

As a result of marking and releasing adult sawflies it was found that they are able to migrate 105 feet across a grain field in 24 hours and up to 120 feet in 48 hours. Adult sawflies live at least seven days.

In the sawfly investigations it was found that grasshopper nymphs, *Melanoplus* sp. in the second instar traveled as far as 100 feet in 24 hours. One small immature spider was also found to have migrated over 100 feet in 24 hours after release.

Aphid Migration

Aphids, *Myzus persicae* (Sulz.) were marked with both water colors and transparent lacquers. They were then allowed to become established on potato plants for 24 hours. The plants were then rouged. Three days after rouging, the aphids had migrated up to 59 inches and were recovered from adjacent weeds and potato plants. The work initiated at North Dakota Agricultural College Experiment Station in 1949 has great possibilities in biological studies of fragile insects. Detailed notes on the equipment and concentration are on file in the department of agricultural entomology, and sources of material will be sent upon request.

SAVING FARMERS A BILLION

An important type of transportation work by the USDA deals with obtaining fair and equitable rates, services, and charges for moving farm and food products from farms to markets. In this capacity the department represents shippers of farm products before the Interstate Commerce Commission and other transportation regulatory agencies so that they may be fully informed of the shippers' position in freight-rate hearings. This work by Production and Marketing Administration's Marketing Facilities Branch is authorized by the Agricultural Adjustment Act of 1938 and the Research and Marketing Act of 1946, Section 203.

The cost of transporting farm products from farm to consumer now amounts to two or more billion dollars a year and comprises a significant part of marketing costs. Therefore, it is of great importance to farmers that transportation charges be kept reasonable, and that they obtain satisfactory transportation services for the charges they pay. An unreasonable freight rate to a given market acts in the same way as tariff barriers against the movement of that produce to market.

Whenever it is determined that action on freight rates in behalf of farmers is necessary, the branch contacts the carrier or carrier rate bureau to see if the desired rate adjustment can be worked out. If not, a formal action is filed in the name of the Secretary of Agriculture with the Interstate Commerce Commission or the appropriate commission having jurisdiction over the matter. Then all available evidence is assembled and presented at the hearing where both oral testimony and exhibits are offered.

From 1938 through June 30, 1948, the Marketing Facilities Branch participated in 667 formal cases, most of which were before the Interstate Commerce Commission. It has been estimated that this transportation activity, including many cases in which the USDA assumed leadership, has made a difference in freight costs of fully a billion dollars in the farmer's favor.—USDA.