SCREWWORM SURVEY OF THE SOUTHEASTERN STATES IN 1945

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A screwworm survey of the Southeastern States was initiated by the Bureau of Entomology and Plant Quarantine in June 1943 and, in cooperation with State agencies, was continued through 1944 and 1945 (Bruce 1944, 1945).

The purposes of the survey were (1) to determine the incidence and relative abundance of screwworms, Cochliomyia americana C. & P., (2) to ascertain the amounts of critical insecticides needed for screwworm control, (3) to aid in the proper distribution of these insecticides, and (4) to advise farmers and stockmen of the approved methods and materials for the treatment and prevention of screwworm infestations.

The incidence and relative abundance of screwworms were determined by information obtained from farmers, stockmen, county agricultural agents, veterinarians, teachers and students of vocational agriculture, and other interested agencies.

Screwworms were more widespread and more destructive in the Southeastern States in 1945 than they were in either of the two previous years (Fig. 1). This was due to climatological conditions more favorable to the development and migration of screwworms, to the shipment of infested cattle into uninfested areas, and to the unpreparedness of the stockmen to control screwworms in the most seriously affected areas.

FLORIDA. The screwworm overwintering area, for the winter of 1944-45, was confined to peninsular Florida, the northern limits of which extended through southern Duval and Baker Counties, central Columbia, Suwannee, and Lafayette Counties
and southern Taylor County. Screwworm surveys during the winter and spring were concentrated in the northern counties of the overwintering area in an effort to delay the usual spring build-up of screwworms and the subsequent northern migration. This procedure was successful in keeping infestations at a minimum beyond the season when most calves are dropped in that area.

The screwworm situation in Florida during 1945 was about the same as in 1944, i.e., generally widespread throughout peninsular Florida but with a minimum of death losses. The stockmen in this area have a year-round screwworm problem, and have learned that continued vigilance is necessary to avoid death losses in their livestock. Infestations in western Florida were higher than in 1944 but did not reach outbreak proportions.
GEORGIA. Unusually heavy infestations were found throughout the southern half of Georgia, some counties reporting the worst outbreak since screwworms first invaded the State. Although the migration from the overwintering area was considerably delayed by intensive surveys, the favorable climatic conditions enabled the screwworms to reach outbreak proportions soon after becoming established in Georgia. Screwworms were especially abundant in the hog-raising sections in the southwestern counties, where 5 percent of the livestock were reported to be infested.

ALABAMA. The heaviest infestation of screwworms in the Southeast was found in Alabama, where stockmen reported it to be the most destructive of all screwworm outbreaks. Infestations in excess of 10 percent were reported, with death losses amounting to as much as 5 percent of the livestock on some farms. The outbreak in central Alabama started well in advance of the natural migration of screwworms from the overwintering area, and evidently resulted from the shipment of infested cattle into that area. Heavy infestations (over 2 percent) were reported in Russell, Macon, Montgomery, Lowndes, Dallas, Wilcox, and the northern portions of Monroe, Conecuh, and Covington Counties. Medium infestations (0.5 to 2 percent) were found in Lee, Chambers, Tallapoosa, Clay, Elmore, Coosa, Autauga, Chilton, Perry, Bibb, Marengo, Clarke, Escambia, and the southern portion of Monroe and Conecuh Counties. Light infestations (less than 0.5 percent) were found in Randolph, Talladega, Shelby, Jefferson, Walker, Tuscaloosa, Pickens, Greene, Hale, Sumter, Choctaw, and Washington Counties.

MISSISSIPPI. A few scattered cases were found in four counties bordering the Alabama line, namely, Greene, Clarke, Wayne, and Lauderdale.

SOUTH CAROLINA. Screwworms were reported to have reached South Carolina in the later part of July. Heavy infestations developed in the southern tip of the State and light, scattered infestations were found in approximately two-thirds of the State.

Summary. Screwworm surveys of the Southeastern States in 1945 revealed widespread infestations in Florida, Georgia, and Alabama and light to heavy infestations in South Carolina. Infestations reached outbreak proportions in Alabama and southwestern Georgia.
Climatic conditions throughout the spring and summer were favorable for screwworm development and migration. The activities of stockmen in practicing approved control measures prevented a more serious outbreak.

LITERATURE CITED


In January, 1946, a letter was received from Dr. Jose S. Camus, Undersecretary of Agriculture and Commerce of the Commonwealth of the Philippines, Manila. He stated that at the outbreak of World War II, the Scientific Library of the Bureau of Sciences, a branch of his Department, had one of the largest and best collections of technical and scientific publications in the Orient. The Library was destroyed by the Japanese during the war. As a start toward rebuilding their Library, he asked that we donate to them whatever publications we could spare.

Ordinarily these matters would have been considered at the business meeting of the Society. However, this would have occasioned great delay, and the Executive Committee thought it advisable to act upon them. All members approved of the exchange with the Florida Academy of Sciences and the exchange of publications has been completed. The committee members were heartily in favor of aiding the Philippine Scientific Library and recommended that a complete set of the Florida Entomologist be sent to the Library and that it be placed on our mailing list for future issues. A set was prepared and sent in May and a letter from Dr. Camus dated August 1, 1946, gratefully acknowledged its receipt and thanked our Society for the gift.

A. N. Tissot, Secretary

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