

research work on the genetics, protection, and management of the basic food crops has now yielded results upon which firm recommendations can be made to farmers in terms of the soil and climatic conditions of their local regions, and seed of many improved varieties is ready for their use. With these recommendations and materials available, there is a basis for effective extension, and a system of regional resident "county agents" has been put into operation by the Ministry of Agriculture with important success. The ministry has consistently enlarged its direct and indirect financial support of the collaborative project.

The increased production of several food crops which Mexico is now enjoying is due in part to such factors as larger supplies of fertilizers and more irrigated farmland but, in important respects, is also the result of research and extension. The wheat crop, now sufficient to meet local demand for direct consumption, is grown almost entirely from seed of higher yielding, disease-resistant varieties developed through research. Hybrid and other improved corn varieties have been furnished which make possible a substantial increase in the corn crop. Better beans, tomatoes, and other vegetables have been produced. Recent research on the late blight disease of potatoes opens the possibility that potato varieties highly resistant to this scourge may be in the offing. A new poultry improvement project has aroused great interest among small farmers and their families and among commercial raisers, who evince enthusiasm for increasing the production of chickens and eggs as a source of much needed animal proteins.

An extremely important result of the cooperative project is the outstanding performance of growing numbers of well-trained young Mexican technologists, teachers, and investigators, who are reinforcing all aspects of professional agricultural work in Mexico and who are assuming responsibility for a number of projects formerly handled by foundation staff members.

The ten scientists on the staff of the foundation in Colombia operate a large central experiment station near Bogotá and five regional stations. Their work, now in its seventh year, is concentrated on training and research on foodstuff production, chiefly corn, wheat, beans, potatoes, and feed crops; and it has recently been extended to poultry and livestock improvement.

The office serves as a training center for graduates of schools of agriculture in Colombia and in neighboring countries of the high Andean region and has sponsored the advanced training of a number of these through fellowships and scholarships to Mexico and the United States. The work of the unit is finan-

cially supported by both the Ministry of Agriculture and the foundation.

The work in Chile began in the spring of 1955 and is concentrated on two crops—wheat and forages for livestock feed. Research has been begun in the three chief agricultural regions of the country. Large numbers of plant materials from Mexico and Colombia are being tested for adaptation and will be used with selected local varieties for increase or as the basis for hybridization for the development of better and higher-yielding varieties suited to Chilean conditions. Experiment station and other facilities are also being improved.

Crop improvement research is being extended into neighboring countries in a type of operation which is not handled directly by the foundation but which stems from the work it has done. In Central America the six governments have each established local corn improvement programs staffed by nationals but using materials from the Colombian and Mexican corn-breeding work as a basis for developing autonomous seed and improvement projects. The six local projects were established with orientation and aid from the foundation, and through cooperation of foundation staff representatives they are linked into an effective international group. During the 3 years the work has been in force, appreciable improvement has been made in the quantity and quality of corn produced, in the number of Central American scientists who have been trained for positions within their countries, and in the growth of interest on the part of administrators and agricultural producers in the utilization of improved methods and materials for greater economic benefits.

In Ecuador the Ministry of Agriculture is establishing a wheat-improvement project. As in the Central American corn program, a member of the foundation staff—in this case the leader of the wheat work in Colombia—provides technical advice and guidance. Both Ecuadorian and Colombian agricultural scientists participate in the effort.

The international cooperative activities of the operating centers are being continued and strengthened. The foundation is responsible for two of the corn germ plasm banks which are part of the plan of the National Research Council for preserving genetically valuable varieties. These germ plasm banks send seed to scientists all over the world. Those in charge of the work with wheat cooperate with the international wheat rust nursery project of the U.S. Department of Agriculture. In the fight against the late blight disease of potatoes, the foundation puts its facilities in the high Valley of Toluca in Mexico at the service of scientists in a dozen different coun-

tries and research centers for testing promising types of commercial potatoes against the virulent strains of the disease there which are found at no other place in the world.

## Paraplegia Fellowships

The National Paraplegia Foundation has announced the continuation of a limited number of fellowships for research in spinal cord disease and trauma and in the complications commonly associated with such disease or injury. These fellowships carry a minimum stipend of \$3000 per year and may be awarded to any candidate who has demonstrated a capacity for medical research and has outlined a program of meritorious study.

Application forms for the 1957-58 academic year may be obtained from the chairman of the Medical Advisory Committee, Dr. L. W. Freeman, and completed forms should be submitted to him not later than 15 Apr. at the National Paraplegia Foundation, 1940 W. Michigan St., Indianapolis 7, Ind.

## Academic's Two New Journals

Academic Press, New York, has announced publication of two new journals. *Annals of Physics*, a new monthly that is scheduled for release in April, will be under the editorship of Philip M. Morse, professor of physics at Massachusetts Institute of Technology. Assistant editors are Bernard T. Feld and Herman Feshbach of M.I.T., and Richard Wilson of Harvard University. They will be advised by an editorial council that includes E. Amaldi, R. F. Bacher, H. A. Bethe, S. Chandrasekhar, E. M. McMillan, L. Nordheim, J. R. Oppenheimer, R. E. Peierls, I. I. Rabi, F. Seitz, E. P. Wigner, and C. Zener.

Original articles on research in any branch of physics may be submitted. *Annals of Physics* hopes to provide a medium for the publication of important papers that are internally complete and, thus, are generally understandable to professional physicists working in other fields. The length of articles will not be a limiting factor.

The other new periodical is the *Journal of Molecular Spectroscopy*, which will be edited by Harald H. Nielsen of the department of physics at Ohio State University. The editorial board consists of Børge Bak, W. S. Benedict, Bryce L. Crawford, Jr., David M. Dennison, Michael Kasha, P.-O. Lowdin, S. Mizushima, James N. Schoolery, G. B. B. M. Sutherland, C. H. Townes, H. L. Welsh.

The journal will be devoted to publication of original research papers deal-