1987.

15 leaves.

Availability: AGRIC.

Paper presented at seminar "Programme Planning for Agricultural Diversification".

An overview of the cotton industry in <Barbados>, this paper examines the current market conditions e.g. the price offered by Japan, government incentives to farmers and competition from the <Giza 45> strain. Production, field and ginnery costs are analysed and tabulated data presented. Guidelines are given for the following aspects of production: <agronomy>; <insects> and <pests> and <profitability> factors. A development strategy covering production, <ginnery> operations; research work and marketing is outlined.

014

MINISTRY OF OVERSEAS DEVELOPMENT

Cotton entomology in Barbados and the Leeward Islands: progress report 1st July 1977-9th Dec. 1978. /W. R. Ingram. London, Centre for Overseas Pest Research, 1979. 61p.

Availability: AGRIC.

A review of the work done at the Central Agronomic Research Station, Graeme Hall, <Barbados>. The <Sea Island Cotton> crop was seriously affected by the <bollworm> (1978-79) requiring <insecticide> <control> for the first time. Peanuts and sorghum are used as hosts plants. <Pink bollworm> <moths> were trapped in <sex pheromone> <traps> for research on effective <control> methods. The results of <spacing> <trials>, <insecticide> trials and <fertiliser> trials are analysed and comparisons made with previous season's findings. <Scouting> activities though useful were inadequate due to insufficient staff.

015

PLANT PATHOLOGY SEMINAR: (1986: DOVER CONVENTION CENTRE, BARBADOS)

Plant pathology seminar: peanuts, onions, sugar cane epidemics ...1986. /Plant pathology Section, Ministry of Agriculture. Graeme Hall,, Ministry of Agriculture, 1986. 73p.

Availability: CDB.

Page (49) of this report discusses <anthracnose> in <yams> and its effect on yields especially the <White Lisbon> variety. It also looks at <pre-storage> treatment of <yam

planting material> and <control and prevention> of anthracnose. Pages (58-59) discuss plant pathology programmes for <cotton> e.g.< seed> viability, quality and pathology and some <diseases> of the cotton plant.

016

SCHOTMAN, CHARLES Y.L

Cotton pest management and quarantine. /Charles Y.L. Schotman. Bridgetown, FAO, [n.d].

4 leaves.

Availability: FAO.

This study by an FAO regional plant protection officer looks at <integrated pest management> and <quarantine>. This integrated approach is regarded as more desirable than the long term use of <insecticides> which could result in the unprofitability of <cotton> growing. Concepts of <integrated control> and strategies used for its success are discussed and the major points of this concept are listed.

017

SEA ISLAND COTTON CONFERENCE: (1932: BRIDGETOWN, MARCH 31ST TO APRIL 7TH)

Conference on West Indian Sea Island Cotton Growers...1932. [Bridgetown], WISICG, 1932.

42p.

Availability: AGRIC.

Appendices pp. 28-42 include a scheme for the formation of a West Indian Cotton Growers Assoc.

This conference reviewed the state of the <cotton> industry in particular the overproduction and underconsumption in the following islands: <Barbados>;<St. Vincent>;<Montserrat>; <St. Kitts> <Anguilla>; <Nevis>; and <Antigua>;. A decision was taken to form an association of West Indian Cotton Growers. Other decisions included the continuing cultivation of <Sea Island Cotton> as the main crop, restrictions of output through a reduction of acreage planted, the introduction of grading standards for each island and the introduction and sale of Sea Island Cotton goods.

018

SINGH, N.D and W.B. CHARLES

Cotton growing. /by N. D. Singh and W.B. Charles.
UWI, Cave Hill, CARDI, 1977.
17p. - (Technical Bulletin no.4).
Availability: CARDI.

This paper establishes growing conditions for <cotton>; discusses the commercial varieties found in the <Caribbean> and includes details on <land preparation>. These cover <seeding>; <seed rate>; <spacing> and fertilisers. The <mechanical> and <chemical control> of <weeds> is seen as a practical approach owing to the expensive nature of <hand-weeding>. The <bollworm>; <cotton leaf worm>; <aphids>; <leaf hoppers>; <mites>; <Pink bollworm>; <cotton stainers> ; and <corn ear worm> are covered. Gives distribution of <pests> in the <Commonwealth Caribbean> including <Barbados>, with recommendations for <control>.

019

SPENCE, J.R

Barbados cotton crop: 1983-1984. /J.R. Spence.
Bridgetown, [J.R.Spence], 1985.
22 leaves.
Availability: CDB.

Paper discusses the background to <Sea Island Cotton> in <Barbados> and its decline subsequent on <pests> <infestation>. The impetus for renewed efforts stemmed from <Japanese> interest(1983). Against this background, the author examines the efforts/results of (15) estates in terms of the acreage, <soil> types and climatic factors. Various operations are examined - <sowing>; <ginning>; pest control; <close season> operations etc. A case study approach is used thus facilitating comparisons of results among stations.

020

SPENCE, J.R

Barbados' harvest - the fertiliser factor. /J.R. Spence. Bridgetown, C'bbean Farm News, 1986.
Availability: AGRIC.

Marked improvements were observed in this season's crops. These are attributed to the successful use of the fertiliser <phosphate>; <nitrogen> and <potash>. Cautious spraying was also practiced and in spite of factors such as late <sowing>; <weeds> and damage from the <pink bollworm> yields generally showed improvement. The acquisition of a

John Deere 9920 harvester is expected to give a further filip to the industry.

021

SPENCE, J.R

Cotton. /by J.R. Spence. Bridgetown, C'bean Farm News, 1986.

Availability: AGRIC.

Increased prices offered by Japanese buyers of US \$4.50 per pound of lint has caused a renewed interest in cotton production leading to an increase in the acreage under cultivation. In <Barbados>, the acreage has increased from 50 to 600 acres in three crops. <Antigua> is attempting to reverse the decline by stricter attention to <close season> operations. The government of <Montserrat is coordinating the various stages of the industry. A warning is sounded however against the expectation that these attractive prices will last and caution is advised over increasing the acreage under cotton thus exposing more land to <soil erosion>.

022

SPENCE, J.R

Cotton in Barbados. /John R. Spence. Bridgetown, BAS, [1974?].
pp. 8-10.

Availability: AGRIC.

In: The Bajan Farmer, vol 2, issue 6.

A brief historical view of the <cotton> industry in <Barbados> from 1787-88 when 1,894,365 lbs of <lint> was exported and an overview of factors - the invention of the <saw mill>, the rapid rise in annual cotton production in the United States and the introduction of the <Pink bollworm> in the twenties which influenced the industry. The role of <WISICA> in promoting the <Sea Island Cotton> industry is described. Activities included <market analysis> and <cultivation> methods and research. Results reveal the need for mechanized <harvesting> and modern equipment, for example, the <rust picker>.

023

SPENCE, J.R

Review of the 1986 - 1987 cotton crop. /J.R. Spence.
Bridgetown, BSIL, 1987.

Availability: BSIL, AGRIC.

Competition with the Egyptian <Giza 45> has resulted in reduced prices for the Barbados <MSI> variety. Production costs however must be reduced if the crop is to be economically viable. This depends on the success of <mechanical harvesting>. <Wild cotton> and dried okras plagued <close season> operations. Poor germination due to climatic and other factors affected <fertilising> routines.

<Weed> control consisted of <intercropping> of cotton with sugar cane and the use of <herbicides>. Insects, not diseases were a cause for concern; these included <Pink bollworm>; <Red spider>; <leafworms>; <aphids> and <mirids>.

024

U.N. FOOD AND AGRICULTURE ORGANIZATION

Cotton diseases of economic importance present in the Caribbean. Bridgetown, FAO, [n.d].

8 leaves.

Availability: FAO.

A listing of <pests> and <diseases> of <cotton> categorised by name of pest; type; <status> and <distribution>. Country codes are used to indicate the presence of diseases/pests. <Barbados> is among several other <Caribbean> countries covered>. The report also indicates whether pests/diseases are of economic or quarantine importance in the Caribbean. A valuable document which can be utilised for a quick comparative review of the island's status with that of its neighbours.

025

WEAVER, J.B

Identification of TCDC technical activities and definition of detailed and concrete proposals. /J B Weaver. Bridgetown, FAO, [n.d].

3 leaves.

Availability: FAO.

A listing of activities and their venues with suggested co-ordinators for discussion at a workshop of the FAO. <Barbados> dominates the agenda in respect of being the most often selected country to host an activity. Topics for discussion include: <integrated pest management>;

<biological control>; extension package and <ginning>. Recommendations to governments, <farmers> and specialists are aimed at the improvement of the <cotton> industry.

026

WEAVER, J.B

Report of Sea Island cotton production in the Caribbean (for FAO workshop on Sea Island cotton). /J.B. Weaver. Bridgetown, FAO, 1986.

22 leaves.

Availability: FAO.

An examination of the production of <cotton> in <Barbados>, Antigua, St. Kitts, Nevis, and St. Vincent against the background of <Japanese> interest in the commodity. Specific recommendations are given for Barbados with regards to <harvesting>, <equipment>, <storage>. It also examines <agronomics> and includes recommendations to FAO about their role vis a vis cotton cultivation. Persons interested in particular species would find the section on cotton <genetics> useful especially as it highlights those species found in the region with information on <yields>. e.g the species (F1 of <G.barbadense x G.hirsutum>) is discussed in relation to the various tests done on it in <Barbados>. Advises on <insect> <control>, as well as selection and preparation of <seeds>.

027

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

The West Indies cotton experiments stations progress report. /J.R. Spence. London, Empire Growing Corp., 1965. 10p.

Availability: AGRIC.

An overview of the cotton industry indicates continued <labour> problems and low <yields>. Experiments at various stations analysed <climatic> factors; <agronomy> - <manuring>; <cultural methods>; <mulching>; <sowing> dates and <land> use. Breeding and variety <trials> are examined for the following varieties: <MSI>, <VH8>, <VH10> <BSI> (Barbados Sea Island Cotton Variety), and <Coastland>. <Pests> and <diseases> addressed during this period were the <Pink bollworm>; <cotton stainer>; <leafworm>; <nezara viridula>; <aphid>; <leaf miner>; <red spider> and <black boll disease> among others.

028

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

The final progress report on the West Indian Sea Island Cotton industry. /by Associated Industrial Consultants. London, Associated Industrial Consultants, 1970.

43 leaves.

Availability: AGRIC.

Examines the state of production of <Sea Island Cotton> in the <Caribbean>. Production is insufficient to allow <WISICA> to take advantage of new markets. The lack of total government support for crop <diversification> is seen as an issue for concern. This however, is directly related to production problems which can only be solved by the implementation of a perfect <machine> <harvesting> system. The future of the cotton industry rests on <mechanized harvesting>. Report recommends continued efforts in <promotion>; <textile> <market analysis>; including overseas markets; efficiency in farm production and control of the use of the <end products> and the application of the WISICA trademark.

029

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Advances in cotton pest control. /W.R. Ingram. [Bridgetown], WISICA, 1977.

2p.

Availability: AGRIC.

In: WISICA 32nd Annual General Meeting. Appendix V11.

The 1976/77 period was marked with an almost complete absence of the <cotton leafworm> <(Alabama argillacea)>. Investigations are under way into the <lesser leafworm> which caused greater damage this season. The infestation by the <mirid bug> has resulted in severe shedding of the early <squares> and these have not responded in any significant way to the treatment of <ULV> <malathion>. Other pests active during this period were : <army worms> and trials using mounted sprayers on tractors in <Antigua> and <Barbados> were shown to be ineffective for <cotton> planted in 33" rows. Over 31 percent of the Barbados cotton crop was destroyed by the <Pink bollworm> and early ploughing in is recommended because of anticipated high losses.

030

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Our island story. London, WISICA, [1972?].

3p.

Availability: AGRIC.

Reprinted from British Hosiery and Knitwear 3/69.

As a direct response to post-war decline in the cotton industry, the WISICA has undertaken a massive programme covering <planting>; <harvesting>; <cleaning baling>; and <shipping>. This article is aimed at promoting the use of the product for garments as part of the advertising strategy. It discusses the product in terms of its quality, durability and suitability for a range of garments and compares it with its major competitor <Egyptian Giza 45>. The latter is regarded as inferior to West Indian Sea Island Cotton which boasts a superior staple length of two to two and one-half inches.

031

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Progress reports from experiment stations: season 1960-61, the West Indies. /J.R. Spence [et al]. London, Empire Cotton Growing Corp., 1962.

14p.

Availability: AGRIC.

This period saw a drop in cotton acreage in all territories except <St.Kitts> which expanded by 28 percent. Experiments were carried out in <Antigua>; <Montserrat>; St. Kitts; <Nevis> and <St. Vincent> on <NPK> <fertiliser>; <mulching>; <sowing> dates land use; variety and strain and <insecticides>. An analysis of the activity of the following insects and their response to insecticides is included. <Pink bollworm>; <Cotton stainer>; <Leafworm>; <Nezara viridula>; <Aphis>; <Prodemia ornithogalli>; <Heliothis>; <Red spider mite> and <Bacterial blight>.

032

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the West Indian Sea Island Cotton Association: 1958. [St. John's], WISICA, 1958.

16p.

Availability: BADC, AGRIC.

Appendices on pp. 14-18 shows production figures.

Falling <cotton> prices on the world market coincides with the largest acreage produced since 1942 (12,932 acres), with the Barbados having the smallest acreage under

cultivation (6 acres). The variety hardest hit by the slump is <Long stapled>. Meanwhile efforts at assessing <VH10> as a replacement for <MSI> were thwarted by heavy <Pink bollworm> infestation. Breeding work on <VH8> and VH10 and <Barbados variety> continues in <Antigua> and on MSI and <V135> in St. <Vincent> and <Montserrat> respectively. Production levels of the finer cotton V135, Barbados and VH8 are crucial to WISICA survival and will be maintained and increased. Trademark controls are mandatory to halt the bogus marketing of articles as genuine Sea Island Cotton.

033

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the WISICA held in St. Vincent January, 1936. Port-of Spain, WISICA, 1936.

36p.

Availability: AGRIC.

The issue of grading of baling of cotton is again raised. Market investigations continues in the United Kingdom on new products from Sea Island Cotton, these are: parachutes and raincoats. A technique has been successfully developed for combining Sea Island Cotton and wool to produce a smooth, light warm garment. Statistical data for cotton producing territories including <Barbados> look at <acreage>; average annual lint production; <yield> of lint per acre; prices paid for Sea Island Cotton and projections for 1935.

034

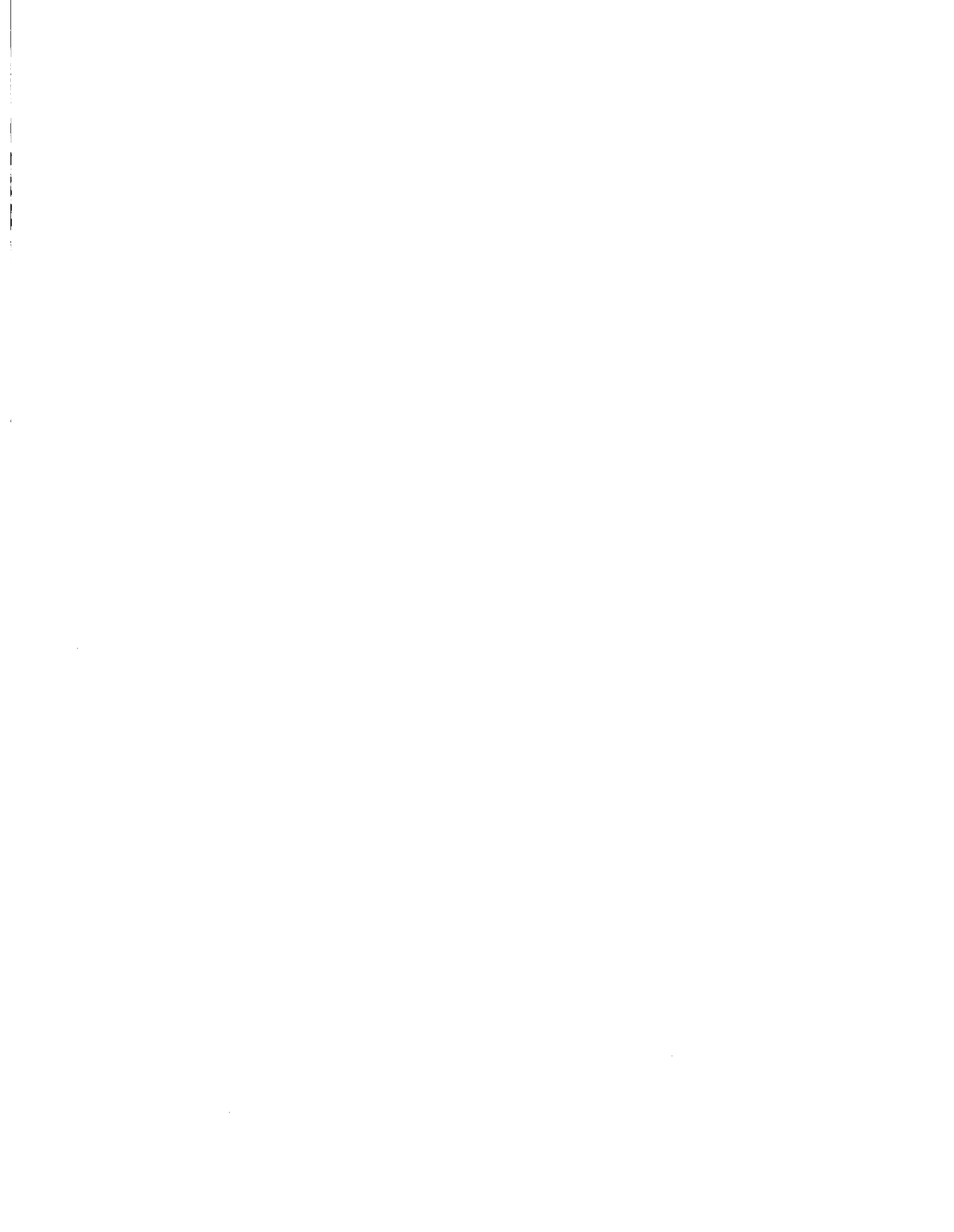
WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 7th Ordinary General Meeting of the WISICA held in Trinidad...1942. Port-of-Spain, WISICA, 1942.

8p.

Availability: BADC, AGRIC.

The effects of the post-war period on the cotton industry are seen in reduced acreage due to contracting export <markets>. The Association requested island governments to represent their case to the U.K for an increase in the price for cotton lint in the event of increased production costs. A proposal to synchronise <planting> dates in the <Leeward> islands as a means of <pests> control is not feasible inasmuch as there are differences in rainfall patterns and planting practices. It was agreed that it was highly improbable for <pests> such as <Pink bollworm> and



<cotton leaf defoliators> to migrate to neighbouring islands.

035

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 4th Ordinary General Meeting of the West Indian Sea Island Cotton Association, Antigua, November, 1939. Port-of-Spain, Imperial Coll. of Trop. Agric., 1939. 26p.

Availability: AGRIC.

The Association urges the Imperial Government to prohibit the purchase of <Sea Island Cotton> from outside the British Empire as a means of coping with competition. The <St. Vincent> <V135>, <Montserrat Sea Island>; and <Barbados Sea Island> and a selection of Barbados Sea Island in <Fiji> are the only varieties to be sold by the Association in order to ensure quality control. <Pests> investigations on <Pink bollworm>; <cotton stainers>; <cotton leaf defoliator> and <cotton boll weevil> indicate that control depends on strict adherence to precautionary practices.

036

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 10th Ordinary General Meeting of the West Indies Sea Island Cotton...1945. [St. George's], WISICA, 1945.

16p.

Availability: AGRIC.

Appendices on production figs. pp.10-13 for all cotton producing territories.

Efforts need to be directed at the fundamental issue of increasing yields. Experimental work should focus on yield improvement rather than wholly on pest management. Increased yields will reduce production costs and in this regard <seed> multiplication and commercial <distribution> should be encouraged. No attempts are to be made to replace the <superfine cotton> with other strains especially since it can hold its own in the competition struggle between <Egyptian growths> and the <MSI> variety. The industry anticipates lower demand in this post-war period and recommends a corresponding reduced production.

037



WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 7th Ordinary General Meeting of the WISICA. St. George's, WISICA, 1946.

12p.

Availability: AGRIC.

Quality variations in the finished Sea Island Cotton product led to investigation of various practices on the islands. Reasons included: changes in environment, variations in seasons and planting dates and between different pickings of the same crop. Serious drops in <spinning> value in certain islands may have resulted from defects in <picking> and <grading>. Growers are admonished to treat this problem as urgent. Improvement in the overall quality of the finished product is seen as a prerequisite for successful marketing.

038

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report to the president and directors, West Indian Sea Island Cotton Association: 1975-76. /J.R. Spence. [Bridgetown], WISICA, 1977.

3p.

Availability: AGRIC.

This report advises on activities undertaken during the 1975-76 <cotton> season. Fact finding missions to <Antigua> and <St. Kitts> by J. Spence and R. Ingram issued guide notes on cotton cultivation in <Barbados> to growers. The <seed> <multiplication> system is less satisfactory in Barbados and <Montserrat> than in <Nevis> and <Antigua>. Barbados' problem stems from the lack of a <delinting> machine. <Yields> during this period were adversely affected by increases in <Pink bollworm> and the absence of <hand-weeding>. <MSI> standards are being maintained for cotton stations.

039

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 2nd Ordinary General Meeting of the West Indian Sea Island Cotton Association...1934. St. John's, WISICA, 1937.

36.

Availability: BADC, AGRIC.

This meeting focussed on grower's activities throughout the region. It was proposed that the <cotton breeding> station in <Montserrat> should be the central cotton breeding

station for the region, since its strain of cotton was compatible with their needs. Cotton <pests> investigations in the <Windward> and <Leewards> including <Barbados>, examined in part, <spraying> as a means of controlling the <cotton leaf defoliator> <(Alabama argillacea)>; restricted <planting> season; <close season>; fumigation of cotton <seed>; <biological control>; of <Pink bollworm> and action taken to prevent the introduction of the <boll weevil> into the eastern <Caribbean>.

040

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the West Indian Sea Island Cotton Association...1955. [St. John's], WISICA, 1955. 18p.

Availability: BADC, AGRIC.

Appendices on cotton production on pp. 16-18.

A call for growers to reduce production costs of <cotton> and concentrate on quality through a careful application of their accumulated knowledge. This refers in particular to <pest> control and <crop> management. Lower costs would permit the industry to better survive the competition from man-made <fibres>. The industry believes the Purchase Tax is a disincentive especially on the highest quality goods. Cotton production analysis for <Antigua>; <Barbados>; <Montserrat>; <St. Kitts>; <St. Vincent>; and <Nevis> addresses problems of <climate>; pests and <marketing>.

041

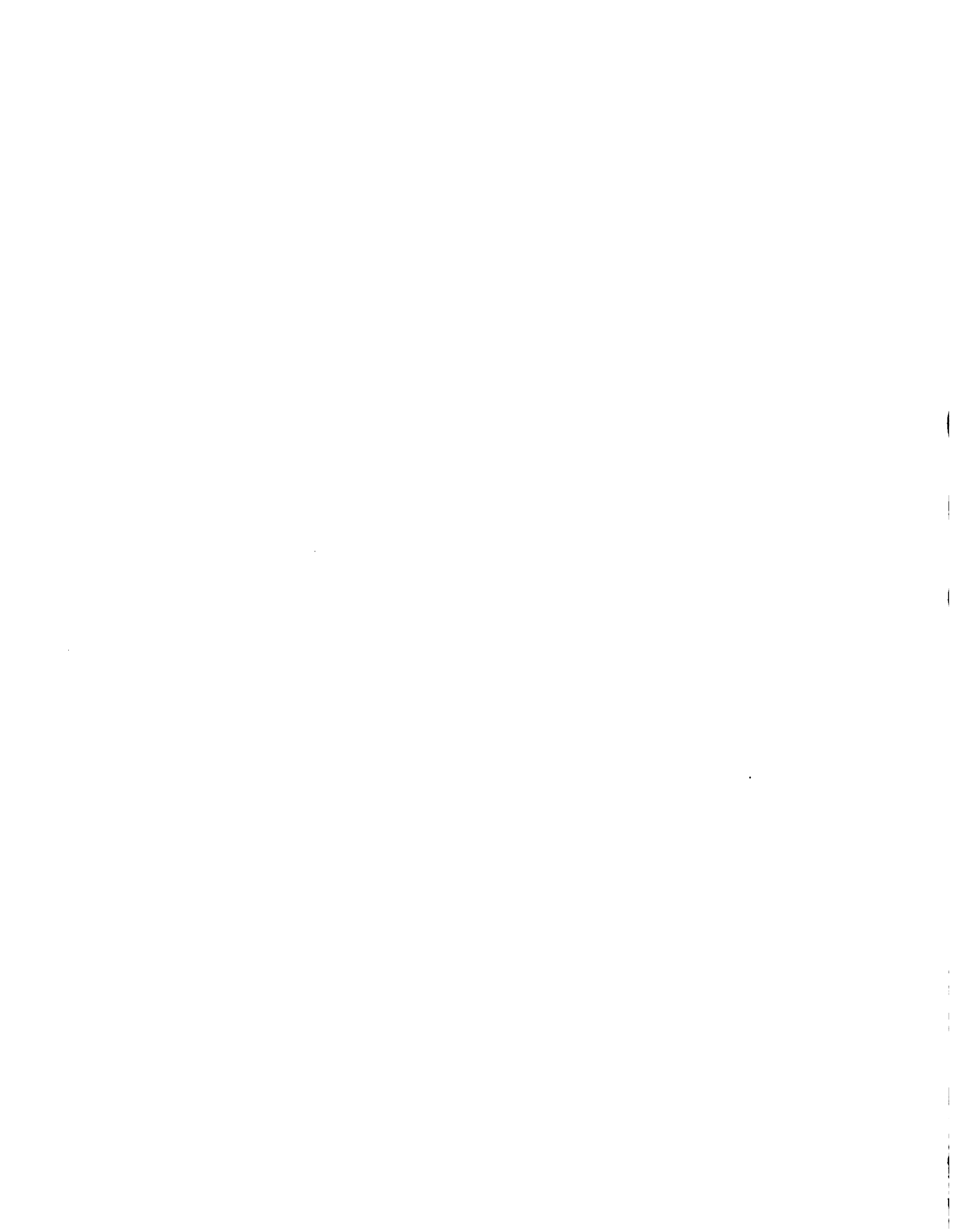
WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 5th Ordinary General Meeting of the WISICA ...1940. St. John's, WISICA, 1940. 27p.

Availability: BADC, AGRIC.

The producers of West Indian Sea Island Cotton are urged to concentrate their energies on strategies for handling the <post war> stock of Sea Island Cotton. Active propaganda is recommended to encourage local consumption of its products which are ideally suited for the tropics. Growers are also urged to divert some cotton lands into food production to reduce large <stocks> piling up and to ensure adequate supplies of food during this period. The meeting was advised to set up a <Factories Act> shortly to regularise the provision of <safety> devices.

042



WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the 8th Ordinary General Meeting of the
WISICA ...1952. St. John's, WISICA, 1952.

17p.

Availability: BADC, AGRIC.

<Market> conditions during the period under review was very unfavourable to the sellers as a result of the severe recession affecting raw <commodities>. Work on <pest> control focussed on the location of <host> plants and centres of infestation. It was recommended for <Antigua> that all cotton <seed> should be fumigated before leaving ginneries. Investigations with regard to : pests, <insecticide> <trials>; and <planting> season were carried out in <St. Vincent>, <St. Kitts>, <Antigua> and <Montserrat>. Ten year statistics for various aspects of cotton production in the region including <Barbados> are given in appendices ix - xiv.

043

WEST INDIAN SEA ISLAND COTTON ASSOCIATION

Report of the West Indian Sea Island Cotton
Association. Port-of Spain, WISICA, 1964.

13p.

Availability: AGRIC.

All cotton producing territories are currently experiencing the disastrous effects of certain local competitive industries coupled with a changing socio-economic pattern which is producing serious labour problems for the industry. <Antigua> growers are contemplating the introduction of <mechanical> <harvesting> to overcome labour difficulties. Research for this period concentrated on variety maintenance <(VH8, and VH10)>; <sowing> dates; <mulching>; <trials> using sugar cane bagasse and cotton seed hulls. Barbados recorded no activity for this period.

044

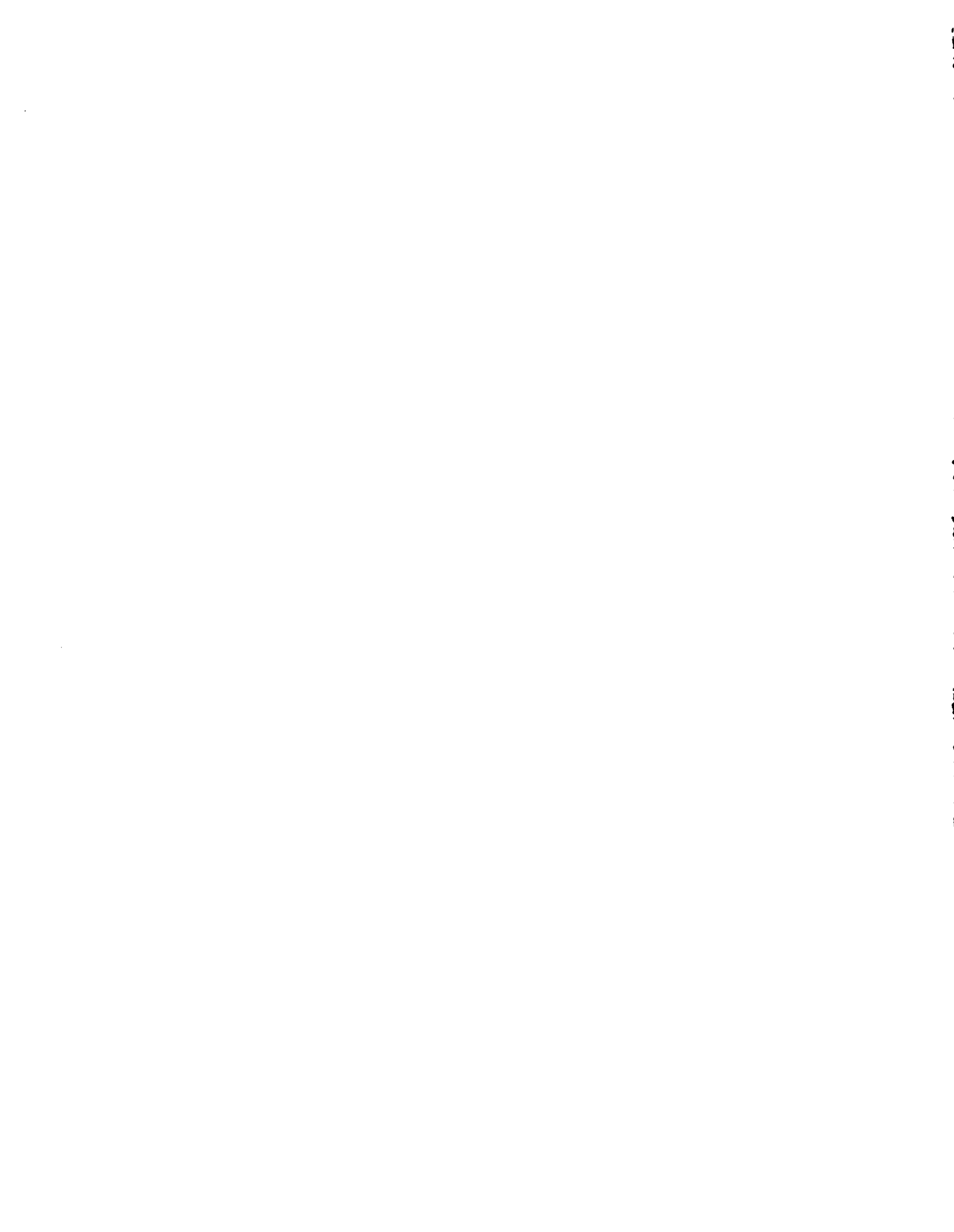
WEST INDIAN SEA ISLAND COTTON CONFERENCE. (1933: TRINIDAD)

West Indian Sea Island Cotton Conference. Port-of
Spain, WISICA, 1933.

17p.

Availability: AGRIC.

This conference addressed the issue of defining the objectives and rules of the newly formed WISICA. It also discussed the control of <production> of cotton as an economic measure. Decisions included the allotment of



acreage and regulations as to the quantity of unsold <lint> which any island can hold. It includes statistical data for 18 year period on acreage under production, total lint obtained, and prices received among other things for the <Leeward> islands and <Barbados>.

045

WORKSHOP ON SEA ISLAND COTTON. (1986: BARBADOS)

Report of the FAO - RLAC subregional workshop on Sea Island cotton, held in Barbados, 22-24, April 1986. Bridgetown, FAO, 1986.

39 leaves.

Availability: FAO.

This workshop served as a forum where an exchange of information on technical matters re <cotton> could be facilitated. Aspects treated are - cotton <genetics>; <agronomics>; <land management>; <pests>/<diseases> and strategies for their <control>. Emphasis is placed on the need for international and bi-lateral assistance. Includes recommendations. Countries participating: <Barbados>; Montserrat; St. Christopher & Nevis; Anguilla & Barbuda and St. Vincent. The documents which comprise this publication are stored at FAO as individual country papers.

046

WORKSHOP ON SEA ISLAND COTTON: (1986: ANTIGUA)

Sea Island Cotton production - Antigua and Barbuda. /prepared for FAO regional workshop on Sea Island Cotton. [St.Johns], FAO, 1986.

8 leaves.

Availability: FAO.

A discussion on the background to <cotton> introduction in Antigua <(diversification)> and gives a brief assessment of the industry. It details the production of the crop - land requirements; strategies for <pests> <control> (use of scouts) and includes a table of pesticide applications. Persons interested in yield/acreage ratio should find the appendices useful. Comparisons can be made from the production figures for 1976-79; and 1983-85. These are categorized by producer, acreage and lbs of lint produced.

047

BARBADOS. MINISTRY OF AGRICULTURE, FOOD and FISHERIES

Crop recommendations.- 4th ed. /edited by Francis Chandler [et al]. Bridgetown, Ministry of Agriculture. pp.70-72.

Availability: IICA.

Recommendations are given for <Crop Lisbon> <Oriental> and <Horn yam> , covering <seed> treatment, <spacing> and <planting>; <seasonality>; duration of crop, <weed> control and <disease> control. Diseases identified are <nematode>; <storage rot>; <Internal Brown Spotting>; <Cercospora leaf spot>; <Fusarium wilt> and <anthracnose>. The effective use of <fertilisers> is discussed as well as the need to move from the labour intensive operation to <mechanical harvesting>.

049

CARDI

A summary of results obtained from a yam field trial carried out at Hothersal Turning plantation in St. John in 1978. UWI, Cave Hill, CARDI, 1978.

Availability: TCL.

The purpose of this experiment was to assess the effect of the application of <Furadan 10g> and <Nemagon 50 EC> on <tuber> yield and incidence of <dry rot> <disease> caused by the <nematode> <pratylenchus coffeae> in <Crop Lisbon> yams. Applications of Furadan did not significantly increase tuber yields, but it was successful at reducing incidence of dry rot disease. Nemagon results indicate that it may be <phytotoxic> to yams and further use is not recommended. The <market> quality of tubers treated with Furadan was significantly enhanced.

050

CARDI

Control of yam virus. Kingston, CARDI, 1981.

Availability: TCL.

A technique for the eradication of <flexous rod> <bacilliform> and <spherical shaped viruses> using an <apical> <meristem tip> culture from infected <plants> subjected to hot air (36 1 C) for at least 10 days has been developed. Using this <micropropagation> technique it is possible to obtain 65,000 plants from a single culture within six months. Results of field trials show that <virus-tested> stock improves <tuber> quality and out-yields those with virus diseases by an average of 34

percent. The yield of virus-tested <White Lisbon> yam in <Barbados> trials, ranged from between 20 -26 tonnes per hectare as compared with normal yields of 15 tonnes per hectare.

051

CARDI

Progress report on the ODM project on virus diseases of yams. Port-of Spain, CARDI Inf. Unit, 1975.

27p.

Availability: CARDI.

An investigation into the control of <viruses> - properties and transmission and <epidemiology> through the selection of healthy material and the development of a <rapid propagation > technique and <tissue culture>. The anatomy and development of yam tubers <IBS> is traced. A survey of <virus-like symptoms> (Oct-Dec 1974) in Jamaica, Dominica, St. Lucia, Barbados, St. Vincent, Grenada and Trinidad revealed the presence of <VLS> in all these countries. Experiments (Barbados, Trinidad 1975) to determine effect of storage time and relative humidity on development of IBS in stored <yam tubers> - <foliage symptomatology not regarded as reliable for field detection. Results of transmitted viruses by <mechanical> means and by <vectors> inconclusive.

052

CARDI

Root crops programme: research and development summary 1982-83. UWI, St. Augustine, CARDI, 1983.

[10]p.

Availability: CARDI.

The projects carried out under the <Root Crops> programme in the territories and their results are summarised as follows: (1) Cassava - variety assessment in Trinidad and intercropping with cowpeas, (2) Yam - <Virus-tested> and improved <planting material> distributed in the region, particularly <Barbados>, and (3) Sweet potato - variety assessment, disease resistance trials, fertiliser trials and pest control studies.

053

CARDI

Virus-tested yam tuber multiplication project: annual report 1982. UWI, St. Augustine, CARDI, 1983.

14p.; appendices.

Availability: CDB, CARDI.

This project focussed on the upgrading of the quality and yield of the <Dioscorea alata> -<White Lisbon>-<yam> in particular for commercial benefit. The research phase (1973-79) produced a <tissue culture> technique for the eradication of <viruses> and the <rapid propagation> of the clean material. It also discusses the multiplication of <virus-tested yam> material by approved growers in Barbados under the supervision of the Tissue Culture laboratory and Yam Propagation Centre in <Barbados>. Performance of material at farmer's level is appraised.

054

CARDI

Virus-tested yam tuber multiplication project: annual report 1981. UWI, St. Augustine, CARDI, 1982.

13.p.

Availability: AGRIC, CARDI.

The control of <diseases> of <yam> for improvements in <yields> and quality of <tubers> is researched using proven tissue culture method for <virus> eradication and <rapid propagation> to produce commercial quantities of <virus-tested> stock of <White Lisbon> yam. This stock is distributed to farmers in <Barbados> and the <Commonwealth Caribbean>. Multiplication of B and C grade material through the agency of Approved growers in Barbados is projected to be over 100,100 Kg and to be available to <farmers> by July 1982. Recommendations for improved cultivation - pre-plant treatment, <fertiliser> application <harvesting> and <storage>, <pests> and <disease> control and for maintaining a clean stock of yam tubers are given.

055

CARDI

Virus-tested yam tuber multiplication project: final report 1980 -1984. UWI, St. Augustine, CARDI.

30p.:ill.

Availability: CARDI.

This project analysed the status of the <yam industry> in <Barbados> and the Caribbean and concentrated efforts on removing constraints to the industry. It developed a system

for producing commercial quantities of <virus-tested> <yam planting material> <D. alata> <White Lisbon> variety. Results included the establishment of a tissue laboratory and <Yam Propagation> Centre at Diamond Valley, St. Philip; a culture room with 25-27 degrees centigrade and 16 hours daylength. Six members of the Barbados Sugar Producers Association were selected as registered growers of virus-tested yam planting material to ensure a multiplication of foundation stock. Gives assessment studies on the use of virus-tested yam planting material including tables of budgetary data. Also assesses project's role in the venture.

056

CARIBBEAN DEVELOPMENT BANK

Instant yam processing: Barbados: feasibility study. /prepared by E.G.B Gooding and H.K. Kane. Wildey, CDB, 1975.

[72]leaves.

Availability: CDB.

A technical, financial and marketing analysis of an undertaking producing 100 tons of <instant yam> in five (5) years and 200 tons after ten (10)years. The paper also discusses the break-even point for 100 tons(\$2.09 per lb of product) and the pivotal role <marketing> <promotion> would play in the success of the project. An indepth analysis of each aspect of this economic venture is achieved through the generous use of tables and charts. These include packaging, consumption and sensitivity testing.

057

CARIBBEAN DEVELOPMENT BANK. TECHNOLOGY AND ENERGY UNIT

Technical information package on postharvest handling of perishables: volume iv root crops. /prepared by Ena C. Harvey. Wildey, CDB, 1986.

pp. 35-42.

Availability: NLS, CDB.

Post harvest requirements for handling tropical root crops are discussed, with general and specific recommendations on <harvesting>; <field temperature>; <management>; <curing>; <storage>; <pests> and <disease> control; packaging and utilization. <Crops> discussed are <aroids>; <cassava>; <potato>(English and sweet) and <yam>. Methods and techniques presented have been tested in the <Caribbean> region; <Latin America>; Africa; South East Asia and



Hawaii. Many of the methods are used commercially and are effective as well as economical.

058

CARIBBEAN FOOD CROPS SOCIETY MEETING (12TH: 1974: JAMAICA)

Further work on mechanical planting and harvesting of root crops in Barbados: proceedings of 12th Caribbean Food Crops...1974. /by I.D. Chandler and J.P.W Jeffers. [Bridgetown], [Ministry of Agriculture?], 1974.

15 leaves.

Availability: AGRIC.

A locally constructed <planter> was used to plant <yams> on a field scale. <Harvesting> <trials> were carried out using the locally constructed <Harvesting Aid> and the imported <Digger-elevator>. The Digger-elevator was used for the first time with yams and the results are promising.

Modification on the elevator chain are planned to promote better <soil> separation. The Harvesting Aid performed well on ridges 168 cm apart but needs modification to ensure effectiveness on ridges 85 cm apart.

059

CHANDLER, FRANCIS L and S.Q HAQUE

The use of tissue culture in the production of improved yam and sweet potato planting material. / F.L Chandler and S.Q. Haque. UWI, St. Augustine, CARDI, 1984.

Availability: TCL, CARDI.

In <Barbados> the system of eradication of <viruses> in <alata> variety <White Lisbon> <yam> has been used to produce and multiply <virus-tested> yam <planting material> on a large scale for distribution to growers in the <Caribbean> region. The virus-tested material has not yielded diseased material under high technology and subsistence conditions. Similarly, Frison (1981) reports the use of <meristem tip> and <nodal> segment culture using the M & S modified medium in the production of improved material. The procedures involved, the required conditions as well as the necessary equipment and sources are described.

060

CHANDLER, I.D

Mechanisation of yam production in Barbados with special reference to planting: prepared for the 11th annual

meeting of Caribbean Food Crops Society, Barbados 1973.
/I. D. Chandler. UWI, Cave Hill, CARDI, 1973.

47p.

Availability: CARDI.

This report pages (7-13) examines the work done under the <Disease - free> <yam> <propagation> project (62-01-01). The tissue culture method of <virus> eradication and <rapid propagation> is used to produce a virus tested stock for distribution to <farmers> in <Barbados> and the <Commonwealth Caribbean>. <Trials> were carried out in Barbados and <tubers> affected with <IBS> <mottling> <vein banding> and <vein clearing> were rogued. Six estates chosen as approved growers were briefed on methods for growing <virus - tested> material to ensure stocks of clean <planting material>.

061

CLARKE, BARTON

Root crop production in Barbados. /Barton A. Clarke.
UWI, St. Augustine, Dept. of Agric. Extension, 1984.
pp. 12-14.

Availability: AGRIC.

In: UWI. dept. of Agric. Ext. Newsletter, Vol 15, No 1.

The production of <root crops> - <Yams> <Dioscorea spp>; <Sweet potato> - <Ipomoea batatas>; <Tannia> - <Xanthosoma spp>; <Eddoe> - <Colocasia spp> ;<Cassava> - <Manihot esculenta> and <Irish potato> - <solarium tuberosum> is appraised. An examination of the prevailing situation suggests that with clean <planting material> yam production can increase while mechanisms need to be put in place if the 10 percent annual decline in yam <exports> is to be halted and extra-regional <markets> secured.

062

CLARKE, H

Market and market prospects for yams in Barbados: prepared for UWI Faculty of Agriculture seminar/workshop on yam production in Barbados. /H. Clarke. Bridgetown, Ministry of Agriculture, 1975.

Availability: TCL.

The present market situation for yams in Barbados is examined and prospects for its expansion explored. A strong <market> is critical for the success of <agricultural> <diversification> in terms of <export> earnings. The emphasis should be placed on deepening rather than expanding markets. These include the U.K,



North America and those countries on the fringe of the Caricom area. To effect these objectives, measures such as improved technology and <planting> techniques e.g closer <spacing> to achieve increased production are being adopted. Barbados needs to exploit the market for <fresh yam> and keep production cost down in order to maintain a competitive edge.

063

COURSEY, D.G

Internal Brown Spot in yams (*Dioscorea alata* L) in Barbados. /D.G. Coursey. London, ODM, 1967.

5p.

Availability: TCL.

In Barbados, yams (*Dioscorea* spp) are food crops of substantial importance. Recently an important export trade in yams from Barbados to the U.K and to a lesser extent the U.S.A has developed and accounts for 1,500 tons/annum. <White Lisbon> the variety favoured for local consumption is the only cultivar used for export. In an effort to meet the requirements of the export trade, attention has focussed on yam quality. One condition described as Internal Brown Spot hitherto unrecognised has seriously affected the quality of the product. This article describes the disease.

064

COURSEY, D.G and F.W. MARTIN

The past and future of the yam as crop plants. /D.G. Coursey and F.W. Martin. [Honolulu?], Trop. Rt.& Tuber Crop Tomorrow, 1971.

Availability: TCL.

The origins of yam cultivation and the species cultivated, the present status of yams as energy-producing food <crops> and future research work in <breeding> and <selection> especially with regard to <agronomic> problems are reviewed.

065

DEGRAS, L and P. MATHURIN

Anatomy of the tuber as an aid in yam biology study. /L. Degras and P. Mathurin. Petit-Bourg, CFCS, 1979.

Availability: TCL, CARDI.

1

2

Transverse sections of <tubers> of <Dioscorea> transversa cv wael, <D. Cayenensis> cv v17-2, <D.trifida> cv INRA 25 and <D.alata> cv Pascala and longitudinal sections of tubers of <D.esculenta> cv Pas-possible are described with illustrations. D.alata had thick primary and secondary suberized layers and a <sclerenchymatous> zone interpreted as <transfusion tissue> which accounted for its good keeping quality after <harvest>. In all spp., blocks of cells in the inner <cortical parenchyma> appeared to function as organizing poles determining growth and <morphogenesis>.

066

FERGUSON, T.U

Agronomic aspects of yam production in the Commonwealth Caribbean. /T.U. Fergusson. UWI, St. Augustine, Dept. of Crop Sci., 1980.

19p.

Availability: TCL.

<Cultivations>, <planting> methods and dates; <fertilisers> regimes; <weed control>; <harvesting> methods and dates and <crop rotations> practised in the various Caribbean countries are reviewed. Over 20 cv of five (5) <Dioscorea> spp. are widely grown in the region: <D.cayenensis> representing 40 percent; <D.rotundata> 30 percent; <D.alata> 28 percent and <D.trifida> and <D.esculenta> 2 of the total acreage in Jamaica.

067

FERGUSON, T.U

Agronomic techniques in yam (Dioscorea spp.) production in the Caribbean. /T.U. Ferguson. UWI, St. Augustine, Faculty of Agriculture, 1974.

22p.

Availability: AGRIC.

Presented at the 12th Annual meeting of the CFCS...Jamaica, June 30-July 6th, 1974.

Yams are one of the more important food crops which can be found growing throughout the region. Yams are particularly valuable in the economies of <Jamaica>; <Barbados> and <St. Vincent>. Jamaica is by far the largest grower, producing over 150,000 tons. Production in Barbados is estimated to be 15,000 - 18,000 tons (Gooding 1970) and is estimated to be less than 500 tons for St. Vincent. In this paper,

various aspects of the <agronomy> are examined and suggestions for improvement made.

068

FERGUSON, T.U and P.H HAYNES

The response of yams (*Dioscorea* spp.) to nitrogen, phosphorus, potassium and organic fertilisers. /T.U Ferguson and P.H. Haynes. UWI, St. Augustine, Dept. of Crop Sci., 1971.

5p.

Availability: AGRIC.

<Fertiliser trials> with <yams> are reviewed. Relatively low but positive yield responses were obtained with N and organic manures. In some cases there was a response to low rates of K, and P has no apparent yield effect. There were differences between <*Dioscorea*> <esculenta> and <*D. alata*> in response to N and K, and it is suggested that species and varietal differences should be considered more fully in the future and that the efficiency of P uptake by yams needs to be studied.

069

FERGUSON, T.U, P.H. HAYNES and J.R SPENCE

Distribution of dry matter and mineral nutrients in tubers of two cultivars of *Dioscorea alata* L. /T.U Ferguson, P.H. Haynes and J.R Spence. UWI, St. Augustine, 1980.

Availability: TCL.

The distribution of DM energy, N,P, Ca, K, Mg and CP was examined in the <pulp> and <peel> of <yam> cv <White Lisbon> and <Oriental>. Positive physiological gradients in nutrient conc were observed. The conc of <DM energy> <N>, <P>, <Ca>, <Mg> and <CP> decreased and that of K increased from the head to tail end of <tubers>. K and Ca conc were higher while those of DM and N were lower in the peel than in the pulp. The pulp and peel of <bulbils> were higher in N,P and K and lower in Ca than in the pulp and peel of whole tubers of similar size. CP content on a dry wt. basis decreased from head to tail end of tubers and was higher in the peel.

070

FERGUSON, THEODORE U and F.A.GUMBS

The effect of soil compaction in root and tuber zones on leaf number, leaf area and tuber yields in white Lisbon yam (*Dioscorea alata* L). /by Theodore U. Ferguson and F.A. Gumbs. Columbia, [Ferguson?], [n.d].

29p.

Availability: CDB.

A discussion on <experiments> carried out on <yams> grown in specially designed boxes for the purpose of testing restrictions to the growth of <tubers>. Experiments done in Trinidad revealed that a close positive linear relationship was observed between <leaf area> and <yield>, suggesting that the growing tuber contributes substantially to the development of the plant by assisting in the absorption of moisture and essential nutrients. <Compaction> in the <tuber zone> had no effect on tuber number, length or width, but tubers growing in compacted soil, penetrated to a lesser depth, and had a larger number of growing points (or toes).

071

FOURNET, J.L. [ET AL]

Field trials about anthracnosis. /by J.L. Fournet [et al]. Kingston, CFCS, 1974.

Availability: AGRIC.

In: Proc. Carib. Food Crop Soc. (1974) pp. 58-62.

Anthracnosis of yam (<*Dioscorea alata*>) caused by <*colletotrichum gloesporioides*> f. sp. *alatae* is characterized by <leaf spots> and in some varieties by severe blackening and die off of stems. Two simultaneous trials were carried out. These were a <fungicide> trial using a combination of <Propineb> and <Mancozeb> in a factorial pattern with <Benomyl> and a variety trial testing 16 varieties of *D.alata*. Results of both trials with dates, application rates and findings are given together with charts for a more detailed analysis.

072

GARVEY, G.V.J and R.M HOAD

Commercial yam production in Barbados: paper presented at UWI Faculty of Agriculture...on yam production in Barbados. /G.V.J Garvey and R.M. Hoad. UWI, Faculty of Agriculture, 1975.

9 leaves.

Availability: NLS.

Gives a broad outline of <yam> <production> in <Barbados> and the problems encountered. Compares the yield of yams with other <root crops> for the period 1965-66 and traces both the dietary and economic importance of yam <Dioscorea alata>. It examines <planting season>; <spacing>; preparation of <planting material>; and use of fertilisers e.g <atrazine> as a <pre-emergent> application. The <crop Lisbon> yam presents weeding problems, both manually and mechanically owing to its irregular shape. Other problems addressed are <Internal Brown Spotting> <(IBS)> and <harvesting>.

073

GEORGE, CALIXTE and RONNIE PILGRIM

Evaluation of recommended virus-tested yam *Dioscorea alata* c.v White Lisbon ex Barbados on small farms in St. Lucia. /C. George and R. Pilgrim. Bridgetown, CFCS, 1982. 7p.

Availability: TCL.

Paper presented at 18th meeting of the CFCS, Barbados, 1982.

Edible yams - *Dioscorea alata*; <D.cayenensis>; <D.rotundata>; <D.trifida> and <D.esculenta> are very highly prized carbohydrate food in St. Lucian diet with *Dioscorea alata* showing the highest economic advantage. This paper describes the <experiments> using <clean planting material> to improve yam yields. Farmers carried out operations in keeping with their normal practices e.g <spacing>; <planting dates>; and <weeding>. Results showed that total yields of virus-tested yams almost doubled those using existing planting material. The increase in actual cash from using clean planting material was also significant and it is expected that farmers would be amenable to its use in the future.

074

GOODING, E.G.B

The production of instant yam in Barbados. /E.G.B. Gooding. Bridgetown, Gooding, [n.d]. pp. 323-333.

Availability: CDB.

An investigation of the technical difficulties surrounding the export of <yam> and the feasibility of <instant yam> as an economically viable alternative crop. Paper covers various technical factors - from selection of raw materials to preparation. Researchers and persons interested in producing instant yam should find this highly detailed

presentation valuable. Tables cover response of species to <storage>; dry matter content; response to <amylose-iodine> reaction; <moisture content>; <texture> and <drum-drying>.

075

GOODING, E.G.B

The production of yam in Barbados. /E.G.B. Gooding. Edghill, St. Thomas, BSPA, 1971.

3p.

Availability: TCL.

In: Trop. Root & Tuber Crops Tomorrow Honolulu. Vol.1, 97-99.

Barbados is almost unique in cultivating yams on a plantation scale. The methods of <cultivation> are largely determined by the status of the yam crop as a <catch crop> grown in <rotation> with sugar cane in land prepared for cane. Several <cultivars> of <D.alata> are grown in all cases without staking. Yields average about 5.5t/ha, but maybe as high as 11-11.5t/ha. Recent experiments have shown increases in <yields> from <fertilising> with <NK> and slightly more with <NPK>, also from closer and earlier <planting>. <Rainfall> below about 100cm during the 8-month growing season seems to be limiting.

076

GOODING, E.G.B

Effects of fertilising and other factors on yams in Barbados. /E.G.B Gooding. Edghill, St. Thomas, BSPA, 1971.

Availability: TCL.

Small scale experiments were set up on 125 estates in <Barbados>, in which comparisons were made of <NK> versus no fertiliser and <NPK> versus no fertiliser. The rates of application are given. No effect was found for NK fertilising but NPK resulted in an increased yield of about 1,000 pounds per acre (8 percent) or an increased value of \$40.00 per acre for an expenditure of about \$20.00. Other trends were; general increase in effectiveness of NK fertilising, with increasing rainfall; an increase in yield with closer <spacing> and low <rainfall>; and a decrease in yield with delayed <planting>.

077

GOODING, E.G.B

Rootcrops in Barbados. /by E.G.B. Gooding.
[Bridgetown?], BSPA, [n.d].

9p.

Availability: AGRIC.

This review of the status of <root crops> in <Barbados> addresses some of the problems of <yam> as a viable economic commodity. Yams compete with English potatoes which have a snob value. Labour problems at <harvesting>, and transport difficulties are further aggravated by arbitrary pricing policies of hucksters. Some possible solutions to these problems are: <crop rotation> and <intercropping>. Efforts toward a dehydration project and <market> expansion are crucial if the industry is to have an economic impact.

078

GOODING, E.G.B

Yam and sweet potato dehydration project, Edghill:
technical report no. 2: (July - October 1969). /by E.G.B
Gooding. St. Thomas, Edghill, 1969.

20 leaves.

Availability: CDB.

An investigation into the feasibility of producing a <yam flake> carried out jointly by Edghill, (Barbados) and St. Augustine, Trinidad. The problems of <discoloration> and the effects of <dehydration> are discussed. Several experiments on the product - cooking; mashing; crushing after drying; adding of <GMS> to mashed yams; liability of <Coconut Lisbon> yams to pinking and the effects of pre-treatment and cooking. Conclusions drawn from the various tests are included.

079

GOODING, E.G.B and R.M HOAD

Problems of yam cultivation in Barbados. /E.G.B.
Gooding and R.M. Hoad. Bridgetown, Gooding & Hoad, 1967.

15p.

Availability: CARDI.

This report briefly summarises the two years of systematic <experiments> started on the yam <dioscorea alata> in an effort to overcome some problems of low <yields>. The experiments were carried out in various parts of the island to ensure that all <rainfall> zones were tested. Experiments were done on rate of development of <tubers> of

four <cultivars>; <White Lisbon>, <Coconut Lisbon>, <Oriental> and <Hunt>; on <spacing> requirements on White Lisbon, <planting material> and yields and <fertiliser> use.

080

HARRISON, B.D and I. M. ROBERTS

Association of virus-like particles with Internal Brown Spot of yam (*Dioscorea alata*). /B. D. Harrison and I.M Roberts. Port-of-Spain, Tropical Agriculture, 1973. 6p.

Availability: AGRIC.

In: Tropical Agric.(Trinidad). Vol 50, No 4. pp. 335-340.

Tubers of <yam> <(Dioscorea alata cv)> <White Lisbon>, affected by <Internal Brown Spot> produced foliage with <mosaic> symptoms, whereas normal-looking <tubers> produced leaves that were uniformly green. Almost all the normal-looking and mosaic-affected plants tested contained slightly <flexous> <virus-like> particles. Mosaic-affected plants in addition, contained <bacilliform> virus-like particles of 130 by 29 nm. <Infection> with bacilliform virus thus seems to be a prerequisite for the development of Internal Brown Spot.

081

HARVEY, W.O'N and J.P.W JEFFERS

Attempts at mechanical harvesting of root-crops in Barbados. /W.O'N Harvey and J.P.W Jeffers. Bridgetown, CFCS, 1973. 10p.

Availability: TCL.

Paper presented at the 11th CFCS Meeting in Barbados.

A locally constructed harvesting aid and an imported <digger-elevator> were used for harvesting sweet potatoes. The harvesting aid was also used in <yams> and work so far indicates a saving in harvesting costs of up to \$48.00 per acre. So far the mechanical diggers have not damaged more <tubers> than <hand-digging> methods. Further work is planned.

082

JEFFERS, W. DE COURCEY and WYNTER HEADLEY

The problem of Internal spotting of yams *dioscorea* sp. in Barbados. /by W. de Courcey Jeffers and Wynter Headley.

Bridgetown, Ministry of Agriculture, 1967.

7 p. - (Bulletin no. 46).

Availability: AGRIC.

The problem of <Internal Brown Spotting> <(IBS)> evident prior to 1965 has assumed greater importance in view of the threat to the developing trade in <yams>. This problem is manifested by an irregular internal rusty brown discoloration which appears to have no connection with the surface of the <tuber>. Investigations by the Ministry included <storage trials>, <field trials> and <fertiliser trials>. Results of storage trials were inconclusive while field trials indicated that clean <planting material> would reduce the problem.

083

MANTELL, S.H

A rapid propagation system for yams. /S.H. Mantell.
St. Augustine, CARDI, 1979.

19p.

Availability: FAO, CDB.

Traditional methods of <yam propagation> are slow and unsuitable for countries not requiring large scale bulking of <tuber> stocks. The article describes a very effective <rapid propagation method> which uses a simple <tissue culture technique>. This method can produce 65,000 new plants with both roots and shoots from a single vine node in six months. Laboratory requirements and specifications are given e.g. growth medium area, <culture preparation> area, culture conditions and plantlet establishment area. Plates are used to demonstrate processes.

084

MANTELL, S.H

Dioscorea yam propagation methods: paper presented at IDRC/UWI Root Crops Tropical programme workshop. /by S.H. Mantell. Bridgetown, CARDI, 1978.

17p.

Availability: TCL.

This paper defines the various types of propagation techniques and outlines the yam propagation methods being used in the Eastern Caribbean. These are <sexual propagation>; <asexual propagation>; traditional <techniques>; the <stem cutting> technique; <minisett scoring>; <tissue culture>; <(micropropagation)> and the <meristem tip> culture technique. The choice of a particular yam propagation technique for a given situation

is illustrated with reference to the control of yam <virus> diseases in the <Eastern Caribbean>.

085

MANTELL, S.H

Disease-free yams: their production, maintenance and performance. /S.H. Mantell. Cave Hill, CARDI, [n.d].

22p.:ill.(appendices).

Availability: CARDI, CDB, FAO.

The need for <disease-free> <yams> is seen as an economic urgency, especially against the background of the success of the pilot processing project in <Barbados> for <instant yam>. The article focuses on the need to <control> <diseases> in <yams>. Those discussed include <viruses>; <fungi> and <bacteria>; <foliage> <diseases> and those caused by <nematodes>. The establishment of a propagation scheme to produce superior disease-free yam <planting material> and the maintenance and testing of such a scheme is seen as crucial to the industry.

086

MANTELL, S.H

Internal brown spot disease of yams. /S.H. Mantell. Cave Hill, CARDI.

13p.

Availability: CDB, FAO, CARDI.

The nature and presentation of <Internal Brown Spot> <(IBS)> an important <disease> of <Dioscorea alata> are discussed. The implications of <lesions> in <yams> at various stages are examined and observations recorded microscopically using thin sections of IBS - affected <tubers>. Factors e.g. environmental - favouring IBS are examined and correlation between <soil> types in <Barbados> and IBS indicated. Tests were carried out to determine susceptibility of other cultivars apart from <White Lisbon>. Methods of disease transmission and recommendations for control are detailed.

087

MANTELL, S.H

Virus disease of yams in the Commonwealth Caribbean. /by S.H. Mantell [et al]. UWI, CARDI, 1977.

46p.

Availability: CARDI. '

A description of work done on the <Yam> Virus Project 1st. October 1973 - 31st March, 1976. A <bacilliform virus> was found in the <leaves> of <Dioscorea alata> grown from <tubers> affected by <Internal Brown Spot>-<IBS>- and in leaves of <D.cayenensis Lam> free of this disease. <Flexuous rod> virus was found in <leaf material> of <D.alata>; <D.rotum>; <dat Poir>; D.cayenensis;<D.trifida L>; <D.esculenta> among others. <White Lisbon> showed severe <mottle> and Internal Brown Spot symptoms. The association of one particular <virus> or several viruses with the occurrence of IBS in tubers could not be established. The project covered <Barbados>, <Trinidad> and <St.Vincent>.

088

MANTELL, S.H and S.Q HAQUE

Incidence of internal Brown Spot in White Lisbon yams (Dioscorea alata) during storage. /S.H. Mantell and S.Q. Haque. [Bridgetown], [ODM, CARDI], 1978. [6]p.

Availability: AGRIC.

In: Exptl Agric., (1978), 14: 167-172.

<Tubers> of <Dioscorea alata L> cv <White Lisbon>, affected by <Internal Brown Spot> <(IBS)> <disease> and stored under ambient conditions on wooden or wire racks, did not show significant increases in IBS incidence and mean <lesions> over storage periods of up to 18 weeks. Storage under different conditions of temperature(13,20 and 3 degrees C) did not have any significant effect on IBS incidence; but tubers stored under conditions of high relative humidity(95 2 percent) showed less IBS and greater mean lesion diameters. Although a significant reduction in disease incidence occurred during storage under the latter conditions, the increased lesion size resulted in some deterioration of tuber quality.

089

MANTELL, S.H and S.Q HAQUE

Three techniques for rapid clonal propagation of the White Lisbon yam (Dioscorea alata L.). /by S.H. Mantell and S.Q. Haque. Bridgetown, CARDI, 1977.

Availability: TCL.

Three techniques used successfully for <vegetative> <propagation> of <D.alata> <cv White Lisbon> are described.

There are: the <split-node> <vine cutting> technique; the <minisett scoring> technique (setts as small as 25 g) and a <tissue culture> technique. The disadvantages and applications of each method are discussed.

090

MANTELL, S.H [ET AL]

The distribution pattern of IBS in *D.alata* L. cv White Lisbon. /S.H. Mantell [et al]. UWI, St. Augustine, CARDI, 1975.

14 leaves.

Availability: CARDI.

<Internal Brown Spot> <(IBS)> of <yam> <(Dioscorea spp)> occurs on several <cultivars> of (*Dioscorea alata*) including *D.alata* cv White Lisbon and is widespread in the <Commonwealth Caribbean>. Available evidence suggests that a <virus> is associated with this <disease>. This paper aims to address the issue of distribution of IBS in <tubers> in individual plants as this will assist in determining the feasibility of selection methods in obtaining diseases-free <planting material>. Some features of the distribution of IBS based on data obtained from studies of the development of IBS in storage and in the field are described.

091

MANTELL, S.H., S.Q. HAQUE and A.F. WHITEHALL

Apical meristem tip culture for eradication of Flexous Rod viruses in yams (*Dioscorea alata*). /S.H. Mantell, S.Q. Haque and A.F. Whitehall. UWI, Cave Hill, CARDI, 1980.

Availability: TCL.

Apical meristem tip excised from vines of *Dioscorea alata* cv <White Lisbon> produced normal plantlets when cultivated in <vitro>. Highest yields were obtained on <basal> medium supplemented with either 1.0 or 0.5 mg/l 2 - <naphthaleneacetic acid> in combination with either 0.2 or 0.1 mg/l 6 <benzyladenine> respectively. Eradication of <flexous rod> virus infection was possible only when meristems were excised from mother plants which had been growing at 36 1 C for at least 111 days. Plantlets thus obtained remained free of detectable virus infection as judged from symptomless growth for 16 months and electron microscopic examination of both sap and ultrathin sections of <leaf tissue>.

092

MANTELL, S.H., S.Q. HAQUE and F.L. CHANDLER

Yam tissue culture: propagation and production of clean planting material. /S.H. Mantell, S.Q. Haque and F.L. Chandler. UWI, Cave Hill, CARDI, [n.d].
15 leaves.
Availability: TCL.

A self-financing yam propagation scheme has been established in the <Commonwealth Caribbean>. The scheme is intended as a model upon which future schemes might be based. Use of <disease-free> planting material benefits farmers and consumers. Increases in yam <tubers> are achieved on existing lands; greater returns from yam crops are realised as a consequence of the consistently high quality yam now being produced. Consumers benefit from improved tuber quality and less wastage through spoilage. This hopefully should lead to an increased preference by consumers for yam and thus reduce the consumption of imported root and tuber vegetables.

093

MANTELL, S.H., S.Q. HAQUE and R. PHELPS

Some observations on Internal Brown Spot and virus-like symptoms of yam (*Dioscorea* spp). /S.H. Mantell, S.Q. Haque and R. Phelps. UWI, Cave Hill, CARDI, 1974.
6p.
Availability: TCL.

Internal Brown Spot, a condition of the Barbados <White Lisbon> is characterised by small brown nodules in the yam <tubers>. Spotted tubers are indistinguishable from unspotted tubers until cut open. The disease does not appear to be associated with pathogenic fungi, bacteria or nematodes. <Foliage> from the affected plants showed <mosaic/mottle> symptoms. Results also indicate that <IBS> is probably caused by a <virus> although the relationship between the virus-like symptoms on the foliage and IBS has not yet been established.

094

MARTIN, F.W. and L. DEGRAS

Tropical yams and their potential. Part 6: minor cultivated *Dioscorea* species. /F.W. Martin and L. Degras. Mayaguez, Inst. of Trop. Agric, 1978.
23p.
Availability: AGRIC.

The geographical origins, the extent of cultivation and the

toxicity of several spp. of <edible yams> <(Dioscorea spp)> are tabulated. Various aspects, including domestication, distribution, botanical classification, morphology and cytology of five minor spp. which are considered to be more important than others are examined. The spp. are <D. dumetorum>; <D. hispida>; <D. pentaphylla>; <D. nummularia>; and <D. transversa>. The cultivation of these spp. is discussed with reference to the existence of named cv, growth cycles, land preparation and planting, application of fertiliser, harvesting and yields. The detoxification, culinary characteristics, chemical composition and potential use of these spp. are also briefly considered.

095

MATHURIN, P. and L.M. DEGRAS

Effects of division levels of seed tubers on yams (D.alata, D.trifida) germination and yield. /P. Mathurin and L.M. Degras. Petit-Bourg, CFCS, 1974.

9p.

Availability: AGRIC.

Presented at the 12th Annual meeting of CFCS Jamaica, 1974.

Tubers of <cush-cush> yam (D.trifida) and <Pascala> yam (D.alata) have been divided in equal volumes. At germination the oldest parts (head) as expected gave the highest percentage and quickest growth. When planted under uniform <spacing>, sections developed unequal yield. 1/16 in d.alata and 1/32 in d.trifida were the highest in cummulated yield, but 1/4 in both species gave the better yield in respect of <harvest> weight per square metre. Methodological, physiological and <genetic> condiderations are presented in view of a research program in this field.

096

MOHAMED, N and S.H. MANTELL

Incidence of virus symptons in yam (Dioscorea sp) foliage in the Commonwealth Caribbean. /N. Mohamed and S. H. Mantell. Port-of-Spain, Tropical Agric., 1976.

7p.

Availability: AGRIC.

In: Trop Agric. (Trinidad) Vol 53, No. 3. pp.255-261.

A survey of <virus-like symptons in <yam> <foliage> was carried out in the <Commonwealth Caribbean> late 1975. An average disease rate of 48 exists for <(Dioscorea alata, d)>; <D. cayenensis>; <D. rotundata>; <D. trifida> and <D. esculenta>. Electron microscopic examination of <leaf dip> preparations indicates the presence of one type of <virus>

particle, a long <flexous rod> 770nm in length. This was detected in 50 of the samples examined from all species mentioned above.

097

MOHAMED, N and S.H. MANTELL

Report of a survey of virus diseases affecting yam (dioscorea Spp.) foliage in the Commonwealth Caribbean. /N. Mohamed and S.H. Mantell. UWI, CARDI, 1975.

23p.

Availability: CARDI.

This project (Oct 1973) studies <virus diseases> affecting <yams> in the Eastern Caribbean. A survey was carried out on the following islands: <Barbados>, Jamaica, Dominica, St. Lucia, St. Vincent and Trinidad. The results are reported in a tabular format showing incidence of <virus-like symptoms> in <yam foliage> in islands surveyed and samples with virus particles collected (Table 1). Table 5 is on Barbados.

098

ORSHAN, JEHUDA

Barbados: onions and development projects: mission progress report. /Jehuda Orshan. Bridgetown, OAS/BEPC, 1982.

47 leaves.

Availability: IICA, AGRIC.

Pages (7-10) of this document addresses the production of <yams> primarily for the <export> market, with a view to increasing the amount exported. It projects on the potential for <market expansion> and touches on the varieties preferred by the consumer. The <White Lisbon> was not a favourite. The idea of exporting yam as a processed product seen as not viable owing to the availability in the target countries of fresh yam.

099

PLANT PATHOLOGY SEMINAR: (1986: DOVER CONVENTION CENTRE, BARBADOS)

Plant pathology seminar: peanuts, onions, sugar cane epidemics ...1986. /Plant pathology Section, Ministry of Agriculture. Graeme Hall,, Ministry of Agriculture, 1986.

73p.

Availability: CDB.

Page (49) of this report discusses <anthracnose> in <yams> and its effect on yields especially the <White Lisbon> variety. It also looks at <pre-storage> treatment of <yam planting material> and <control and prevention> of anthracnose. Pages (58-59) discuss plant pathology programmes for <cotton> e.g. <seed> viability, quality and pathology and some <diseases> of the cotton plant.

100

REEVES, K.C

Progress with food processing in Barbados. /by K.C. Reeves. UWI, CARDI, 1975.

10 leaves.

Availability: NLS.

Research here was aimed at finding a suitable <cultivar> which would produced an acceptable processed product. Three varieties - <Oriental Crop Lisbon> and <Coconut Lisbon> were tested to determine the properties of a good cultivar and problems with other cultivars. Gives an economic evaluation of the industry with regard to production targets, production costs of mini commercial quantities and resultant problems in supply of raw material as well as future projections for a fully commercialised <yam> <processing> factory.

101

ROBIN, G [ET AL]

Introducing clean planting material into small farm systems of Dominica: a farming system approach. /G. Robin [et al]. UWI, St. Augustine, CARDI, 1985.

pp. 4-9.

Availability: CARDI.

The results of on-station observations on introduced <anthracnose> resistant and <virus-tested> <yam> <cultivars> from <Guadeloupe> and <Barbados> respectively are given for the years 1981 - 1983. <White Lisbon> yielded the most in 1982, however yield was reduced in 1983 due to incidence of anthracnose. The increased incidence of anthracnose in White Lisbon was attributed to the virus-testing process or the greater precipitation in <Dominica>. <SEA 189> and <belep> are recommended in spite of lower <yields> because of lower susceptibility. A summary cash analysis of commercial yam production on 0.1

ha of a small farm in Dominica is presented which estimated a net cash income of EC\$3,680.

102

UNIVERSITY OF THE WEST INDIES. FACULTY OF AGRICULTURE

Yam varieties and planting material. UWI, St. Augustine, Faculty of Agriculture, 1975.

4p.

Availability: AGRIC.

In: Extension Newsletter, Vol6, No 2 pp 3-6. Article continues from Vol6, No 1. March 1975.

The <yam> cultivation practices in the <Caribbean> including <Barbados> are discussed. <Staking>, employed in <Jamaica> and <St. Vincent> is not used in Barbados. Successful use of this system depends on climate as well as cost of implementation. <Hand weeding> is practiced in all territories but in Barbados a single weeding suffices since fields were previously under <sugar cane>. <Mulching> <fertiliser> use and <pruning> vary to suit local conditions and the species of yam cultivated. In Barbados <sulphate of ammonia> and <muriate of potash> are used while mulching is practised to any significant extent only in Jamaica.

103

WILSON, JILL E

Careful storage of yams: some basic principles to reduce losses. /Jill Wilson. London, Commonwealth Secretariat, [197?].

8p. :ill.

Availability: IICA.

An outline of some important principles which can improve traditional, on-farm <storage>. Losses in traditional <yam> storage are often very high and much of the harvested <yield> is wasted. Losses are due to a variety of <diseases> and <pests> and to <sprouting>. Guidelines for care and <management> of <crops> are given.

104

WILSON, JILL E

Recent developments in the propagation of yam (Dioscorea spp.). /Jill E. Wilson. [s.l.], Inst. of Trop. Agric, 1978.

5p.



Availability: TCL.

Sexual propagation makes possible the production of genetically variable populations required for <breeding>. Rapid <vegetative> propagation is essential for multiplying improved <cultivars>. Procedures for <germinating> <seed> and establishing seedlings and for rapid multiplication using rooted <vine cuttings> and <tuber> pieces are discussed.

105

AUTHOR INDEX

Associated Industrial Consultants 029	Chandler, Francis L 049, 060, 093
Barbados Agricultural Development Corporation 001	Chandler, I.D 059, 061
Barbados. Department of Science and Agriculture 002	Charles, W.B 019
BARBADOS. Ministry of Agriculture and Natural Resources 003, 004, 005, 006, 007, 049	Clarke, Barton 062
Caribbean Agricultural Research and Development Institute 050, 051, 052, 053, 054, 055, 056	Clarke, H 063
Caribbean Agriculture Research and Development Institute 008	Cook, A.A 009
Caribbean Development Bank 057	Coursey, D.G 064, 065
Caribbean Development Bank. Technology and Energy Unit 058	Degras, L 066, 095, 096
Caribbean Food Crops Society Meeting 059	Estwick, Adrian R 007, 014
	Farnum, Ralph 010
	Ferguson, T.U 067, 068, 069, 070, 071
	Fournet, J.L. 072
	Garvey, G.V.J 073



AUTHOR INDEX

George, Calixte
074

Gooding, E.G.B
057, 075,
076, 077,
078, 079,
080

Grant, Michael
005, 010,
014

Gumbs, F.A.
071

Hague, S.Q
060, 089,
090, 092,
093, 094

Harrison, B.D
081

Harvey, W.O'N
082

Haynes, P.H
069, 070

Headley, Wynter
083

Hoad, R.M
073, 080

Ingram, W.R
011, 012,
015

Jeffers, J.P.W
059, 082

Jeffers, W. de Courcey
083

Kane, H.K
057

Lucas, C.H
013

Mantell, S.H
084, 085,
086, 087,
088, 089,
090, 091,
092, 093,
094, 097,
098

Martin, F.W
065, 095

Mathurin, P
066, 096

Mohamed, N
097, 098

Orshan, Jehuda
099

Phelps, R
094

Pilgrim, Ronnie
074

Reeves, K.C
101

Roberts, I. M
081

Robin, G
102

AUTHOR INDEX

Schotman, Charles Y. L
017

Singh, N.D
019

Spence, J.R
014, 020,
021, 022,
023, 024,
028, 039,
070

U.N. Food and Agriculture
Organization
025

University of the West
Indies. Faculty of
Agriculture
103

Weaver, J.B
026, 027

West Indian Sea Island
Cotton Association
028, 029,
030, 031,
032, 033,
034, 035,
037, 039,
040, 041,
042, 043,
044, 045

West Indies Sea Island
Cotton Growers
018, 036,
038

Whitehall, A.F
092

Wilson, Jill E
104, 105

Workshop on Sea Island
Cotton
047

SUBJECT INDEX

- Anthracnose
016, 072,
100, 102
- Close season
004, 020,
022, 024
- Coconut Lisbon
079, 080,
101
- Cotton
001, 002,
004, 010,
013, 014,
017, 018,
019, 020,
023, 026,
027, 029,
030, 036,
038, 039,
040, 041,
045
- Cotton - agronomy
007, 015,
019, 027,
028
- Cotton - crop management
003
- Cotton - development
programmes
005, 026
- Cotton - diseases
002, 006,
009, 016,
025, 100
- Cotton - entomology
006, 011,
012, 015
- Cotton - experiments
013, 028,
032, 037
- Cotton - fertilisers
019, 021,
032
- Cotton - genetics
046
- Cotton - intercropping
008
- Cotton - labour problems
044
- Cotton - marketing
031, 034,
035, 042,
043
- Cotton - pest control
001, 002,
004, 008,
011, 012,
017, 020,
032, 043,
046, 047
- Cotton - pests
006, 010,
012, 025,
033, 047
- Cotton - production
018, 022,
033, 035,
037, 039,
042
- Cotton - products
034

SUBJECT INDEX

- | | |
|--|--|
| Cotton - varieties - Giza
45
014, 024,
031 | Pesticides - cotton
002, 004,
017, 026,
047 |
| Cotton - varieties - MSI
024, 028,
037 | Root crops - harvesting
058, 082 |
| Cotton - varieties - VH10
033 | Sexual propagation
105 |
| Cotton seeds
029, 039 | Tissue culture
054, 055 |
| Crop Lisbon
049, 050,
101 | White Lisbon
016, 054,
071, 079,
089, 091,
099 |
| Dioscorea alata L
069, 070,
071, 079,
080, 087,
095, 097 | Yams
049, 050,
053, 058,
059, 061,
065, 067,
069, 070,
073, 075,
078, 080,
083, 084,
085, 087,
089, 095,
099, 101,
103 |
| Fusarium wilt
049 | Yams - agronomy
067, 068 |
| Instant Yam
057, 075,
078, 079,
086 | Yams - biology
066 |
| Internal Brown Spot
064, 072,
081, 083,
087, 088,
089, 091,
094 | Yams - diseases
016, 064,
072, 081,
083, 086,
087, 088,
089, 091, |
| Nematodes
049, 050,
086, 094 | |

SUBJECT INDEX

094, 097,
098, 100

Yams - experiments
050, 051

Yams - fertilisers
069, 070,
077

Yams - field trials
050, 072

Yams - flexous rod
051, 081,
088, 092

Yams - harvesting
049, 058,
059, 082

Yams - marketing
057, 063,
064, 075,
078, 099

Yams - pest control
053, 104

Yams - planting material
060, 061,
093, 102,
103

Yams - production
062, 063,
067, 076

Yams - propagation
054, 055,
056, 084,
085, 090,
093, 105

Yams - storage
104

Yams - Tissue culture
060, 084,
093

Yams - tubers
096

Yams - virus-tested
052, 054,
055, 056,
061, 074,
102

Yams - viruses
051, 052,
085, 088,
091, 092,
097, 098

FECHA DE DEVOLUCIÓN

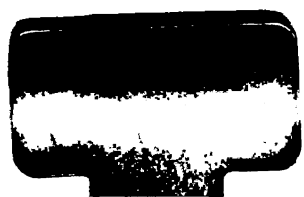
2003

IICA-PM-A2/
BB/no.88--011

Autor

Título Cotton and yams in Barbados

Fecha Devolución	Nombre del solicitante
2003	[Handwritten Name]
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