

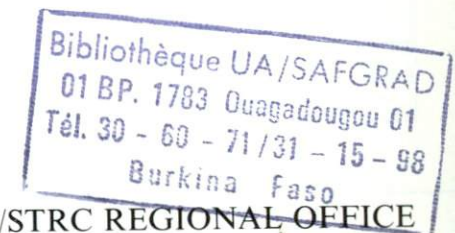
ORGANIZATION OF AFRICAN UNITY



SCIENTIFIC,
TECHNICAL & RESEARCH COMMISSION
(OAU/STRC)

OAU/STRC
ACTIVITIES REPORT
1984-85

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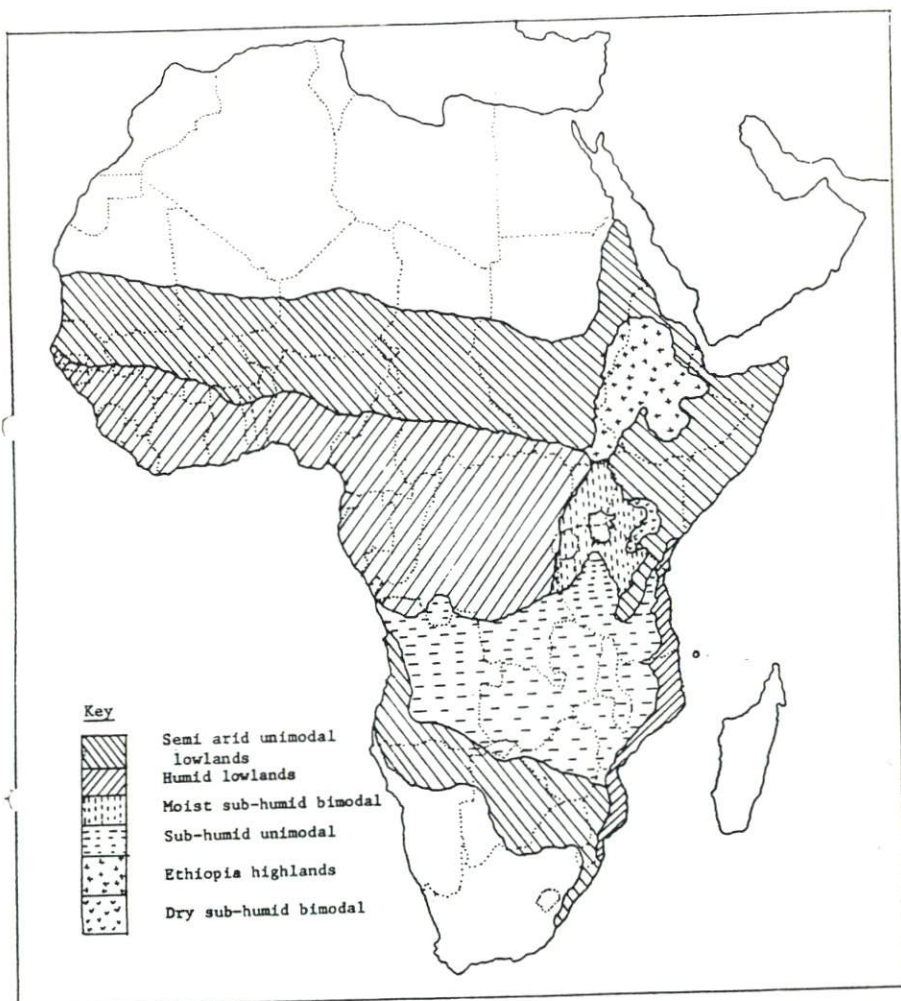
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PMB 2359, LAGOS, NIGERIA

Reports from OAU Offices in Lagos, Nairobi, Yaounde, Bangui,
Guinea (Conakry) and Ouagadougou (Burkina Faso).

3D

Sub-Saharan African Ecological Zones



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Foreword

The Scientific, Technical and Research Commission (STRC) of the Organization of African Unity has been hosted in Lagos by the Government of the Federal Republic of Nigeria for more than 21 years. Although this Commission is the successor of the CCTA (Commission for Technical Co-operation in Africa South of the Sahara) of the colonial era, it has so far made no attempt to publicize its activities beyond submission of records to the OAU Secretariat in Addis Ababa. This is made manifest by the several enquiries received by the Lagos office and also the numerous questions directed to the Executive Secretary and his staff concerning the functions and activities of this Commission. The existence of this Commission is, in fact, not widely known, even though it has been responsible for several different scientific and research activities of the OAU.

With the publication of the Lagos Plan of Action and the Final Act of Lagos in 1980, the aspirations of the Heads of State and Government were made known to Africa in particular and the international community in general. This Commission, which has its headquarters in Lagos, is responsible for the supervision of three subregional offices located in Nairobi (Kenya), Bangui (Central African Republic) and Yaounde (Republic of Cameroon). In addition to these three subregional offices, it is also responsible for the supervision of an OAU Co-ordination Office in Conakry (Guinea) and another Co-ordination Office in Ouagadougou (Burkina Faso).

The Scientific, Technical and Research Commission (STRC), which is under supervision of the Assistant Secretary-General of ESCAS (Education, Science, Cultural and Social Affairs Department) in Addis Ababa, reports to the Secretary-General through the Directorate of ESCAS Division of the OAU General Secretariat. The activities of the STRC in Lagos are largely

initiated by African scientists and approved at meetings of the Council of Ministers and Summit Heads of States and Governments of member States. Such activities reflect the philosophy enshrined in the Lagos Plan of Action and the Final Act of Lagos. In this report, it will be seen that the Nairobi office is responsible for animal health and production: the Yaounde office for Plant protection and other phytosanitary activities in Africa, while the office in Bangui is responsible for research into African soils and also has a documentation centre for soil science activities. The Co-ordination Office in Ouagadougou which has been largely financed by USAID is chiefly concerned with research on the production of improved varieties of cereals and legumes. Recently, with the support of IFAD, it has established Farming Systems Research using African scientists from OAU member countries. In addition, Accelerated Crop Production Officers (ACPO) also play a key role in the member states by transmitting newly generated technologies from international agricultural research centres to the national agricultural systems. The co-ordination office in Conakry (Guinea), now only one year old, is financed by the OAU, UNDP and UNGO and works in collaboration with UNDP, FAO and UNESCO for the rehabilitation of the Fouta-Djallon highlands. This vital project mainly involves the following three countries: Senegal, Sierra Leone and Guinea, and its objectives include integrated studies of natural and human resources for mapping out a strategy for the protection and development of the Fouta-Djallon area.

The regional and subregional offices of STRC produce scientific publications and newsletters which are listed and illustrated in this report (See pages 32-33). They are also involved in regional projects which are of considerable economic importance to member states. Examples of such projects are given in this report under their respective offices. The OAU/STRC offices are responsible for attending or convening approved scientific meetings of African scientists and experts in various fields. Recommendations from these meetings of panels of experts are communicated to the Council of Ministers for consideration and implementation. There is consultation and co-ordination of efforts with EDECO (Economic Development and Co-operation Department) in Addis

Ababa and with other specialized agencies of the United Nations system namely: WHO, FAO, UNIDO, ECA, UNDP, UNEP, IARC, etc.

During the past three years several donors have either taken or indicated interest in the activities of the OAU/STRC and its subregional offices. Some of the activities which have interested donors and agencies include the Pan-African Rinderpest Campaign (PARC). The Africa-Wide Biological Control of Cassava Pests (ABCP), Agricultural Management Training for Africa (AMTA) and the African Centre for Fertilizer Development (ACFD), as well as the training of Africans in several scientific fields, to mention only a few. Donors who have supported various projects have been mentioned and/or listed in this report. (See page 52).

The OAU has trained several Africans in the field of traditional medicine, with particular emphasis on Pharmacognosy. The largest number of trainees, however, are in the field of agriculture through the USAID supported SAFGRAD JP. 31 project. Several other projects, falling within the ambit of the Lagos Plan of Action, require financial support from the Organization and the International donor community. Some of these are under consideration for support by the Technical Committee of the Co-operative Development for Africa (CDA), a group composed of representatives of the Governments of Belgium, Canada, France, Federal Republic of Germany, Italy, United Kingdom and the United States of America.

The recent support and collaboration between the OAU/STRC, IFAD, ADB and the EDI of the World Bank, as well as the recent appointment of the African Development Bank (ADB) as the executing agent for the IFAD-funded AMTA programme in the field of agricultural management shows a very healthy trend which should be extended to other spheres of activity. The collaboration existing between all the OAU/STRC offices and international agricultural research centres namely: IITA, ICRISAT, ICIPE, ILCA, ICRAF, etc., continues to be highly valued, its most useful and encouraging aspect being the impact that these activities are having on member states. The support and cordial relationship extended to OAU/STRC staff members by Governments of mem-

ber states in relation to approved STRC activities is greatly appreciated and very encouraging. Although more can still be achieved by strengthening the scientific and supporting staff of STRC and its subregional offices, it is certainly gratifying to note the recent appointments of qualified and competent scientists to subregional offices in Yaounde and Nairobi. I take this opportunity to acknowledge the assistance of organizations which have also seconded experts and consultants to some of the OAU/STRC offices for the strengthening or implementation of specific projects. For example, the European Economic Community (EEC) has seconded consultants to the Nairobi office for the Pan-African Rinderpest Campaign, FAO has seconded a consultant to the Yaounde office, the UNDP has seconded staff for the Guinea (Conakry) office and USAID has seconded a consultant to IITA for the Africa-Wide Biological Control Project and other USAID funded projects. A meeting of the Scientific Council of Africa (SCA) has been proposed for the near future. This meeting will provide further guidelines for the STRC Executive Secretariat in its future activities.

I should like to conclude this foreword by expressing my deep gratitude to the host Governments of all the regional and subregional offices and also to all the member states of the OAU for their unreserved financial and moral support. I wish to thank the Secretary-General, his Assistants and Directors for their understanding, co-operation and appreciation of the vital roles expected of the Executive Secretariat of the Scientific Technical and Research branch of the Organization. To the donors, agencies, collaborative research centres and to all the dedicated staff members of the STRC and its subregional and co-ordination offices. I express my sincere thanks and appreciation for supporting and sustaining the activities of the Scientific Commission and ensuring the success of its activities.

Finally I hope that all readers will find the contents of this annual report not only useful but informative.

A. Olufemi Williams
EXECUTIVE SECRETARY

OAU/STRC

Staff List of the OAU/STRC Regional and Sub-Regional Offices

OAU/STRC – Lagos

| | |
|---------------------------|---------------------------------------|
| Prof. A. Olufemi Williams | – Executive Secretary |
| Prof. Couaovi A. Johnson | – Assistant Executive Secretary |
| Mr. Moise Akle | – Scientific Officer |
| Mr. J. L. Bitchoka | – Information/Publication Officer |
| Mr. Asare K. Pobi | – Conference/Documentation Officer |
| Mr. W. A. Carrim | – Translator (English) |
| Mr. D. M. Ngueremalet Bea | – Translator (French) |
| Mr. M. O. Braimah | – Translator (Arabic) |
| Mr. A. Afework | – Chief Accountant |
| Mr. S. Gamal | – Internal Auditor |
| Miss Bola Obilana | – Administrative Assistant |
| Mme. Prudence Dossou | – Precise Writer |
| Mr. E. S. Badejogbin | – General Services Officer |

IAPSC Yaounde Office

| | |
|-----------------------|----------------------------------|
| Mr. A. L. Mbiele | – Scientific Secretary |
| Dr. G. M. Lallmahomed | – Assistant Scientific Secretary |
| Mr. Matip Pajarito | – Documentalist |

BIS Bangui Office

| | |
|---------------------------|-------------------|
| Mr. Noel Johnson | – Acting Director |
| Mr. Eli Ndinga | – Administration |
| Mr. Faustin Ratsirahonana | – Documentalist |

IBAR Nairobi Office

| | |
|-------------------------|-----------------------------------|
| Dr. W. Masiga | - Director |
| Dr. A. C. Tall | - Chief Animal Health Officer |
| Mr. K. M. Katondo | - Chief Animal Production Officer |
| Mr. M. O. Adeniji | - Animal Production Officer |
| Mr. M. Tarek Abdel Azim | - Scientific Officer |
| Miss Hildred Telly | - Documentalist |
| Mr. M. Ranaivoson | - Translator (French) |

Safgrad-Ouagadougou Office

| | |
|---------------------|-----------------------------|
| Dr. J. Menyonga | - International Coordinator |
| Mr. Taye Bezuneh | - Director of Research |
| Mr. Odonkor | - Financial Controller |
| Mr. Adanlete | - Accountant |
| Ms. Mary Ann Briggs | - Administrative Assistant |

Fouta Djallon Conakry (Guinea) Office

| | |
|----------------------|-----------------------------|
| Mr. Akadiri Soumalia | - International Coordinator |
| Mr. D. Obiaja | - Translator (English) |

Acknowledgments

The Scientific Technical Research Commission of the OAU hereby expresses its gratitude to the President of IFAD, Mr. Idriss Jazairy, and the International Fund for Agricultural Development for their support in the implementation of the projects and in the publication of this document. It has been a great pleasure for the staff of OAU/STRC and its co-ordination office to work with the staff of IFAD in the realization of the goals and objectives defined in the various projects. The effective international co-operation which has been established in the execution of these projects continues to predispose improvements in the quality of life among the peoples of Africa. The initiative of IFAD in the promotion and inclusion of agroforestry, as a component of the SAFGRAD farming systems research is hereby acknowledged. The continued collaboration and effective inputs by representatives of other donors, namely USAID and FAC are appreciated. It is hoped that other donor supports which are being solicited will be forthcoming presently. To all the other donors and collaborating agencies and institutions, we express our gratitude.

Acronyms and Abbreviations

| | |
|--------|--|
| ABCP | Africa-Wide Biological Control of Cassava Pests |
| ABCS | African Biological Control Service |
| ACFD | African Centre for Fertilizer Development |
| ACPO | Accelerated Crops Production Officer |
| ACSAD | Arab Centre for Semi-Arid Development |
| ADB | African Development Bank |
| AMTA | Agricultural Management Training in Africa |
| BIS | Inter-African Bureau for Soils |
| CAB | Commonwealth Agricultural Bureau |
| CC | Consultative Committee |
| CDA | Cooperative Development for Africa |
| CILSS | Centre Inter-états de Lutte Contre la Secheresse dans la Sahel |
| CIMMYT | Centro Internacional de Mejoramiento de Maíz y Trigo |
| ECA | U.N. Economic Commission for Africa |
| EDECO | Economic Development on Cooperation Department for OAU |
| EDI | OAU Economic Development Institute of World Bank |
| EEC | European Economic Community |
| ESCAS | Education, Science, Cultural and Social Affairs |
| FAC | Fonds d'Aide et de Cooperation |
| FAO | Food and Agriculture Organization |
| FSR | Farming Systems Research |
| FSU | Farming Systems Unit |
| GTZ | Duetsche Gesellschaft fur Technische Zusammenarbeit |
| IAPSC | Inter-African Phytosanitary Council |

| | |
|---------|--|
| IARC | International Agency for Research into Cancer |
| IBAR | Inter-African Bureau for Animal Resources |
| IBRAZ | International Agriculture Research Institute of Burkina Faso |
| ICARDA | International Centre for Agricultural Research in the Dry Areas |
| ICIPE | International Centre of Insect Physiology and Ecology |
| ICRAF | International Centre for Research into Agro-Forestry |
| ICRISAT | International Crops Research Institute for the Semi-Arid Tropics |
| IFAD | International Fund for Agricultural Development |
| IFDC | International Fertilizer Development Centre |
| IITA | International Institute for Tropical Agriculture |
| ILCA | International Livestock Centre for Africa |
| INSAH | Institut de Sahel |
| IRAT | Institut de Reserche Agronomique Tropicole |
| ISNAR | International Service for National Agricultural Research |
| OAU | Organization of African Unity |
| OIE | International Office for Epizootic Diseases |
| OPEC | Organization of Petroleum Exporting Countries |
| PARC | Pan-African Rinderpest Campaign |
| PMC | Project Management Committee |
| SAFGRAD | Semi-Arid Food Grain Research and Development |
| STRC | Scientific Technical and Research Commission |
| TAC | Technical Advisory Committee |
| TCP | Technical Cooperation Programme of FAO |
| TTQR | Trypanosomiasis Technical Quarterly Reports |
| UNDP | United Nations Development Programme |

| | |
|--------|---|
| UNEP | United Nations Environmental Programme |
| UNESCO | United Nations Educational Scientific and Cultural Organization |
| UNIDO | United Nations Industrial Development Organization |
| USAID | United States Agency for International Development |
| WHO | World Health Organization |

Activities of STRC Office (Lagos)

GENERAL INFORMATION

This report outlines activities of the OAU Scientific Technical Research Commission in the fields of science, technology and research during the financial year 1984 to 1985. The STRC office which is the regional office in Lagos, together with its subregional offices in:

- Nairobi, for livestock production and animal control IBAR.
- Bangui, for soil management techniques (BIS).
- Yaounde, for plant quarantine (IAPSC).

and its Coordination offices in Ouagadougou and Guinea Conakry constitute the network for implementation of appropriate resolutions and recommendations.

Although the Inter-African Bureau for Tropical forestry, proposed and approved for Malabo, Equatorial Guinea, has not yet been established, a plan for the proposed office is to be submitted to the government of E. Guinea presently. Agreement on the headquarters for this office will be executed by the government of E. Guinea in the near future.

During 1984/85 STRC activities have had a considerable impact at the technical level on member states, which needs to be maintained and intensified in 1985/86 financial year.

With the publication of the Lagos Plan of Action and its subsequent Final Act in 1980, together with OAU Secretary General's mandate to implement the Lagos Plan of Action and the decision taken at the 20th Conference of Heads of State and Government to convene an extraordinary summit meeting on economic development, the STRC has an additional source of authority for its functions and activities.

These activities are carried out according to the directives, resolutions and recommendations adopted at the meetings of

Heads of State and Government (Summit), Council of Ministers, and the Scientific Council for Africa with its Inter-African Committees of Experts.

THE AFRICAN CENTRE FOR FERTILIZER DEVELOPMENT

Recognizing the need for an African Centre for Fertilizer Development and its potential role in African agriculture in the early 1980s the Organization of African Unity made the OAU/STRC and its Inter-African Committee on fertilizers responsible for implementation of the Centre, in close collaboration with the International Fertilizer Development Centre (IFDC), UNIDO and FAO. The Council of Ministers of OAU devoted two resolutions to this issue during its 36th session held in February 1981, and the 40th session held in February 1984.

Objectives: The resolutions underlined the following objective:
- To increase African production of fertilizers and reduce imports of fertilizers by reviewing the feedstocks and raw materials available in Africa.

Activities: Provide and/or arrange for the training of manpower to develop fertilizer production, plant operation and maintenance, fertilizer storage, and the handling, distribution and the efficient utilization of fertilization.

- Assist individual countries in assessing raw material resources for fertilizer production.
- Prepare technical studies on fertilizer production emphasizing the use of indigenous raw materials.
- Assist in preparing technical, economic and agronomic studies leading to an increase in the production and use of fertilizer, taking into account the relative socio-economic and policy issues.
- Assist in compiling documentation and data and provide for its dissemination so that effective, national decisions may be made in the light of the latest innovations in production, distribution and use.

- Provide advisory services to member countries where fertilizer plants are to be established.

Executing Agent: The International Fertilizer Development Centre (IFDC) has been appointed executing agent for the African Centre for Fertilizer Development (ACFD) during its early period of existence.

Management: An agreement between IFDC and the OAU/STRC stipulates that IFDC will undertake ACFD management during the establishment of the Centre and for a further period of 5 years after ACFD has become a legal entity, functioning under its Board of Directors.

Location of the Centre: Harare, Zimbabwe.

Financing Organizations and potential donor Countries: IFDC, IFAD, FAO, UNIDO, OPEC, USAID, and Governments of France, USA, UK, Italy and the Federal Republic of Germany.

Duration of the Project: 10 years initially for external funding.

AGRICULTURAL MANAGEMENT TRAINING PROGRAMME FOR AFRICA (AMTA)

IFAD Supported

Preamble: Confronted with the task of developing manpower in the agricultural sector, and fully aware of the need for training agricultural managers in order to fulfil the goals and objectives of the Lagos Plan of Action, the STRC of the Organization of African Unity has requested a grant from IFAD for the purpose of implementing a management training programme for Africa.

Objectives and Strategy: The objectives of the proposed agricultural management training programme are as follows:

- (a) to promote the development of human resources by increasing the number of experienced and trained managers in the

agricultural sector; and also by maintaining a higher proportion of agricultural managers than in the past;

- (b) to strengthen the capacity of national and regional training institutions for organizing, preparing and delivering short-term courses on the administration and management of agricultural projects;
- (c) to increase awareness among high-level Government officials, concerning policy and procedural issues in the area of public administration in which these projects operate; and
- (d) to assist countries at project/implementation level by improving the administrative and managerial skills of project management staff, primarily those involved in ongoing IFAD/World Bank/ADB agricultural projects; and also to promote the participation of managers from agricultural Ministries and agencies.

The strategy for achieving the above objectives consists in:

- (a) conducting an integrated series of management training courses for project management staff and agricultural managers; the integrated approach would include needs assessment visits, residential sessions, and on-the-job and on-site training of management teams;
- (b) keeping a register from which programme participants could be considered for managerial posts. The register is primarily intended for national civil service commissions, while access would be made available to international organizations and bilateral programmes;
- (c) involving regional management training institutions in the implementation of the programme and inviting the participation of national trainers with a view to encouraging these institutions to adapt and replicate the training process at regional and national level; and
- (d) organizing periodic high-level policy seminars at which policy and procedural issues inhibiting project management performance would be discussed by policy-makers from several countries.

Area and Duration of the Project: The proposed programme is designed for 72 projects in 24 countries to be implemented over 45 months, 12 from each of the anglophone and francophone areas. To ensure effective implementation the programme will be divided into four overlapping sub-programmes. Each sub-programme will concern about six countries in the same language area. Three projects in each country (about 18 projects per sub-programme) would be identified as participating projects.

Target Group: The target group would be managers in the public agricultural sector. Though principally drawn from development projects, they could also include personnel from agricultural Ministries and agencies. Specifically the programme would include project managers, deputy project managers, senior project staff, procurement specialists national trainers, regional trainers and senior policy-makers.

Training Process: The broad approach to training is to provide mutual learning and experience of all participants, including trainees, trainers and staff of participating national, regional and international organizations. At all stages, account will be taken of the environment in which management tasks are performed as well as interaction between environment and management performance.

Team Training Programme: Two phases of the training programme for project managers, deputy project managers and senior project staff would involve management team training; the first phase at the beginning of each sub-programme would form part of the problem and needs assessment visits; and the second about 18 months later, immediately prior to the completion of each sub-programme. For the concluding management team training session, the general curriculum would reflect the experiences gained from the planning and implementation of the management team training.

Donor Funding and Support: IFAD, EDI (The World Bank Economic Development Institute), ADB (African Development Bank).

Project Cost: US\$ 1.45 million (IFAD)
 US\$ 350,000 (ADB)
 US\$ 300,000 (EDI/WORLD BANK)

AGRICULTURAL MANAGEMENT TRAINING PROGRAMME FOR AFRICAN DIRECTORS OF RESEARCH

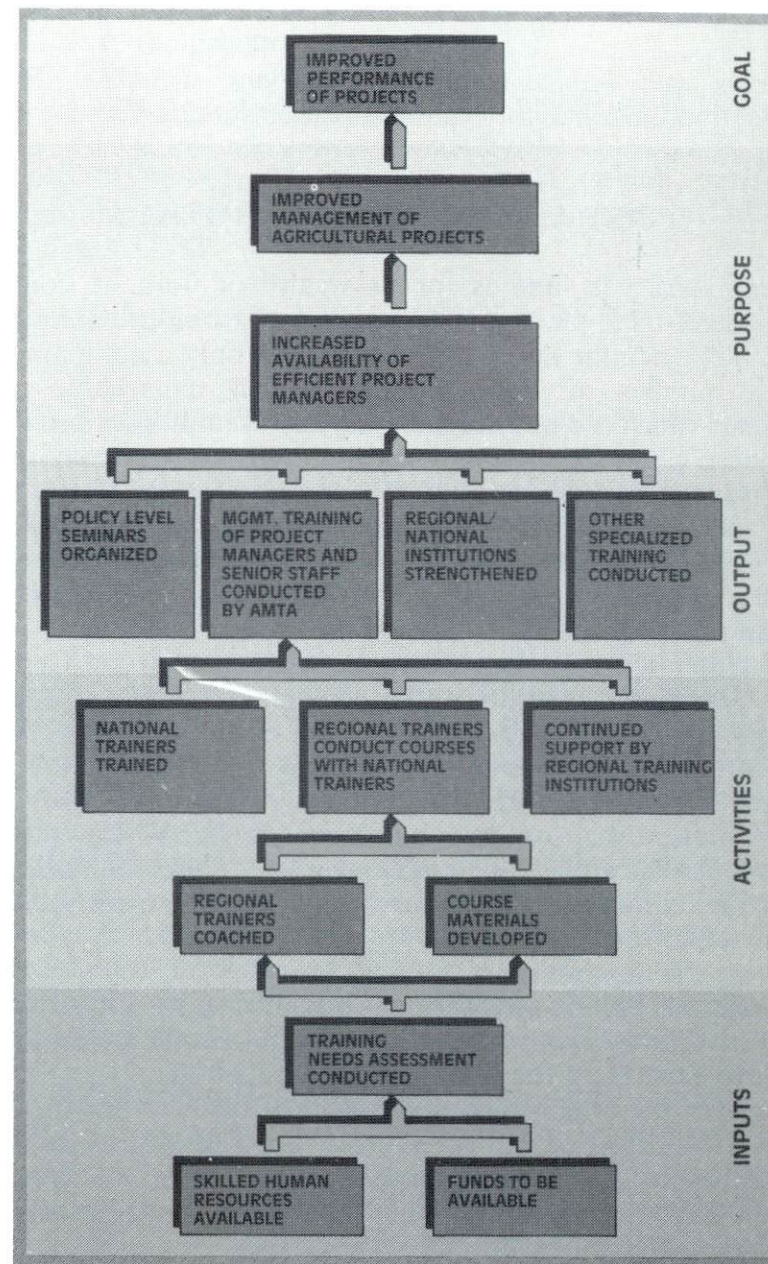
USAID Supported Through ISNAR

Since food production has fallen considerably below the population growth rate, current conditions of food scarcity in Africa will only intensify unless agriculture can be made more productive. One major constraint remains the shortage of top quality managers, particularly agricultural research managers. Too often African scientists with inadequate management experience have been promoted to senior positions, to the detriment of both science and management; and all too seldom have these officials received sufficient service management training. Review of national agricultural research systems indicates the urgent need to improve the management of agricultural research in Africa by:

- helping countries to identify their needs for planning and implementing agricultural research, as well as training and extension links;
- assisting them to determine research priorities and strategies;
- helping to formulate programmes of action, including programmes for the development of skilled manpower;
- assisting them to draw up apposite organizational procedures.

Strategy: While training programmes should necessarily be oriented towards the trainee, institutional capacity for providing an adequate education must first be established. The gap between systems of national agricultural research and the existing educational institutions must be bridged by introducing, to both sides, the concept of agricultural research management, through a series of workshops.

MANAGEMENT FLOW SHEET



Implementation: Workshops oriented to needs and priorities of small farmers.

Financing and Implementing Organizations: USAID, ISNAR (International Service for National Agricultural Research).

FIRST AFRICAN PHARMACOPOEIA

Résumé: Africa is famous for its wealth of flora. A complete catalogue of these plant species reveals an enormously long list of items. Yet scientific study has shown that only a comparatively limited number of these species contain remarkable active principles which are not only in everyday use but have been cited in modern pharmacopoeias the world over. A large majority of these plants contain several therapeutic agents used in the traditional medicine practiced by about 80 per cent of the continent's population. However, in spite of the work carried out in Africa by various research teams, until now there has been no official African pharmacopoeia.

Consequently, at the 8th Meeting of the Inter-African Committee on Traditional Medicine and Medicinal Plants held at Bamako in September 1981, a sub-committee was appointed to investigate the traditional medicines of Africa and to prepare the first African Pharmacopoeia. Through the initiative of the OAU/STRC the sub-committee met on two occasions at the WHO office in Geneva, in 1982 and 1983, to draw up a list of the 100 plants most widely and commonly used in traditional African medicine.

They undertook to:

- prepare the monographs;
- compile and collate all information related to the plants;
- convene a meeting of the editorial board to obtain the opinion of African experts on the work before publication.

Aware of the importance and benefit of such a work to Africa the OAU Council of Ministers devoted a full resolution to the publication of the First African Pharmacopoeia at their 40th session. The resolution urged the WHO office in Africa to assist this OAU/STRC publication.

A meeting of the editorial board composed of African experts was held at Brazzaville in 1984, and the manuscripts were then submitted to the printers (see pages 32-33).

Publication: Volume I of the first African Pharmacopoeia has now been published in English and French by the OAU/STRC, ISBN No. 978-2453-02-01. The second volume, which deals with methods and analyses, will be published by the end of 1985.

See pages 32-33.

SYMPOSIUM ON VIRUS ASSOCIATED CANCERS IN AFRICA

There is abundant and convincing evidence that the hepatitis B Virus infection is causally related to the development of liver cancer in Africa as well as in other parts of the developing world.

HBV infections are particularly common in tropical Africa where the majority of an estimated 200 million chronic HBsAg carriers are living. The infection, which in most tropical populations is acquired during infancy and early childhood, leads to chronic liver diseases such as cirrhosis of the liver with a high morbidity and mortality rate. More data are continually being collected on the epidemiology of HBV infections. This indicates that the incidence of chronic carriers of acute hepatitis and chronic liver diseases are on the increase—a situation which requires immediate intervention.

Additional factors such as mycotoxins may play a role in the causation of liver cancer. Control of the mycotoxin contamination of food grains has been recognized but this would largely depend on agricultural workers and planners.

Clearly however, if HBV infection is prevented by active immunisation the incidence will be considerably reduced in these areas.

The OAU/STRC headed by Prof. A. O. Williams, who is also President of the International Association for the Study of Liver Diseases, IASL, decided to convene the symposium on Virus Associated Cancers in Africa in Nairobi, Kenya from 24-28 April 1984.

Participation: 72 representatives from 25 African countries and 10 non-African countries.

Co-sponsoring Organizations: World Health Organization for Africa (Brazzaville), International Agency for Research on Cancer (Lyon), United Nations Environment Programme, International Association for the Study of Liver Diseases, Falk Foundation (Federal Republic of Germany), Institut Pasteur Production (France), International Union against Cancer (Geneva), International Association for the Study and Prevention of Virus Associated Cancer.

Recommendations: The following recommendations were made at the symposium:

- The need to launch a vaccination programme against HBV infection is imperative in Africa;
- It is mandatory that all infants and children should be vaccinated;
- In view of costs, manpower needs and epidemiological data, adults may not be recommended for routine vaccination. However, susceptible adults in some populations may be vaccinated under certain defined conditions;
- Multi-centred programmes, using standard protocols should assess the efficacy of all vaccines in the tropical populations;
- Training of personnel and research on field trials as well as laboratory diagnosis in hepatitis areas should be incorporated in the vaccination programmes of African countries;
- Additional data should be constantly collected in regard to optimum vaccination route, the stabilizing of vaccines not maintained in a cold chain, optimal minimum dose, and, most important of all, the cumulative influence of vaccination on the prevalence and incidence of chronic liver diseases and PHC;
- The most urgent goal should be to encourage a marked reduction in the cost of these vaccines. Establishment or production centres in Africa should ensure a local supply of cheaper vaccines;
- It is highly desirable to provide an international standard for

HBV vaccines, as had been established for immunoglobulins and certain other vaccines (e.g. ATS, tetanus);

- A follow-up symposium should be held in 2-4 years to review progress in vaccination against hepatitis and liver cancer in Africa, with particular reference to the advances and additional information resulting from the use of second generation vaccines.

Publication: The proceedings of this symposium have been published under the title of Virus Associated Cancers in Africa. ISBN No. 978-2453-005.

AFRICA-WIDE PROJECT FOR BIOLOGICAL CONTROL OF CASSAVA PESTS (ABCP) OAU/STRC JOINT PROJECT 38

Africa produces an annual 48 million tons of cassava, which is the staple food for about 200 million Africans. Since the introduction into Africa in the early 1970's of two cassava pests from South America, the pests have spread through 30 African countries, causing damage estimated at over 2 billion US dollars a year. The pests are not considered a serious threat in South America where they are constantly kept in check by a host of natural enemies which attack them at all phases of their life cycle; but in Africa, where such enemies are absent, the pests have found a favourable breeding ground. Over the past four years scientists have been developing various research lines on cassava pest control. These include investigations into the use of pesticides, culture practices, the introduction of pest resistant cassava varieties, and biological control. Biological control has been selected as the most effective method.

Objective: The project has been designed to control the two cassava pests: the cassava mealybug (*phnacocus manihoti*) and a complex of cassava green spider mites (*mononychellus* species) which originated in South Africa and were first introduced biologically into Zaire and Uganda.

Research Programme

By means of an investigation conducted by IITA and their collaborators in the pests' countries of origin, effective natural enemies, both parasites and predators, have been found in Brazil, Columbia, Paraguay and Bolivia. After a quarantine period at the Commonwealth Institute of Biological Control in the U.K., these natural enemies were transferred to Africa for study at the IITA laboratories Ibadan, Nigeria. All natural enemies proved harmless to crops and beneficial insect species.

Implementation: At the request and with the full collaboration of the national governments these enemy insects have been released, experimentally, in the following countries: Nigeria, The Gambia, Guinea Bissau, Ghana, Senegal, Togo and Zaire.

Management: An international control service has been set up within the IITA in view of the biological control data which IITA has been accumulating over the past four years. This body, known as the African Biological Control Service (ABCS), organizes the control campaign, while research activity remains with IITA. A programme control co-ordinator (Team Leader) has been appointed by IITA.

Africa-wide Project: A major biological control campaign has now been launched. The project, which is expected to establish effective control within 6–10 years, includes:

- establishment of facilities to amass, breed and distribute the natural enemies;
- expansion of the IITA research base;
- training of a national staff to undertake release operations; and
- assistance for a national biological control programme.

Co-operation: Research in this field has been carried out with the collaboration of the Research Institute of Brazil; the International Centre of Tropical Agriculture; CALI of Columbia; the Commonwealth Institute of Biological Control; the Commonwealth Institute of Entomology; the University of California, USA; the Institute of Phytomedicine, Zurich, Switzerland; and the Natural History Museum of London, U.K.

Project Financing: The following donors met in Rome in mid-October 1984 to make financial commitments: IFAD in Rome, Government of Italy; the International Development Research Centre of Ottawa, Canada; the German Agency for Technical Cooperation (Federal Republic of Germany); the Islamic Bank; the World Bank; the Governments of Canada, Denmark, the Federal Republic of Germany, Italy, Japan, the Netherlands, Norway, Switzerland and the United States of America.

Project Cost: Approximately 16 million dollars was projected for the first phase of release operations in about 20 countries but it was decided to reduce the cost of operations.

AFRICANS TRAINED IN BIOLOGICAL CONTROL

OAU/STRC/ABCP/IITA/FAO Biological Control Trainees in cassava mealybug and greenspider mites.

(I) 9 January–3 February 1984 Trainees
(All from Nigeria) ABCP/IITA Sponsored

1. Mr. ILORI James Oladeni
I.A.R. & T.
University of Ife
Moor Plantation
Ibadan
2. Mr. FAJUYIGBE Festus Babalola
Plant Quarantine Services
Moor Plantation Ibadan
3. Mr. MADAKI Joshua
Federal Department of Pest Control Services
P.M.B. 2158
Sokoto
4. Mr. TAYLOR Kehinde
I.A.R. & T.
University of Ife
P.M.B. 5029
Moor Plantation
Ibadan

5. Mr. EZULIKE Thomas Okeke
National Root Crops Research Institute
Umudike
Umuahia
6. Mr. Iruke Obioma
N.R.C.R.I.
P.O.B. 1006
Umudike
Umuahia
7. Mr. KALABARE Doubokare Nicholas
Shell (P.A.G.W.I.)
Pet. Dev. Co. of Nigeria
Bendel State
8. Mr. EchENDU Nmadi
National Root Crops Research Institute
Umudike
Umuahia
9. Mr. AUGUSTINE A. Chilaka
Federal Department of Pest Control Services
P.M.B. 01400
Enugu
10. Mr. DOUBOKARE N. Kalabare
Shell Petroleum Dev. Co Nig. Ltd.
(CDPW) P.O. Box 230,
Warri

(II) OAU/STRC/IITA/ABCP/FAO
Biological Control Training Course
(28 January–15 February 1985)

1. Mr. NADYIRAGIJE Pascal
B.P. 1483
Bujumbura
Burundi
2. Mr. TCHUANYO Marton
I.A.R.
P.M.B. 25
A. Ekowa
Buea
Cameroon

3. Mr. TOURAY K. Omar
Department of Crop Protection Service
Ministry of Agriculture
Yundum
Gambia
4. Mr. MALLOW Samba
Department of Crop Protection
Ministry of Agriculture
Yundum
Gambia
5. Mr. MAREZA Cirilo
M.D.R.P.
P.O. Box 71
Bissau
Guinea-Bissau
6. Mr. ABREU Lourenco
M.D.R.P.–D.P.V.
P.O. Box 71
Bissau
Guinea-Bissau
7. Mr. FAYE Falilou
AU Crefphyd Km. 15
Route de Rufisque
B.P. 54
Thiaroye
Dakar
Senegal
8. Mr. CAMARA Ousmane
Divisio De Lo Protection des Vegetative
B.P. 486
Dakar
Senegal
9. Mr. Sanda A. Kolla
Direction de la Protection des Végétaux
B.P. 44021
Lome
Togo

10. Mr. Komalan Toughon
Institute des Plants & Tubercules (I.N.P.T.)
B.P. 1263
Lome
Togo

(III) OAU/STRC/FAO/IITA/ABCP
Biological Control Training Course
(3-28 June, 1985)

1. Mrs. ALBERTO DARKU Maria Jose
Ministro da Agricultura
C.P. 6333 Dnopa Street
Conandate Jika
No. 2 Luanda
Angola
2. Mr. DOZITE Mbusu
Entreprise Agro-Pastoral de Negae
Luanda
Angola
3. Mr. GONCALVES Rui Manuel Roque
Delgação Provincial Agricultura de Malange
C.P. 22 Malange
Angola
4. Mr. KELE-KELE Florent
Controleur d'Agriculture Responsable des Activite des
Credites
CNCR
B.P. 1003
Libreville
Gabon
5. Mr. MBOUMBA Kombila Alphonse
Ministère de l'agriculture
B.P. 633
Libreville
Gabon

6. Mr. MOUARAGADJA Isaac
I.R.A.F.
B.P. 2246
Libreville
Gabon
7. Mr. MITUMBILI Edward Geoffrey
Makoka Agricultural Research Station
Private Bag 3
Thondwe
Malawi
8. Mr. SAUTI Raphael Felix Nembozanga
Makoka Agricultural Research Station
Ministry of Agriculture
Private Bag 3
Thondwe
Malawi
9. Mr. KANJU Herman
Mtwara Agricultural Research Station
P.O. Box 5099
Mtwara
Tanzania
10. Mr. Eustard Francis
Tanzanian Research Organization (TARO)
Ukiriguru Agricultural Research Station
P.O. Box 1433
Mwanza
Tanzania
11. Mr. MUPO Sikuniso
Kaoma Research Station
P.O. Box 940084
Kaoma
Zambia
12. Mr. SUMANI Alfred Joseph
Luapula Regional Research Station
P.O. Box 710129
Mansa
Zambia

(IV) OAU/STRC/FAO/IITA/ABCP
Biological Control Training Course
(23 September–18 October 1985)

1. Dr. BOUSSIENGUEST Juste
Faculté des Sciences
B.P. 1886
Libreville
Gabon
2. Mr. OMTE Noel
Ministère du Développement Rural
ADECAF
B.P. 1935
Bangui
Central African Republic
3. Mr. SARA-DJENATA Auguste
PRODEROM
B.P. 1007
BANGUI
Central African Republic
4. Mr. RICHMOND Cudjoe Anthony
Plant Protection and Quarantine Unit
Department of Agriculture
P.O. Box M37
Accra
Ghana
5. Mr. ADJAKLOE Koblah Robert
Plant Protection and Quarantine Unit
Department of Agriculture
P.O. Box M37
Accra
Ghana
6. JEAN-MARC Anga Abo (Mr.)
Ministère du Développement Rural
Protection des Végétaux
B.P. V185
Abidjan
Ivory Coast

7. Mr. KPABAR Joseph
Central Agricultural Research Station (CARI)
M.B. 3929
Suakoko
Liberia
8. Mr. LAVELEH Augustine Sumowar
Central Agricultural Research Institute (CARI)
Suakoko
P.M.B. 3929
Liberia
9. Mrs. BAUDOUINE Birandano
Institut des science
Agronomiques du Rwanda
B.P. 138
Butare
Rwanda
10. Mr. HARELIMANA Jean Marie Deo
Ministère de l'Agriculture
De l'Elevage et des Forêts
B.P. 621
Kigali
Rwanda
11. BREWA Mathew (Mr.)
Ministry of Agriculture and Natural Resources
Crop Protection Branch
Freetown
Sierra Leone

MEDICINAL PLANTS AND TRADITIONAL MEDICINE

At least 85 per cent of the peoples of Africa are forced to resort to traditional practitioners and medicines. The scientist, however, whose duty and mandate it is to enumerate and evaluate the numerous and most commonly used medicinal plants, establish their botanical profiles, improve the preparations made by traditional therapists and determine dosage, must endeavour to provide a more rational use.

Implementation: Impressed by the vast research activity undertaken in various universities and research centres in Africa, the OAU/STRC has since been assisting these institutes in their research and training in Africa.

Training: The Universities of IFE (Nigeria) and CAIRO (Egypt) have received assistance from the OAU/STRC for the training of post-graduates at high level, while the Madagascar Research Centre will train technicians at medium level. The first OAU scholar from Ethiopia has just been successful in the Masters degree in Pharmacognosy. There are two more scholars about to finish their post-graduate training.

Research: The OAU/STRC is assisting 21 research centres in Africa in research work on medicinal plants. Research is aimed at discovering the following drugs: anti-cancer, anti-malaria, anti-helminthic, antibiotic, hypotensives, drugs acting on the cardiovascular system, anti-sickling, anti-viral, insecticides, anti-diabetic, anti-hypertensives, the study of aphrodisiacs and drugs against skin diseases.

Project Cost: Annual subvention varies from US\$ 10,000 for research centres, to an annual US\$ 20,000 for IFE and Cairo Universities.

Funding: OAU through STRC budget.

PUBLICATIONS

See pages 32-33.

Activities of The Inter-African Phytosanitary Council (OAU/STRC/IAPSC)

PUBLICATION OF MONOGRAPH ON DISTRIBUTION MAPS OF MAJOR CROP PARASITES IN AFRICA (IN COLLABORATION WITH CAB-UK)

Objective

The objective of this monograph is to produce a map for each pest and disease illustrating its distribution in Africa so that governments and member states can be informed on the health conditions of plants, plant parts and plant products likely to be imported from affected African countries, for the purposes of research or agro-industrial development in the respective countries.

The monograph containing maps are now being printed in English and French and will be published shortly.

PHYTOSANITARY TRAINING

During the period under review, training of the following staff categories has been continued.

Training of Junior staff in regional Phytosanitary Training Centres in Africa.

Three months training courses were held at the centres in Ibadan (Nigeria) and Cairo (Egypt). Candidates were selected from OAU member countries.

Phytosanitary Training for Senior Staff

Training continues for research officers working in the plant protection departments of member countries. These short-term courses, which range from a few weeks to three months, were

AFRICAN PHARMACOPOEIA

1985



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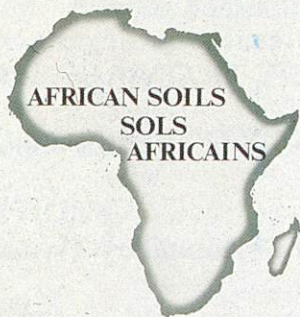
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COMMISSION SCIENTIFIQUE TECHNIQUE ET DE LA RECHERCHE
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BUREAU INTERAFRICAIN DES SOLS

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JOURNAL of AFRICAN MEDICINAL PLANTS



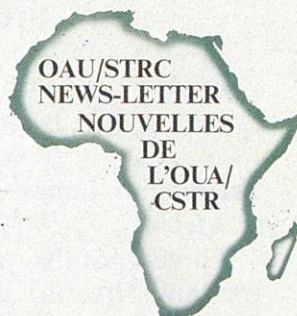
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RESEARCH INTO AFRICAN
MEDICINAL PLANTS

newsletter JP 27

Organisation of African Unity
Scientific Technical and Research Commission (OAU/STRC)



RECHERCHES SUR LES PLANTES
MEDICINALES AFRICAINES.

Bulletin d'Informations JP 27

ORGANISATION DE L'UNITE AFRICAINE
Commission Scientifique Technique et
de la Recherche (CSTR/OUA)

EDITOR: Prof. Abayomi Sofowora Faculty of Pharmacy University of Ife, Ife-Ife, Nigeria.
NO. 11 ENGLISH and FRENCH (ANGLAIS et FRANCAIS) JANUARY 1985



ORGANIZATION OF AFRICAN UNITY
Scientific Technical and
Research Commission

NEWSLETTER OF
OAU JP 31 SAFGRAD
Semi Arid Food Grain
Research and Development



No 11

OCTOBER 1984

Editorial

One of the major activities of the SAFGRAD Project is to facilitate the dissemination of technical research information among scientists of member states. The Newsletter is one of the strategies that SAFGRAD employs to attain this objective. The involvement of the national programmes and regional research activities is mandatory to promote research communication among scientists of member states.

We invite our readers to contribute articles in the following areas:

1. NEWS IN BRIEF.

This covers major events such as conferences, workshops and seminars to promote food grain production in the semi-arid regions of Africa. The change or addition of research personnel (related to food grain improvement and production) at national research stations is also of interest to researchers of other member countries.

2. PROMOTING ON-FARM ADAPTIVE TECHNOLOGY

Transferring research results and related technological innovations

in agriculture to farmers is one of the constraints to increasing food grain production in the semi-arid regions of sub-Saharan Africa. Pre-extension trials, farming systems research and agricultural extension programmes are operational in a number of states in order to facilitate the dissemination of improved techniques to farmers. Simultaneously, these programmes generate feedback information from farmers that usually warrant new research and extension approaches. Exchange of information related to on-farm adaptive technology is relevant to all research and rural development workers of member states.

3. RESEARCH COMMUNICATIONS

National research programmes on food grain crops (sorghum, maize, millet, cowpeas and groundnuts) are carried out in many of SAFGRAD's member states. Furthermore, regional and international research organizations provide backstop services to national research activities. SAFGRAD, through its Newsletter, intends to inform scientists of its member states of any recent research achievements

from national, regional, or global projects in Africa. Every scientist working in the field of food grain research in Africa should submit research published in his/her journal to the wider circulation of the semi-arid region of Africa.

4. NEWS OF AFRICAN COUNTRIES

This column will cover the introduction of new crops and activities of research workers among the regional research workers.

Let us share by sending you following address:

The Director
SAF
B. P.
OUAGADOUGOU



ORGANIZATION OF AFRICAN UNITY
SCIENTIFIC TECHNICAL AND
RESEARCH COMMISSION
INTERAFRICAN
PHYTOSANITARY COUNCIL

ORGANISATION DE L'UNITE AFRICAINE
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TECHNIQUE ET DE LA RECHERCHE
CONSEIL PHYTOSANITAIRE
INTERAFRICAIN



AFRICAN JOURNAL OF
PLANT PROTECTION

★
REVUE AFRICAINE DE LA
PROTECTION DES
VEGETAUX

★
VOLUME NO. 1 (1)

SPECIAL EDITION

Inter-African Symposium on the Role of Plant Protection in Crop Improvement in Africa
Ibadan (Nigeria), 7-12 October, 1974

EDITION SPECIALE

Symposium Inter-Africain sur le Rôle de la Protection des Plantes dans l'Amélioration des Cultures en Afrique
Ibadan (Nigeria), 7-12 Octobre, 1974



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CONSEIL PHYTOSANITAIRE
INTERAFRICAIN (CPI)

Secrétariat Scientifique



DISTRIBUTION MAPS OF MAJOR
CROP PESTS AND DISEASES
IN AFRICA

CARTES DE REPARTITION DES
PRINCIPAUX ORGANISMES NUISIBLES
DES VEGETAUX EN AFRIQUE

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SECRETARIAT OF THE ORGANISATION
DE L'UNITE AFRICAINE
L'UNITE AFRICAINE
1985

PUBLIE PAR LE SECRETARIAT
SCIENTIFIQUE DE LA COMMISSION
SCIENTIFIQUE TECHNIQUE ET DE LA
RECHERCHE DE L'UNITE AFRICAINE
1985

organized by the International Centre of Insect Physiology and Ecology (ICIPE) at the Mbita Point (Kenya) Research Station.

Efforts continued to secure sponsors for more scholarships for training African qualified staff through contacts with regional and international institutions and agencies including CIRAD, CAB, GTZ which offer phytosanitary training courses.

PLANT QUARANTINE PROJECT

The aim of the project is to set up networks of national and regional quarantine stations as well as networks of regional phytosanitary training centres in Africa.

Activities have been geared to arousing the awareness of governments towards the creation of national plant quarantine systems with adequate qualified staff and working materials. Until now, these activities have been carried out in only 10 countries: Kenya, Nigeria, Niger, Egypt, Madagascar, Zambia, Mozambique, Somalia, Ghana and Senegal.

NETWORKS OF SEED HEALTH TESTING LABORATORIES, PROJECT JP 34

Seed Health Testing Project

The project is aimed at providing member countries with national laboratories for testing seed health. A total of 150 laboratories can be found in 42 member countries.

PESTICIDES IN AGRICULTURE AND SYLVICULTURE IN AFRICA, PROJECT JP 35

The IAPSC is strengthening its efforts towards the creation of a network of laboratories for residue analyses and formulation in Africa. Dangers posed by the uncontrolled and harmful use of pesticides in Africa as well as the economic and health consequences on consumers have prompted IAPSC to strengthen its collaboration with the codex commission, with a view to establishing codex standards for the continent's agricultural products.

Africa-wide Project for Biological Control of Cassava Pest, JP 38

This project has been described under projects under direct supervision of the OAU/STRC office in Lagos (see page 21).

However, the importation into Africa of organisms of foreign origin, their massive reproduction and their successive release in various ecological zones have been conducted without any form of effective co-ordination and control. The IAPSC has become a full member of all scientific and technical bodies created for this project.

African Phytosanitary Research and Training Centre

The IAPSC is consulting specialists to complete a feasibility study of this vital project in collaboration with international regional institutions and the OAU/STRC.

Lists of Pests and Diseases of Zero Tolerance in Africa and of those Observed and for which Control Measures have to be taken, JP40

IAPSC is pursuing contacts with regional and international institutions and agencies in order to revise and complete the established lists.

PUBLICATIONS

African Journal of Plant Protection.

See pages 32-33.

Major Activities of Inter-African Bureau for Animal Resources (OAU/STRC/IBAR)

PAN-AFRICAN CAMPAIGN FOR THE ERADICATION OF RINDERPEST (PARC)

Preamble: Rinderpest first infected the African continent in 1889 in a devastating epizootic that killed almost 90 per cent of the African cattle population.

Methods for the control of this disease have developed with the introduction of new vaccines, new laboratories, new field equipment and new trained veterinary personnel. But sporadic outbreaks of rinderpest have always recurred in Africa, the last one recently as the early 1980's. This emergency situation called for international action, a vaccination campaign was organized and the disease was brought under control. In spite of the success of this emergency campaign it was obvious that unless greater eradication efforts were made the disease would break out again.

In accordance with the resolution of the Council of Ministers held in Nairobi in 1981, the OAU/STRC, through its IBAR office in Nairobi, has made considerable progress in achieving the relative objectives and a rinderpest eradication campaign has been prepared with the assistance of interested organizations such as FAO, OIE and others.

Several meetings have since taken place resulting in the formation of a support group at the OAU/STRC/IBAR in Nairobi, supplemented more recently by experts and consultants from FAO and the EEC.

Objectives

- (1) To eradicate rinderpest in Africa.
- (2) To initiate a simultaneous vaccination campaign in all countries where rinderpest is believed to be enzootic.

- (3) To initiate a consolidation phase of approximately six years to ensure follow-up action and the elimination of all residual foci of the disease.
- (4) Wherever necessary, and possible, vaccination against contagious bovine pleuro-pneumonia would be carried out simultaneously.

Area: 28 countries with national files prepared and reviewed: Burkina Faso, Republic of Benin, Burundi, Cameroun, Chad, Ivory Coast, Ethiopia, The Gambia, Ghana, Djibouti, Guinea Bissau, Kenya, Liberia, Mali, Mauritania, Nigeria, Central African Republic, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Uganda and Zaire. Altogether these countries represent a total number of 120 million herds.

Cost of the Project: US\$ 160,000 million.

Management: IBAR office, Nairobi, with an international Coordination Committee yet to be appointed; sub-regional offices in Dakar, Addis Ababa and Lagos.

Financing Organization and Countries: FAO, OIE, EEC, France, Federal Republic of Germany, Canada, Libya, Japan, Indonesia and Italy.

Starting Date: January 1986.

EPIDEMIOLOGY OF ANIMAL DISEASES

Collection and publication of data on the above continues. Data collected are published in IBAR News Letter and the International Journal of Epizootic diseases or Bulletin of Animal Health Production in Africa. Examples of some recently published data are in the following maps.

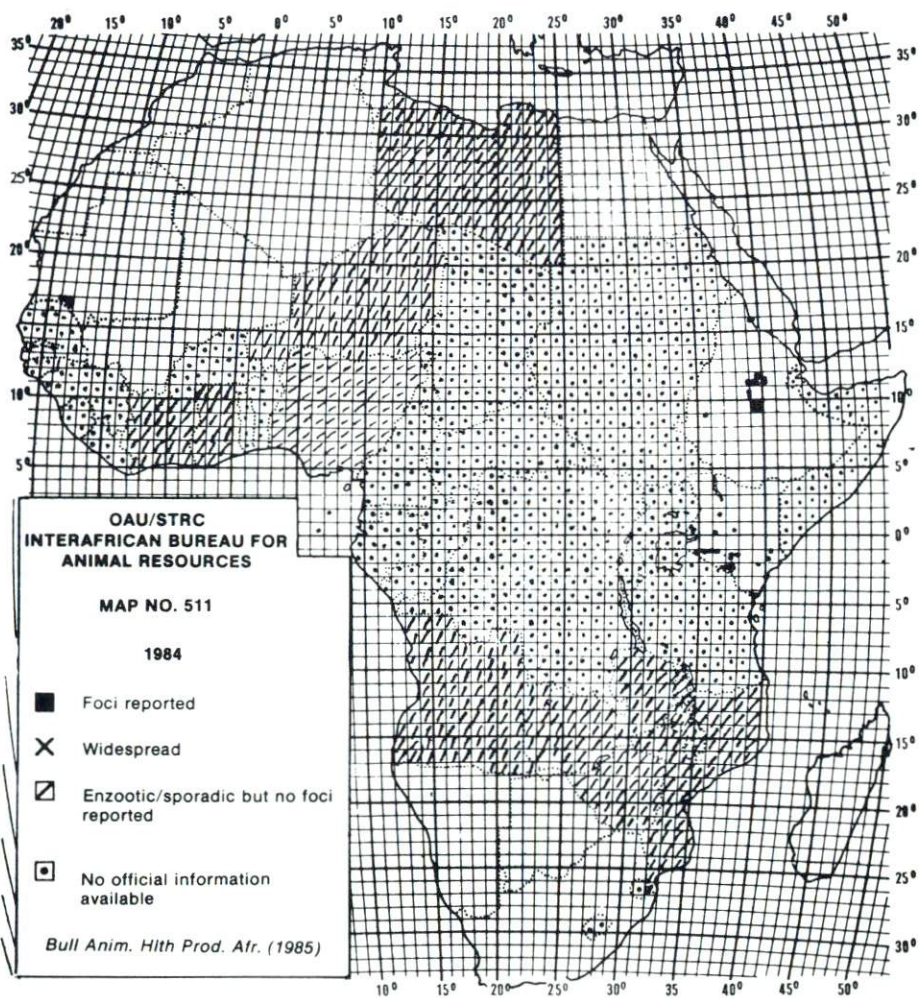
PUBLICATIONS

IBAR NEWSLETTER

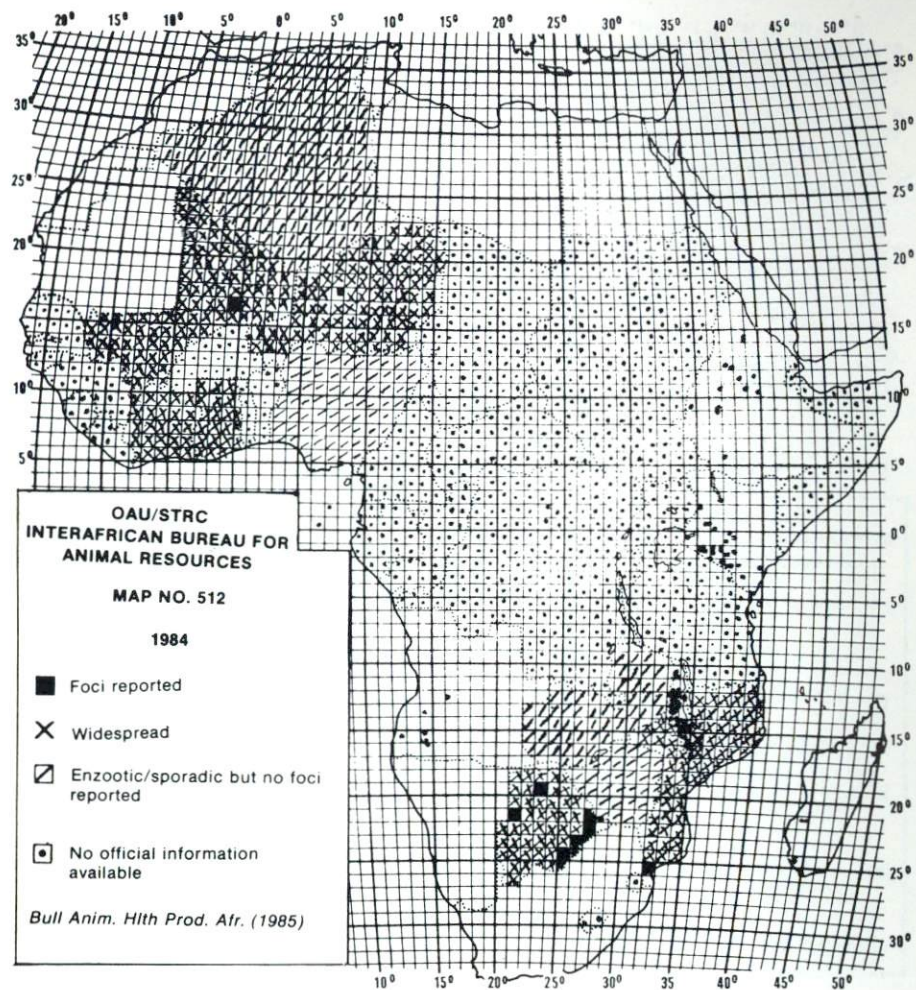
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See page 32-33.

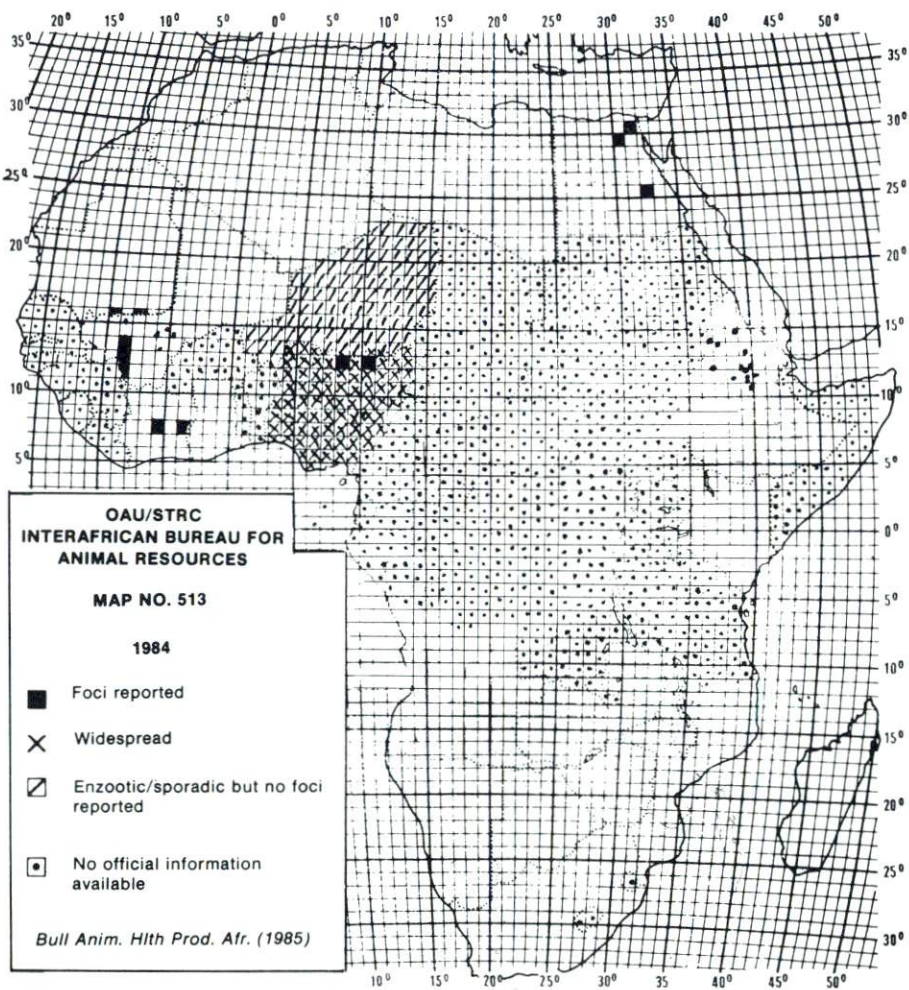
Geographical Distribution of FOOT-AND-MOUTH DISEASE in Africa



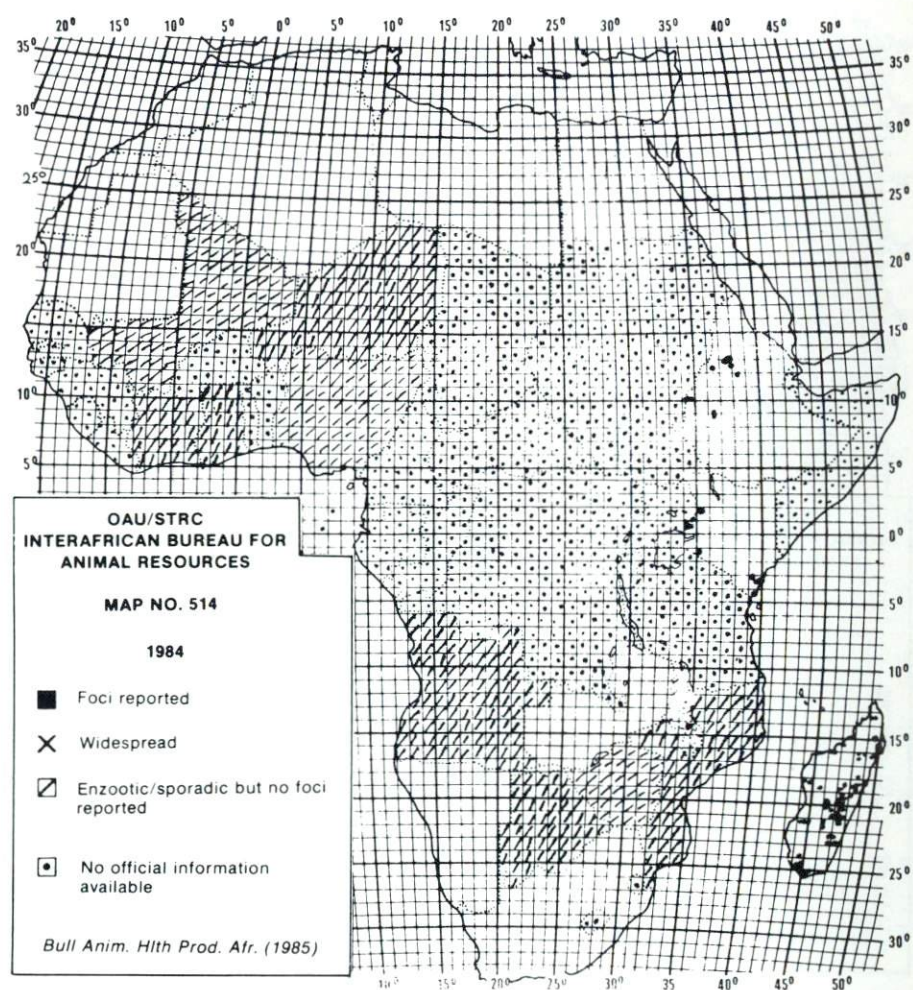
Geographical Distribution of RABIES in Africa



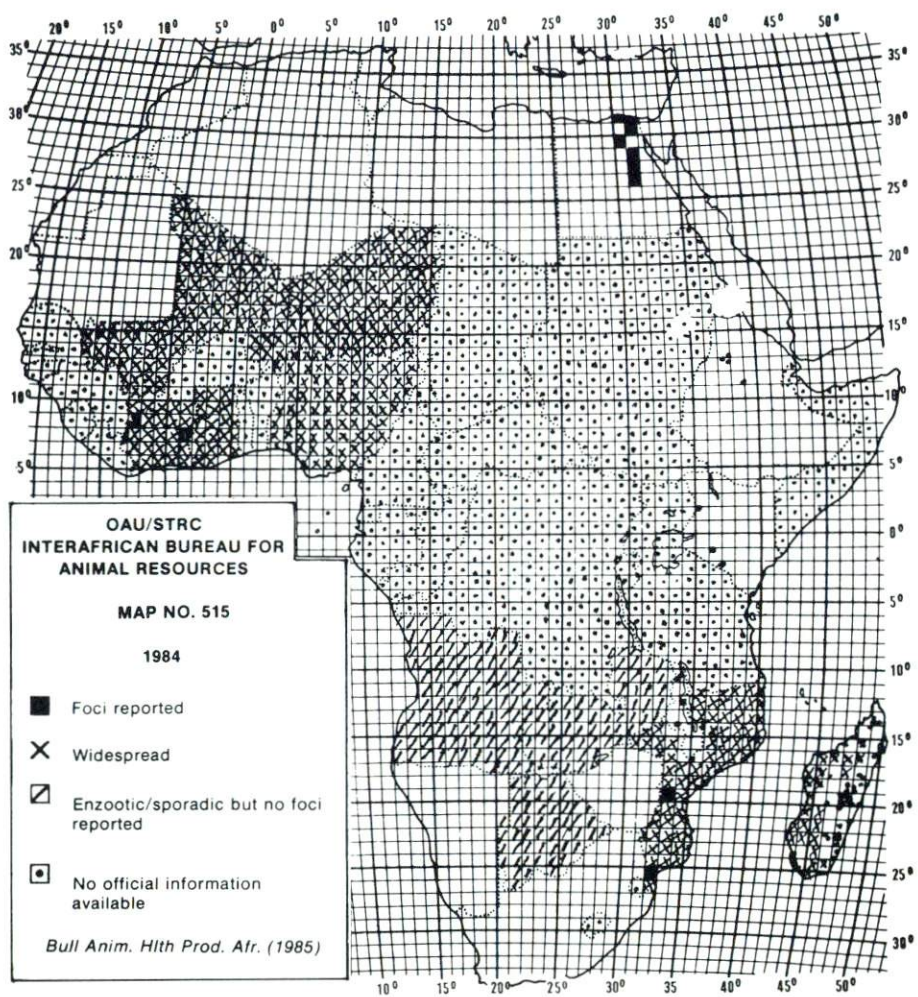
Geographical Distribution of RINDERPEST in Africa



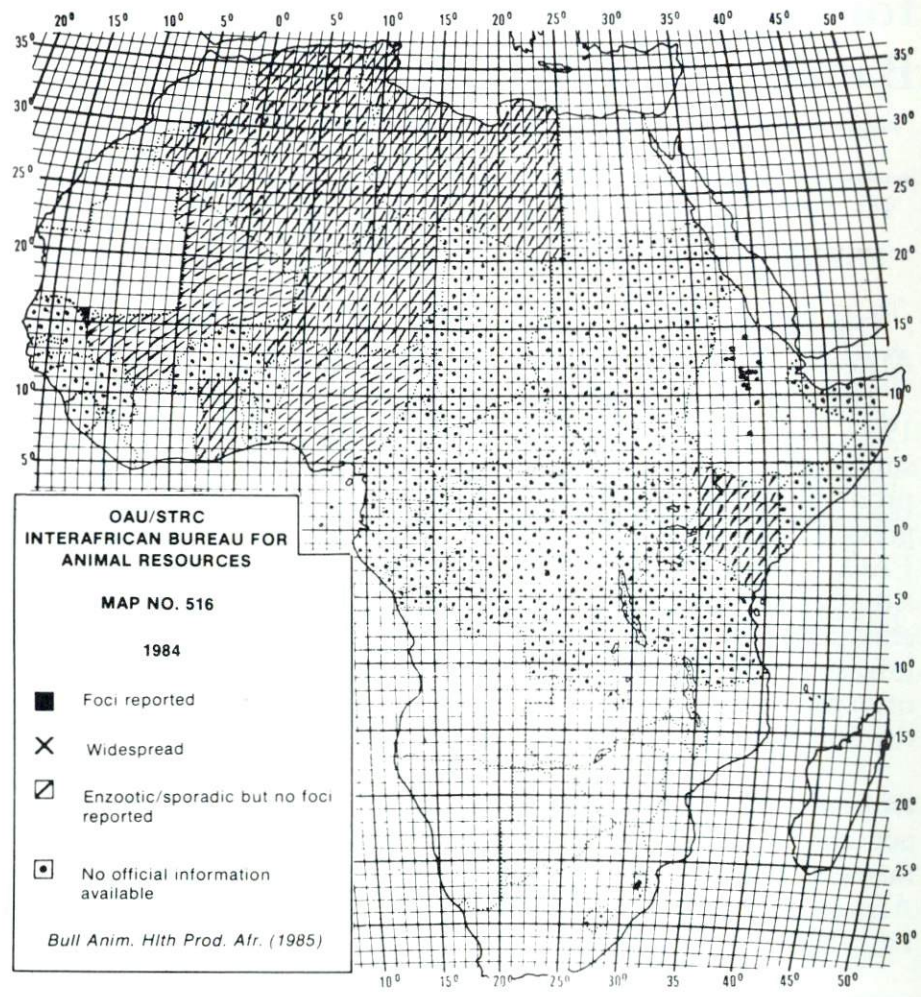
Geographical Distribution of LUMPY SKIN DISEASE in Africa



Geographical Distribution of NEWCASTLE DISEASE in Africa



Geographical Distribution of SHEEP POX in Africa



Activities of the Inter-African Bureau for Soils (OAU/STRC/BIS) Bangui—CAR

ESTABLISHMENT OF A CENTRE FOR SOIL SCIENCE

During 1984, BIS has been working on the convening of the 2nd African Congress to be held in Cotonou, Republic of Benin.

The 36th session of the Council of Ministers, held in February 1984, recommended that ways and means be studied to enable small-holder farms and agricultural co-operatives to increase food production. Prior to this recommendation the First African Congress on Soils, held in Accra in 1980 with the participation of FAO, UNESCO, UNDP and IITA, had taken stock of the situation of soil science research in Africa. From this meeting it emerged that most member states lacked the appropriate infrastructure. Consequently, at the end of the Congress a group of experts recommended the establishment of an African Centre for Soil Science.

Objective: The objective is to train medium level soil technicians to act as "conveyor belts" between high level technicians and farmers. The project will be finalized during the 2nd Congress on African Soils to be held in the near future. (See report published by DSE/BMZ/GTZ of Western Germany under the CDA initiative).

PUBLICATIONS

"African Soils". Out of print since 1977. This publication is shortly to appear. Three volumes are ready for distribution. It is the OAU/STRC publication most in demand and its readers include soil technicians from every country in the world.

See pages 32–33.

Activities of the OAU-Co-ordination Office—Guinea, Conakry

PROJECT FOR THE INTEGRATED DEVELOPMENT OF THE FOUTA-DJALLON HIGHLANDS GUINEA

Résumé: The Fouta-Djallon programme, which is a project of many years standing, was reactivated in 1980 and 1981 by a resolution of the OAU Council of Ministers. The project is aimed at the development of natural and human resources in the Fouta-Djallon district and the conservation of this important zone which includes the upper catchment area of the principal rivers of West Africa. The project covers agricultural, pastoral, silvicultural and hydrological development.

Survey: The co-operation of FAO, UNESCO, UNSO, UNDP and UNEP has been necessary for the preparation of a survey.

Activities: The project's main activities include:

- Map and photographic interpretation;
- Soil surveys;
- Studies in hydrology, climatology and sedimentology;
- Sociological research;
- Pilot projects for agro-sylvo-pastoral development;
- Training and extension services.

The agricultural phase of this comprehensive project was initiated in 1984.

Executing Agent: The FAO is the executing agent of this project with UNDP, WHO and UNESCO as associated executing agents.

Co-ordination: The OAU is responsible for its co-ordination and a co-ordinator has been appointed and taken up duties.

Project Cost: US\$ 1.9 million

Financing Organizations: UNDP, UNSO, OAU.

Location of Headquarters: Conakry, Guinea.

Duration: First phase—3 years.

Activities of the Co-ordination Office in Ouagadougou in collaboration with OAU/STRC Office in Lagos

SAFGRAD: Semi-Arid Food Grain Research and Development Project (JP 31)

Co-ordination Office, Ouagadougou, Burkina Faso

The Semi-Arid Food Grain Research and Development (SAFGRAD), Joint Project 31, was initiated in 1977 to develop improved varieties of three cereals and two grain legume crops, as well to introduce suitable cultural practices for small farmers in the semi-arid regions of Africa. The project is implemented through contracts with: the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) for millet, sorghum and groundnuts; the International Institute of Tropical Agriculture (IITA) for maize and cowpease; and Purdue University for Farming Systems Research in collaboration with the research institutes of SAFGRAD member states.

Financial Funding

Multi-donor funding is provided by the United States Agency for International Development (USAID), the French Aid and Co-operation Fund (FAC) and the International Fund for Agricultural Development (IFAD) in Rome which has recently become a donor. The main research activities to be carried out through IFAD funding concern the improvement of farming system research in SAFGRAD member countries. It was agreed with the donors that a project management committee should be set up to administer the funds.

Management

SAFGRAD is managed by a Consultative Committee (CC) which provides policy guidance and programme supervision; the Technical Advisory Committee (TAC) which reviews research and training programmes and submits appropriate recommendations to CC; the Project Management Committee (PMC) which is responsible for the Farming Systems Research component of SAFGRAD, and, finally, the Coordination Office which implements the SAFGRAD programme as elaborated by TAC and CC.

Although the CC and TAC are intended to meet at least once a year the two committees have only succeeded in convening one or two joint meetings since 1977. Consequently there is an urgent need to reactivate these important committees to ensure the smooth running of SAFGRAD.

The administrative systems and inter-institutional agreements are provided by the STRC. The project continued to serve 25 member states during the year under review, while the active participation in this project of officials from the OAU/STRC Secretariat has contributed to the confidence of the donors.

OAU's support for this project, the STRC's role in supervising the international co-ordination office, the presence of an International Co-ordinator and a Director of Research, both appointed by an international panel of scientists, has lent credibility to the project.

CO-OPERATION

Farming Systems Research (FSR)

The IFAD funds are destined to the improvement of Farming Systems Research in SAFGRAD member countries, under the overall supervision of a Management Committee for their administration. For the implementation of Farming Systems Research (FSR) a team of 3 consultants has been appointed jointly by the IITA, ICRISAT, IFAD and OAU/STRC to prepare a project document covering FSR activities in the member countries. It is evident that the SAFGRAD project is gaining considerable momentum and acquiring an international reputation.

SAFGRAD—USAID

USAID has given considerable financial support to the grain project. An agreement was signed by the U.S. Ambassador on behalf of USAID and the Executive Secretary on behalf of OAU/STRC in Ouagadougou. As part of its evaluation of the project a USAID fact finding evaluation team on the SAFGRAD project visited the Executive Secretariat in Lagos with the mandate to assess the effectiveness of the project and to recommend the direction the project would take, should the donor, USAID continue to fund it. The executive summary of the evaluation team appears satisfactory and their recommendation favours continuation of the project.

SAFGRAD—IITA

The International Institute of Tropical Agriculture, in Ibadan Nigeria, is working closely with the OAU/STRC SAFGRAD project to improve selected varieties of maize and cowpeas for the semi-arid tropics of Africa. The IITA held a joint meeting with the European Economic Commission (EEC) inviting the OAU/STRC to participate in the projects carried out under the SAFGRAD umbrella. The following recommendations and conclusions were reached:

- To create a relationship with the "Institut du Sahel" (INSAH) in order to strengthen national programmes.
- To develop Farming Systems Research Programmes.
- To emphasize the Farming systems Research programmes.
- To extend the Accelerated Crops Production Officers (ACPO) programme to more countries.

SAFGRAD—ICRISAT (International Crops Research Institute for the Semi-Arid Tropics (India))

This institute works closely with SAFGRAD and conducts research programmes in 8 African countries: Niger, Burkina Faso, Mali, Senegal, Nigeria, Sudan, Kenya and Malawi. Collaboration with SAFGRAD aims at improving sorghum and millet varieties which are major staple food crops in most sub-Saharan semi-arid regions of Africa. In future ICRISAT/SAFGRAD will emphasize the strengthening of regional trials at various sites so that

improved varieties and cultural practices can be adopted by national programmes. The ICRISAT/SAFGRAD institute for the improvement of millet and sorghum was formally located at the Institute of Agricultural Research in Ahmadu Bello University in Samuru, Nigeria.

SAFGRAD—Purdue University (USA)

Purdue University, which has a close working relationship with SAFGRAD, has created a Farming Systems Research model in Burkina Faso.

ACPO/SAFGRAD

The Accelerated Crop Production Officer programme (ACPO) forms part of the SAFGRAD project and aims at promoting and increasing food production among member states by applying SAFGRAD research findings. An ACPO officer serves as the principal link between the research and extension programmes of member states. For maximum benefit to the host country, ACPO needs to be fully integrated into the national programmes of the member states.

LIST OF AFRICAN GRADUATES TRAINED AT M.SC. AND PH.D. LEVEL THROUGH USAID/SAFGRAD PROJECT

| <i>Name</i> | <i>Degree</i> | <i>Country</i> |
|------------------------|---------------|----------------|
| Louis Mazhani | Ph.D. | Botswana |
| Lucas Gakale | Ph.D. | Botswana |
| Saidou Kaola | Ph.D. | Burkina Faso |
| Issa Kargougou | Ph.D. | Burkina Faso |
| Sansan Da | Ph.D. | Burkina Faso |
| Hema Idrissa | M.Sc. | Burkina Faso |
| Kimseyinga Sawadogo | Ph.D. | Burkina Faso |
| Paul-Francois Compaore | M.Sc. | Burkina Faso |
| Baya Toe | M.Sc. | Burkina Faso |
| Martin Fobasso | M.Sc. | Cameroon |

| | | |
|-------------------------|-------|---------|
| Dandy Douhouaye Guebila | M.Sc. | Chad |
| Souleymane Conde | M.Sc. | Guinea |
| Bengaly Lenaud | M.Sc. | Guinea |
| Gilbert Sakou | Ph.D. | Guinea |
| Mody Sory Barry | M.Sc. | Guinea |
| Mory Diaby | M.Sc. | Guinea |
| Ekow Akyampong | Ph.D. | Ghana |
| Issaga Moriba Konate | M.Sc. | Mali |
| Lamine Traore | M.Sc. | Mali |
| Lassana Tigana | M.Sc. | Mali |
| Adama Coulipaly | B.Sc. | Mali |
| Brahima Camara | M.Sc. | Mali |
| Coulibaly N'tji | M.Sc. | Mali |
| Mamadou Fofana | M.Sc. | Senegal |
| Mamadou Diop | M.Sc. | Senegal |
| Mohamed Ahmed Barre | M.Sc. | Somalia |
| Komi Sewonou | M.Sc. | Togo |
| M'Po Batoussi | M.Sc. | Togo |

PUBLICATIONS

SAFGRAD Newsletter.
Outline of SAFGRAD Master Plan.
Executive Summary of Master Plan.
Long Term Planning for SAFGRAD.
See pages 32–33.

List of Donors

BENEFACTIONS AND GRANTS TO OAU/STRC AND ITS OFFICES

In addition to the regular budget which originates from contributions from member states the OAU/STRC received technical assistance and grants from various donors and organizations for implementation of its projects:

USAID (United States Agency for International Development)

USAID has been the main donor to the SAFGRAD project since its inception in 1977. It has financed the project which has gained momentum in the semi-arid regions of Africa. USAID has also given assistance to ISNAR for Agricultural Management Training for African Research Directors in Southern Africa.

IFAD (International Fund for Agricultural Development)

Headquartered in Rome has provided technical assistance grants for farming systems research component of the SAFGRAD project in Ouagadougou and the Agricultural Management Training in Africa (AMTA).

SAFGRAD (Semi-Arid Food Grain Research and Development) is a project which is implemented in 25 countries of the semi-arid region of Africa with headquarters in Ouagadougou. Its main objectives are to improve the following three cereal crops (millet, sorghum and maize) and two leguminous plant crops (cowpeas and groundnuts).

EEC (European Economic Commission)

An International Coordinator has been fully supported and consultants from EEC have been put at the disposal of the OAU/STRC/IBAR Office in Nairobi for the Rinderpest Campaign to start in 1986.

Government of France

The Government of France has provided a technical expert as the accelerated crop production officer for the SAFGRAD Togo programme. The Government has also undertaken the complete translation of the First African Pharmacopoeia into French and supported the participation of 3 French experts to the symposium on virus associated cancer in Africa.

FAO—TCP

The Africa-Wide Biological Control Project on Cassava Pests which is to start presently, will enjoy the services of technical experts fully supported by FAO. Considerable support has also been provided by FAO for the Rinderpest Campaign which is being supervised by the IBAR Office. The level of the support is now gaining momentum.

Donations received towards support of OAU/STRC meetings

WHO, IARC, Institut Pasteur Production, Government of France and UNEP made significant contributions to the OAU/STRC meeting on "Virus Associated Cancers in Africa held in Nairobi, Kenya, from 24–29 April 1984.

The International Agency for Cancer Research (WHO) of Lyon supported the participation of several experts at this meeting, provided editorial facilities for the publication of the proceedings and has arranged for the publication of the proceedings by Oxford University Press in New York. The Government of France, through the Ministry of Cooperation, supported the participation of three experts from France. One of these experts was a consultant for the organization of the meeting and a co-editor of the proceedings. The UNEP (United Nations Environmental Programme) supported three experts to this meeting. One of the experts supported by UNEP is a Nobel Laureate, Dr. Blumberg.

Institut Pasteur Production (Marnes la Coquette) France supported the participation of several delegates including experts from the Institute and also gave a donation towards the organization of the meeting.

The World Health Organization (Africa Region) supported the

participation of nine African experts and also gave a donation towards the organization of the meeting.

The OAU/STRC gratefully acknowledges the contributions and co-operation of all the above named donors which predisposed to a highly successful meeting. The 770 page proceedings which has already appeared in print. Copies can be obtained from the publishers, O.U.P. (Oxford University Press) New York, the OAU/STRC Office in Lagos or the IARC (WHO) Office in Lyon, France.

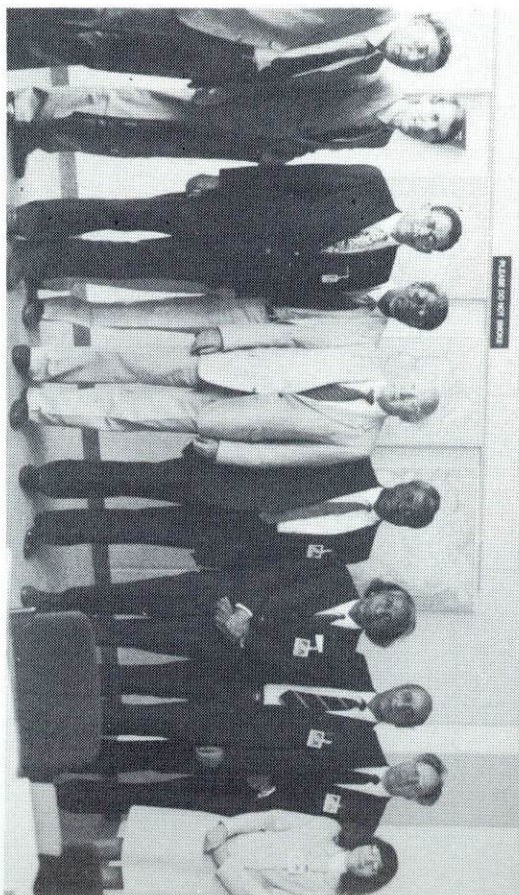
Photographs



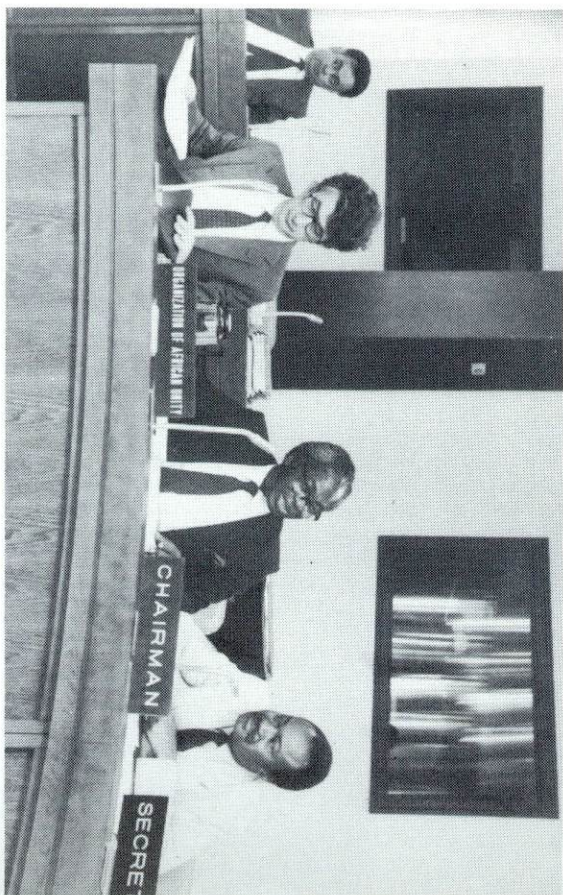
The Executive Secretary of OAU/STRC and the Egyptian Ambassador to Ethiopia having a cordial discussion during the 40th Council of Ministers in Addis Ababa.



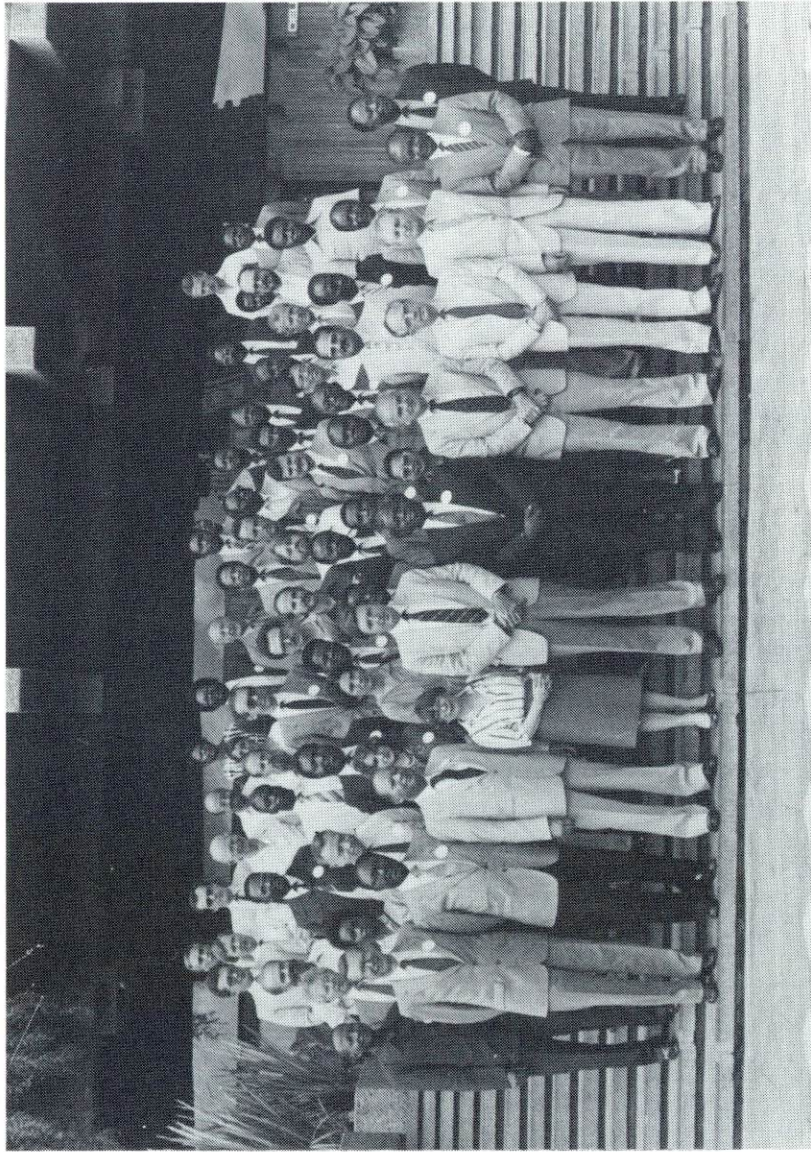
Post-graduate students, directors of agricultural research stations and senior Agricultural Project Officers who attended the Agricultural Research Management Training in Mananga, Swaziland. This training course was funded by USAID and the U.K. government with faculty from ISNAR (Hague) and the CSC Manager Centre in Swaziland.



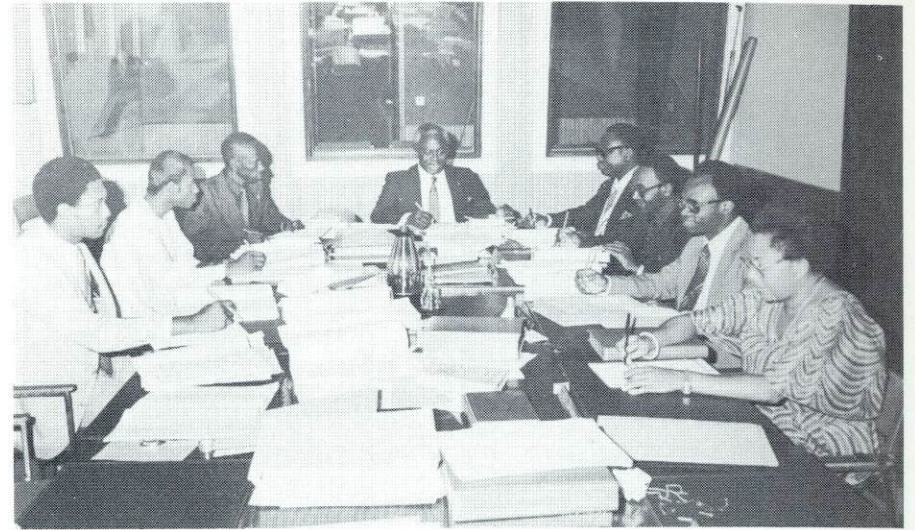
The Joint Consultative OAU/STRC/UNIDO meeting in Vienna on the Industrialization of Medicinal Plants. Participants were from the Federal Republic of Germany, India, Malagasy, Sweden, Nigeria, Egypt, Austria and Sri Lanka.



Some participants at the Sponsoring Group meeting of the Africa-Wide Biological Control Project held at IFAD, Rome. On the extreme right is the Chairman, Mr. Moise Mensah, Assistant President of IFAD.



Participants at the Symposium on Virus-Associated Cancers in Africa held in Nairobi, Kenya. Fourth from the right is Nobel Laureate Baruch Blumberg; fifth from the left is Mr. Leaky, of the Ministry of Foreign Affairs in Kenya.



Members of the Inter-African Committee on the drafting of the first African Pharmacopoeia during a working session, at the WHO Regional Office for Africa in Brazzaville, Congo. Members are from Egypt, Angola, Mali, Senegal, Tanzania, the Republic of Benin, Nigeria and Togo.



The Director General of IBI, Rome, the Executive Secretary of OAU/STRC and officials of the Government of Senegal at the Regional Workshop on Informatics in Dakar.



Group photograph of participants at the Africa-Wide Biological Control meeting in Ibadan, Nigeria. Second from the right is Mr. Mbiele, the Scientific Secretary of the OAU/STRC/IAPSC office in Yaounde, and fourth from the left is the Assistant Executive Secretary of the OAU/STRC office in Lagos, Prof. C.A. Johnson. Other participants included representatives of 23 member states of the OAU and representatives of the international donor community and IITA.



Present at the First high level policy seminar in IFAD, Rome, in October 1985 are from left to right Mr. Aithnard of Togo, Director of Training Centre, African Development Bank, Mr. Brown of United States of America, Vice President of IFAD Mr. Saigal of India and Mr. Jazairy of Algeria, President of IFAD Rome. (Activities Report).



The President of IFAD and the Executive Secretary of OAU/STRC sign the Technical Assistance Grant agreement for the second sub-programme of Agricultural Management Training in Africa (AMTA). (Activities Report).



The Executive Secretary OAU/STRC with Mr. Brown of U.S.A. the Vice President of IFAD discussing the future of Agriculture Management Training in Africa.

Visitors to the OAU/STRC Executive Secretariat in Lagos

Useful discussions and exchanges were held on Scientific and Research activities of the OAU/STRC between the staff of the Lagos office and the distinguished personalities:

1. British Council officials and TETOC officials expressed their readiness to contribute to the OAU/STRC activities by placing themselves at the disposal of the OAU experts and consultants in the fields of projects related to research and training.
2. Mr. CHAPUIS from the French Embassy in Lagos discussed possible contributions from the French government towards campaigns among the smallholder farmers in Africa with the aim of improving farming methods by applying existing research findings.
3. The First Secretary of the Italian Embassy in Lagos, Mr. Giovanni Brauzzi, presented a *note verbale* to the Executive Secretary concerning the contribution of the Government of Italy to the Rinderpest Campaign which is due to start presently. The contribution amounts to about 5 million Naira (6.2 million dollars).
4. A representative of the United Nations FAO Office in Accra, Mr. Sjostrom, discussed FAO participation in OAU/STRC projects related to food storage in Africa. He was accompanied by Mr. Mbiele, the Scientific Secretary of OAU/STRC/IAPSC office in Yaounde.
5. A three man visitation team from USAID visited the Lagos Office in connection with the progress achieved in the implementation of SAFGRAD Project Phase I and future actions to be undertaken for the continuation of the project into Phase II.

6. H. E. ELDIN ABDIM, the Ambassador of the Arab Republic of Egypt to Nigeria paid a visit to the Executive Secretariat.
7. Dr. HARTMANS, Director General of IITA, Dr. Eugene Terry, Director of Training of IITA and Mr. Sicely of the World Bank discussed proposed plans for the campaign for control of cassava pests (mealybug and spider mites) in the 33 affected member countries.
Other visitors who visited the Secretariat to exchange views and to discuss possible contributions of their countries to OAU were as follows:
 8. The Australian Ambassador to the Federal Republic of Nigeria, Mr. A. R. Taylor.
 9. The Swedish Ambassador to the Federal Republic of Nigeria, Mr. Elterndawl.
 10. The Venezuelan Ambassador to the Federal Republic of Nigeria.
 11. The High Commissioner of Malaysia to the Federal Republic of Nigeria.
 12. The Swiss Ambassador to the Federal Republic of Nigeria, Dr. Ruegg.

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Forthcoming Publication



ORGANIZATION OF AFRICAN UNITY
SCIENTIFIC TECHNICAL AND
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INTERAFRICAN PHYTOSANITARY
COUNCIL (IAPSC)

Scientific Secretariat



DISTRIBUTION MAPS OF MAJOR CROP PESTS AND DISEASES IN AFRICA

The distribution of 320 major fungal, bacterial and viral diseases and insect, mite, nematode and bird pests in Africa is mapped on separate sheets. The presence of the organism in a country is indicated by a spot on the map and information sources are listed on the back. The series is modelled on the CMI and CIE Distribution Maps of Plant Diseases and Pests. The information has been compiled by authorities on the various organisms and incorporates the latest nomenclature, with an extensive index of synonyms. A set of 62 phytosanitary regulations concerning the major crops and agricultural products is also included. The publication, which has been edited and prepared by specialists of the Commonwealth Agricultural Bureaux, is available in either English or French and is bound in a looseleaf cover similar to the CMI/CIE Distribution Maps, to enable updating and addition of supplementary material.

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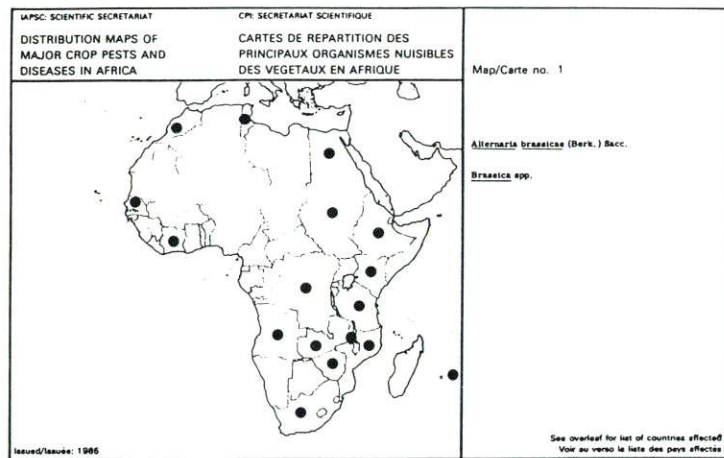
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Forthcoming Publication

DISTRIBUTION MAPS OF MAJOR CROP PESTS AND DISEASES IN AFRICA

SAMPLE MAP AND TEXT. (ENGLISH VERSION)



Map no. 1

Alternaria brassicae (Berk.) Sacc.

Macrosporium brassicae Berk. f

Deuteromycotina: Hyphomycetes

This disease is very widespread and occurs on *Brassica* spp. (cabbage, cauliflower, etc.) and other Cruciferae. For world distribution see *CMI Map 353* and for further information see *CMI Description 162*. (*A. brassicicola* (Schwein.) Wiltz. with which *A. brassicae* may be confused is shown in *CMI Description 163*.)

AFRICA

| | |
|-------------|-----------------------------|
| Angola | [39:555] |
| Egypt | [44: 3287] |
| *Ethiopia | [49: 3739] |
| Ivory Coast | [17:98] |
| *Kenya | [31:173] |
| Malawi | [32:669] |
| Mauritius | [Withe, 28:472; 47: 1065] |
| Morocco | [17:507] |
| Mozambique | [29:89] |
| Senegal | [46: 576] |
| *Sudan | [35:423] |
| *Tanzania | [Wallace & Wallace, 28:472] |
| Tunisia | [IAPSC] |
| Zaire | [IAPSC] |
| *Zambia | [Riley, 36:3] |
| Zimbabwe | [Hopkins, 30:79] |

*Indicates a record in the herbarium of the Commonwealth Mycological Institute.

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1986-06

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