this species could be found. The Braconids seem to have destroyed their own food supply.

Specimens of the parasites are in the United States National Museum awaiting description.

THE PROGRESS OF ENTOMOLOGY

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The present widespread interest in entomology is a direct result of the excellence of the work done by entomologists in the war effort. The urgent demands for more effective methods and materials for controlling insects, especially insect vectors of disease (malaria, yellow fever, epidemic typhus, tsutsugamushi fever, etc.), accelerated research in entomology and the discovery and development of new and remarkable insecticides. Certainly the entomologist had no small part in shortening the duration of the war. By reducing the loss of life and man-hours caused by insect-borne diseases and by preventing insect damage to food, clothing, and other property, the entomologist played a very important part in winning the war.

It is needless to enumerate each and every contribution made by the entomologists during the war or to discuss in detail each important insect-borne disease, its vector, and its control, for all this has been given adequate publicity and is now common knowledge. Suffice to say, the entomologists can be justly proud of their part in the war effort.

For many years prior to the war, entomology was looked upon with polite tolerance. It has now reached the eminence of other learned professions, commands their respect, and enjoys their cooperation. In recent years the general public has become more “insect conscious” and realizes more than ever before the importance of insect control.

To the early entomologists, especially the older members of our entomological organizations, goes much of the credit for the present status of our profession. With devotion to duty, sincerity of purpose, and keen foresight, they banded together for the betterment of the individual, the interchange of technical information, the cementing of friendships, and the planning for the future. They formed societies and struggled through
the lean years to hold their organizations together. It was these scientists who, in time of emergency, were prepared and ready to solve the momentous problems with which they were confronted. It is only fitting that tribute be paid to the founders and former officers of the Florida Entomological Society for their devotion to and foresight in the field of entomology, for their part in building this Society, for their inspiration to the younger entomologists, and for their part in elevating the science of entomology to its present level.

But their work is by no means completed. Their long and diversified experience is needed to guide and stabilize the Society through the coming years. Their inspiration is still needed by their co-workers and by the younger entomologists. There are many problems yet to be solved, and their solution is demanded by the public in its desire for more effective methods of controlling insect pests.

We are on the threshold of a new era for entomology, an era that demands creative thought, intensive research, more extension service, better organization, more accurate insect surveys, more adequately trained entomologists, more cooperation between research personnel and those with the Extension Services, the Public Health Service, industry, and commercial entomologists.

Research in entomology, having profited by the war experience, appears to be on a sound footing. Its progress is limited only by inadequate funds and insufficient personnel. Many insect problems still await the attention of the research worker. Some new insect pests present new problems. Some of the old control measures need improvement. Numerous new insecticides—particularly DDT, TDE, chlordane, benzene hexachloride, chlorinated camphene, and parathion—must be tested for toxicity to the insect and to the host animal or plant. The fields of chemotherapy and insect transmission of disease offer unlimited opportunities to the research entomologist.

Those of us who are interested in insects affecting livestock should devise an insect-control calendar for stockmen—a calendar of the various ectoparasites of livestock, the materials and methods for control, and the approximate dates for treatment. Insect incidence and abundance and climatological conditions vary in different parts of the United States, and therefore different schedules must be formulated to apply to different sections of the country.
We are thinking today, more than ever before, in terms of insect eradication. Even if the eradication of some insects may not appear feasible today, it is time to think of eradication, to learn enough about the insect and its control to justify such a program. Screwworms, the most destructive insect pests affecting livestock in Florida, can be eradicated from the Southeast, and that region can be kept free of reinfestation. It is not unreasonable to assume that, with our present knowledge and present methods of control, cattle lice and horn flies can be eradicated in some of the States where livestock is a highly organized industry, and where the cooperation of the stockmen can be assured.

Yes, there are plenty of opportunities for the research entomologist who has the initiative and the ability for creative thinking, backed by adequate training in entomology and related subjects.

The Extension Services in the various States are now taking a keen interest in entomology, and during the past two or three years they have done their greatest work in this field. It is apparent that these Services could be, and certainly should be, important factors in the development of practical insect control. They are in a position, not only to distribute information concerning insect control, but actually to demonstrate to farmers and stockmen that insect control is both practical and profitable. Too often, heretofore, the results of good research have been buried in isolated reports and publications while the would-be beneficiaries still struggled with problems already solved. Today the Extension Services in many States are keeping pace with the rapid strides in entomological research, and not only promptly relay the new information to the citizens, but by lectures and demonstrations teach the new and improved methods of insect control. Crop dusting and the spraying of livestock are only two of the many examples that could be cited. You have had some excellent examples of livestock spraying here in Florida. More of this type of work must be done if the fruits of research are to be properly harvested. Extension Services should make an effort to maintain the present interest in entomology, to have at least one extension entomologist in each State, to give some entomological training to all county agents, and to cooperate closely with research entomologists.

Cooperation between Federal and State agencies, and of these agencies with the Extension Service and industry, is of
prime importance for the best interests of research and extension. This close cooperation is rapidly becoming a reality. About one year ago two significant conferences were held—one at Oklahoma City, Oklahoma, and the other at Cheyenne, Wyoming—at which representatives from all States west of the Mississippi River, with the exception of Minnesota and California, met to discuss the control of insect pests affecting livestock. The State representatives included entomologists, veterinarians, and animal husbandmen in the fields of research and extension. The United States Department of Agriculture was represented by both research and extension workers. The conferences were informal and permitted a thorough discussion of all problems in veterinary entomology that are important in that section of the country. The information presented was carefully analyzed and control recommendations were formulated. Recommendations were also made for additional research and extension. The success of these conferences was indicated by the enthusiastic participation of all the representatives and by the unanimous opinion that such conferences should be annual events.

Just last month a similar and very successful conference was held at Atlanta, Georgia. Research and extension representatives came from Florida, Georgia, Alabama, Mississippi, Louisiana, Kentucky, Tennessee, South Carolina, and North Carolina. The United States Department of Agriculture was represented by members of the Bureau of Entomology and Plant Quarantine, the Bureau of Animal Industry, and the Extension Service. Sectional conferences of this nature should be held each year and in such locations as to encompass the entire United States.

More active insect pest surveys, by the employment of full-time scouts, would aid materially in reducing the losses due to insect attack. Funds expended in this enterprise should result in savings far in excess of the cost of such a project. This information would provide a basis for the forecasting of outbreaks and help in the detection of new insect pests before they become established. It would thereby enable farmers and stockmen to make accurate estimates of the amounts of critical materials needed, and to obtain insecticides and equipment for controlling the pests before they do serious injury. These scouts could perform another valuable service by collecting data on the actual losses of animals due to insect attack. Many of our present estimates on losses caused by insects are mere guess-
work. We need more facts if we are to evaluate these losses correctly.

The enforcement of our present quarantines to prohibit or regulate the importation or interstate movement of injurious insects must be continued. This phase of entomological work has become more complicated by the tremendous increase of air traffic into the United States, and we must continue to be on the alert for immigrant pests.

This discussion briefly reviews the present status of entomology and looks toward the distant horizon. We cannot rest on our present laurels. There are many problems to be solved. It is up to the entomologists to carry on. To the older entomologists we can truthfully say—"Well done, good and faithful servant"—and to the younger entomologists may we suggest—"Go thou and do likewise."

RESULTS OF TESTS MADE WITH SOME NEWER INSECTICIDES FOR THE CONTROL OF THE RED HARVESTER ANT

*Pogonomyrmex barbatus* (F. Smith)

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A test was conducted from July 30, 1947 to October 23, 1947, to determine if some of the newer insecticides could be used as a simplified control for the red harvester ant, *Pogonomyrmex barbatus* (F. Smith). The materials used were in dust form, and included the following insecticides: 6% benzene hexachloride (gamma isomer), 5% DDT, 5% chlordane, and 20% chlorinated champhene (Toxaphene).

Strong, well established colonies located in a typical Texas Gulf Coast pasture were selected for the test. Five colonies were treated with each material. The treatments were made by applying approximately one ounce of the dust over the mound around the entrance to the nest by hand in such a manner that the ants leaving or entering the nest would have to pass through the insecticide. The dusts were applied by taking the dust in the hand and strewwing it in the manner of sowing seed broadcast, starting at the entrance and extending outward allowing enough dust to just cover the surface of the soil. Each nest