

inch permanent-magnet speakers, but two of which were required for our building of five floors. The cost of equipment was approximately \$25.00.

ROBERT T. HATT

CRANBROOK INSTITUTE OF SCIENCE,
BLOOMFIELD HILLS, MICH.

ENTOMOLOGY AND WARFARE

A YOUNG friend of mine, a keen student of insects, has recently been taken over by the military authorities as an entomologist. He does not know where he will be sent or did not when I talked with him, but he has a keen sense of the possibilities of such a position, and is very enthusiastic about it. Years ago, I met Sir

David Bruce in Madeira, and he commented on the great opportunities for work connected with the transmission of disease in the tropics and the unwillingness or inability of most resident medical officers to take up this work, in addition to their regular duties. If our military authorities are now establishing entomological units, with trained workers, in all the places where our troops are stationed in the tropics, the results will certainly be of great importance. Sickness and death will be prevented, and information will be obtained which will be of value in times of peace.

T. D. A. COCKERELL

CITRUS EXPERIMENT STATION,
RIVERSIDE, CALIF.

QUOTATIONS

IMPACTS OF THE WAR ON AGRICULTURAL SCIENCE AS INDICATED BY THE DECEMBER SOCIETY MEETINGS

So many of the scientific societies of agricultural interest hold their annual meetings in late December that this period normally assembles more research workers in agriculture than any other of the year. For this reason these gatherings furnish an unusual opportunity to obtain a cross section of current thought and trends in some of the most important fields. In this respect, the 1941 meetings were no exception. Although formulation of their programs was well advanced before Pearl Harbor, the war and its impacts inevitably permeated whatever was said and done.

Three main groups of these meetings were attended by representatives of the Office of Experiment Stations. The largest in point of numbers and constituent bodies was that at Dallas, Texas, centering around the American Association for the Advancement of Science and including among others the American Phytopathological Society, the Society for Horticultural Science, the Society of Plant Physiologists and the Mycological Society, the Genetics Society and the Potato Association of America. A second group was that of nation-wide social science societies, held in New York City and including among others the American Farm Management Association and the Rural Sociological Society of America. The third was held in San Francisco and included the American Association of Economic Entomologists and the Entomological Society of America. All these groups were largely attended, and there was the customary substantial representation from the Federal Department of Agriculture and the land-grant colleges and experiment stations.

One of the organizations giving special attention to the war situation was the American Phytopatho-

logical Society. This society scheduled a panel discussion, sponsored by its extension work and relations committee and having as its topic for discussion Plant Pathology in Relation to National Defense and Post-War Readjustments. The meeting was opened by Director C. R. Orton, of West Virginia, who took up the national emergency programs as to crop production and garden goals and set forth the plant disease program involved. Other speakers drew attention to the opportunity for increased service to Latin America, the fungicide and spray machinery situation and the need of better transmission of research findings to the farm. On this last point, it was stated that less than half the states now have extension plant pathologists. In an attempt to remedy some of the difficulties in this direction, a group of southern plant pathologists set aside their original program for a special conference to consider what they might do of a war-time value and formulated simple, specific directions for the control of tomato wilt, sweet-potato wilt and other *Fusarium* wilts of southern crops.

The society as a whole voted to affiliate with the American Society of Agricultural Sciences. Thereby it became the first society in this country to effect association with this good-neighbor group established to promote helpful relationships among the agricultural scientists of the American Republics.

Probably the most significant action of the phytopathologists was their formation of a war emergency committee, consisting of their retiring president, Dr. J. G. Leach, of West Virginia; Dr. E. C. Stakman, of Minnesota; Dr. R. P. White, formerly of the New Jersey Stations; and their newly elected president, Dr. L. M. Hutchins, of the U. S. D. A. Bureau of Plant Industry. Regional representatives for the New England, Middle Atlantic, Southern, Upper Mississippi Valley and Pacific Divisions and representatives for plant quarantine, research, extension and fungicide manufacture were also designated. A ten-

tative program of war services dealt with such matters as the codifying for immediate use of existing information on plant disease prevention, an expanded extension service, redirection of current research programs toward emergency uses and increase of special emergency experimentation, reexamination of long-time basic research projects, intensification of plant disease survey work, tightening of plant quarantines and the holding of regional conferences as a basis for developing coordinated action and research programs to meet war needs in the different areas. Reports were received from several states which indicated that already energetic work was proceeding within the experiment stations to reconstruct their departmental research programs to meet war emergency needs.

The Genetics Society of America adopted resolutions referring to the continuity of fundamental research, now destroyed by war in almost all parts of the world, as "probably the most important investment that can at present be made for the benefit of the post-war period." It urged upon Congress and the Federal Government "the importance of safeguarding the continued prosecution of fundamental research by those institutions which are now supported by Federal funds."

The sociological discussions in New York City centered very definitely around the war situation. One session dealt with rural population and national defense, and another with an agricultural program for defense and the post-war period. Rural health received emphasis in a number of programs, notably in an appeal by Dr. M. L. Wilson, of the U. S. D. A. Extension Service, for a wide use of our knowledge of nutrition in carrying out agricultural policy and by Miss Dorothy Dickens of Mississippi on the family and national defense. There was also a session on rural institutions and national defense, in which the school and the church received special attention. Still another set of papers dealt with the integration of social research in the Americas and cultural barriers to American solidarity. Much interest was shown by the rural sociologists as a group in the organization

of their research for maximum effectiveness on a war-time basis and the need of making readily and widely available whatever findings could be synthesized and applied in emergency production.

The entomological meetings at San Francisco naturally drew their attendance largely from the western states, but the problems considered in the various papers and conferences represented the major phases of national entomological effort. One of the most profitable sessions of the economic entomologists developed in the extension section where the entomologists' place in national defense was discussed. It was pointed out that 32 entomologists are following their profession as commissioned officers in the armed forces, 10 of whom are in the Navy and 22 in the Army. In other instances, professional entomologists are cooperating with military authorities in sand-fly and mosquito control, location of camps, etc. The need for adjustments of long-time research projects was mentioned. It was pointed out that large-scale operations are probably essential during the present emergency. Several authorities on insecticides mentioned the shortage of various essential materials. For example, many of the oils needed in the West are now going for aviation purposes; rotenone can no longer be obtained in quantity; enough arsenic is difficult to get at the present time. The association reaffirmed its desire to be of service in any way possible during the present state of emergency and expressed its willingness to cooperate with other groups with which its service may be coordinated.

Thus regardless of the place of assembly or the field of special interest, we find agricultural science mobilizing to render a maximum of assistance. In these meetings plant pathologists in Dallas, rural sociologists in New York City and economic entomologists in San Francisco alike demonstrated the solidarity of the personnel engaged in agricultural research in the nation and by typically democratic procedures indicated distinct progress in reorganizing their work to meet the new conditions and needs.—*Experiment Station Record*.

SCIENTIFIC BOOKS

DARWIN AND OUR INTELLECTUAL HERITAGE

Darwin, Marx, Wagner. Critique of a Heritage.
By JACQUES BARZUN. xii + 420 pp. Little, Brown and Company. 1941. \$2.75.

A BOOK about Darwin, Marx and Wagner all at the same time will cause some lifting of eyebrows. The author explains the juxtaposition of names in the first sentence of the preface: "This book has not three sub-

jects, but one. That one is simply the prevailing form of our thinking in an age of materialism and machinery." Darwin, Marx and Wagner were in some way responsible for, or at least have symbolized the advent of, the current ideas in their respective spheres—science, social science and art. "Through their efforts, feelings, beauty, and moral values were shown to be illusions for which the world of fact gave no warrant." And "when the layman carries his thoughts beyond what he can see and touch, mecha-