



**Food  
Legume  
Improvement  
and  
Development**

Proceedings  
of a  
workshop  
held at The  
University  
of Aleppo,  
Syria,  
2-7 May  
1978

Geoffrey C.  
Hawtin  
and  
George J.  
Chancellor,  
Editors

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# **Section VI**

## **Cooperative Approaches to Food Legume Improvement at the National Level**

### **The Training and Communications Program at ICARDA**

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The training and communications effort at ICARDA is designed to assist in the process of exchange of information, knowledge, skills, and technology related to the development and improvement of food legumes. To this end, staff from the Training and Communications Program and the legume scientists at ICARDA have been working closely together in the development of a series of training courses, conferences, workshops and seminars, educational materials and audiovisual aids, and public information materials featuring current efforts and results of field research. While providing the necessary support for ICARDA's research efforts, this program also addresses itself to the needs of the national research institutions for technical information and trained manpower. More specifically the objectives of the food legumes training and communications efforts are:

- to provide research workers from the region with training opportunities leading to a better understanding of new skills and a comprehensive knowledge of food legume field research methods;
- to make available to researchers the necessary scientific information concerning effective research technology and findings related to food legume improvement in the Middle East and North Africa Region;
- to bring together researchers from various countries to discuss problems and exchange ideas and strategies concerning the improvement of food legume research and production;
- to assess the structure, nature, and limitations of current food legume research and production efforts within the region;
- to develop, with the national research programs, methods and strategies for the identification of research problems related to food legumes at the local level in each country;
- to establish a common understanding of the major problems of research and development of food legumes and their place within the farming systems of the region.

To accomplish these objectives, the Training and Communications Program focuses its efforts on four main thrusts:

- (1) The conducting of training courses at various levels of technical skill for research personnel in the region;
- (2) the production of publications, newsletters, and other illustrative materials required for publicity, technical information dissemination, or educational purposes;
- (3) the organization of workshops, conferences, seminars, and field days relevant to the issues and problems concerned with the research and development work carried out at ICARDA;

(4) the coordination and support of cooperative research both between ICARDA and the research efforts of the region and between the national programs themselves.

These areas are seen as the fundamental functions existing within the overall sphere of communication itself. They are considered as being intimately connected so that efforts in any one sector provide benefits to the sphere as a whole.

## **The Training Program**

### **Priorities and Guidelines**

This program is aimed and geared toward several different levels of education and is seen as serving the dual functions of increasing and improving cooperative work and generating publicity, as well as its more basic role of increasing the technical expertise of the participants. The program is structured to provide three main types of training.

#### **In-Service Training**

At the present time the main emphasis of ICARDA's training efforts has been placed on the middle level research personnel from the national research programs of the region. The bulk of these people have not enjoyed in-depth academic training; some of them are not university graduates and many of those who are have little experience in the theory and practice of field research. Through residential courses, varying from 2 weeks to 8 months in length, it is aimed to provide such participants with the training necessary to effectively bridge the gap between the high level theorists and the low level technicians at present existing in many of the research efforts of the region.

Observations have indicated that research as a job must be learned by experience. In recognition of this, ICARDA's in-service courses emphasize field training and the acquisition of practical skills related to research work. These skills are taught alongside a background of theoretical scientific training, which aims to give the participants sufficient confidence to effectively undertake practical work and at the same time provide them with the scientific knowledge essential to the structuring and implementation of effective research work.

#### **Degree-Related Research Training**

Through the provision of opportunities to conduct relevant thesis research under the guidance and supervision of ICARDA scientists, this program aims to give graduates at the M.Sc. and Ph.D. levels the field experience and specialized training necessary for their future work with the research efforts of their own countries.

#### **Training with Universities**

Students from agricultural faculties of universities in the region are encouraged to work on ICARDA field experiments to gain practical research skills under the supervision of the scientific staff of ICARDA. At present, this activity is limited but it is hoped that as facilities expand, the program will be able to cater for an increasing number of participants from neighbouring countries.

### **Organization**

The Training and Communications Program has administrative, organizational, and educational responsibility for these activities. The courses themselves are run under the supervision of senior research personnel from the Food Legume Program, together with a training officer who is qualified in agronomy and charged with the development of educational materials and instructional techniques, as well as the overall course organization.

Current training activities are confined almost exclusively to the training of middle level personnel through in-service courses, which usually span the cropping season from February to July. The participants spend the bulk of their time in the field putting into practice the main concepts and skills necessary for a successful legume research program.

In addition, lectures, manuals, and other educational materials, focusing on both theoretical and practical research methods related to the development and improvement of lentils, chick-peas, and broad beans are provided as a supporting core of background information. The courses, apart from providing the participants with the necessary knowledge of legume research, also aim to give them a comprehensive overview of the position of food legumes in the economic, social, and farming systems of the region.

## **The Publications and Communications Service**

### **Guidelines**

The main function of this component of the overall Communications Program is the provision of information. The information services provided by the program fall into four major categories:

(1) the provision of information, in the form of technical reports and comprehensive descriptions of experiments and trials undertaken and results obtained at ICARDA or at any of the national research institutions, to collaborating scientists;

(2) the development and provision of educational materials and training packages, including manuals, visual aids, and other materials, based on the research work being carried out at ICARDA, both to trainees at ICARDA and to national programs wishing to initiate their own training components;

(3) the provision of general reports and other informative material to the public, specifically agricultural planners, donor agencies, and other interest audiences, to enable them to stay abreast of the latest developments and achievements at ICARDA and throughout the region as a whole;

(4) the assistance, where necessary, of the communications efforts of national programs in the region, involving the preparation and production of technical reports, information, and educational materials related to the improvement and production of food legumes.

### **Organization**

To fulfill these functions, the following publications are being produced:

- An ICARDA Newsletter, published quarterly in English, French, Arabic, and possibly also Farsi, providing general information on developments at ICARDA for a very wide audience.

- A Food Legume Newsletter, published biannually and focusing on food legume research, development, and improvement at ICARDA, in the region, and at other international centres and research institutions. This publication is designed for distribution to collaborating national programs, government officials, and research workers in the region.

- An Experimental News Service (similar to that already developed in Canada for lentils) covering all aspects of broad bean research around the world and aimed at all scientists involved in the improvement of this crop.

- Annual Technical Reports on activities and accomplishments at ICARDA, and Special Reports on specific projects. These are directed toward policymakers, agricultural planners, and other concerned audiences.

- Comprehensive Scientific Reports, with detailed descriptions of the design, implementation, and results of experiments carried out at ICARDA, for dissemination to scientists in other international and national institutions concerned with food legume research.

- Popularized articles, publications, and monographs related to food legume production projects undertaken or supported by ICARDA. These articles will be written by local and international journalists and writers and geared for the layman and other audiences not involved with the technical aspects of agricultural research.

- Training manuals, technical publications, and booklets in support of ICARDA training courses and for use by research personnel at the national level. All this material will be published in English and translated through special contracts at the local level to ensure applicability and relevance to the local situations.



## **Conferences and Workshops**

This component of the Training and Communications Program is involved with the organization, together with participating scientists, of conferences, workshops, seminars, and field days related to ICARDA's activities. It is closely integrated with the other communication functions so that in addition to its primary role, it also provides opportunities for trainees to gain experience through participation, stimulates the strengthening and promotion of increased cooperative activities at all levels, and generates material for publications to serve a variety of purposes.

Specifically these activities involve the organization of: workshops related to problems of food legume production and improvement within the region; seminars and symposia related to specific problem areas identified by ICARDA or the national legume research programs; and field days designed to demonstrate to national research workers the operations and achievements of food legume research at ICARDA.

## **Cooperative Support Service**

Work in this field involves supporting ICARDA's efforts in establishing cooperative programs and thereby strengthening its contribution to national research and production programs. Furthermore, this service will provide the necessary support to ICARDA scientists in the planning and implementation of cooperative projects aimed at the effective transfer of newly developed technologies to the national research efforts of the countries of the region. Activities primarily involve assisting in the organization of training and research workshops and conferences at the national and local level, together with the collection, interpretation, and dissemination of technical information concerning the countries of the region and information feedback to these countries about the results of ICARDA's research and training activities.

The four components of the food legume training and communications efforts at ICARDA, namely, training, information provision, conferences and workshops, and cooperative activities, are organized by communications and legume research personnel in very close association. These efforts are providing a channel through which the legume improvement work of ICARDA is becoming closely linked with the other relevant research efforts, both within the region and throughout the world. Such strong and developing linkages are helping to ensure that the work of ICARDA is finely tuned to the real problems of food legume production and improvement facing the farmers of the region, and that ICARDA and the national research efforts of the region work hand-in-hand toward the solution of these problems and thereby bring closer their common aim of increased and more stable food legume production.