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UNITED STATES DEPARTMENT OF AGRICULTURE
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GRASSHOPPER AND MORMON CRICKET CONTROL

NATURE OF THE PEST

Grasshoppers are considered the greatest single crop hazard, other than weather, in the semi-arid areas of the West. They are general feeders and when outbreaks occur, no plant is spared. Since 1870 they have caused agricultural disasters in the Great Plains area. Periodically they have spread over the Western Plains as far east as the Mississippi River; as far south as Texas. Many of these outbreaks have originated in high areas of idle or non-cultivated lands. The Mormon cricket is a species of long-horned grasshopper primarily of concern to eleven Western States. It does not fly, but under outbreak conditions enormous bands migrate great distances laying waste to all vegetation in their path.

CROPS AFFECTED

Grasshoppers and Mormon crickets feed on the foliage of practically all cultivated and non-cultivated plants, including grasses, trees, shrubs, and food crops.

DAMAGE AND ESTIMATED LOSSES

During period of epidemic outbreaks, damage has been estimated to exceed 100 million dollars in one year. It is not uncommon for annual losses to exceed 30 million dollars. In addition to the immediate crop and range losses, widespread destruction of vegetation occurring during severe outbreaks leaves the soil highly susceptible to washing and blowing, forces liquidation of livestock herds, and otherwise disrupts the economy of the area. It has been estimated that during the crop season 1954 extensive damage might be expected on over 4.5 million acres of range land in the West unless control measures are taken or unfavorable climatic conditions interfere with normal development. Grasshoppers are expected to be present in outbreak proportions in many cultivated Midwestern areas.

CONTROL PROGRAM

The purpose of this program is to provide general leadership, coordination and technical direction for the cooperative control of grasshoppers and Mormon crickets on crop and range lands. This involves surveys to inform States and other agencies as to outbreak areas, development and demonstration of new control methods, and participation in actual control operations on low value private and public range lands by use of aircraft spraying and baiting.

LEGISLATIVE AUTHORITY

This program is authorized under the Joint Resolution covering control of incipient and emergency outbreaks of insect pests and or plant diseases, (7 U.S.C. 148-148e).

July 7, 1954



