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BOOK NUMBER A423
R31S

May 3, 1955

SUCCESSFUL ERADICATION OF SCREW-WORM ✓
BASED ON NEW CONCEPT OF INSECT CONTROL X

Eradication of the screw-worm from the Caribbean Island of Curacao by research entomologists of the U. S. Department of Agriculture has not only proved the feasibility of a new concept in insect control, but also sets the stage for a similar eradication effort against this insect pest of livestock in the southeastern United States.

In theory, eradication was based on the fact that native female screw-worm flies will mate with sterilized males but the eggs laid do not hatch. Entomologists felt that release of a preponderance of sexually sterile males would result in reduction or elimination of the screw-worm. The sterile males actually competed successfully with normal males for the females in laboratory cages.

In practice, the entomologists saturated the wild screw-worm population of Curacao with thousands of laboratory-reared male flies, made sterile by exposure to gamma rays from radioactive cobalt.

Now, USDA entomologists are studying ways of developing low-cost, rapid methods of rearing, sterilizing, and releasing flies. If the results of this research are favorable, an attempt to eradicate the screw-worm from the Southeast may be considered in a few years. Each winter, cold weather pushes the screw-worm survival line deep into Florida, but even so the area of eradication will be many times greater than that of 200-square-mile Curacao.

In Texas, where the screw-worm also overwinters, eradication with this method appears to be impractical, since the area would be re-infested from Mexican screw-worm populations. However, if the screw-worm could be wiped out in Florida, entomologists believe that the Gulf Coast climate and marshlands lying between Florida and Texas would prevent natural re-infestation of the Southeast from Texas.





