ENTOMOLOGICAL SOCIETY OF BRITISH COLUMBIA, PROC. (1959), Vol. 56, Nov. 4, 1959

In June, 1957, 156,000 acres of western hemlock were sprayed to control the black-headed budworm. The operational spray consisted of DDT in Standard base oil diluted with diesel oil to yield a solution containing 1 pound of DDT per gallon with an emulsifier of 1.64 per cent. Spray was applied at the rate of 1 gallon per acre. The indicated average control of about 90 per cent was sufficient to prevent serious defoliation in 1957. Fish populations, particularly cohoe fry, and fish food organisms in some streams were severely depleted.

Summary

Although there were a number of puzzling inconsistencies in results obtained from the assessment of fish mortality, it is clear that under the conditions of the operation, fish and fish food populations in some streams were severely depleted.

References Cited

- Brown, G. S., A. P. Randall, R. R. Lejeune and G. T. Silver. 1958. Black-headed budworm spraying experiments on Vancouver Island, British Columbia. For. Chron. 34: 299-306.
- Crouter, R. A. and E. H. Vernon. 1959. The effects of black-headed budworm control on salmon and trout in British Columbia. Canadian Fish Culturist 24: 23-40.
- Lejeune, R. R., A. P. Randall and K. R. Elliott. 1957. Aerial spraying operations for control of the black-headed budworm, Vancouver Island, British Columbia, 1957. Interim Report 1957-1, Forest Biology Laboratory, Victoria, B.C. (Multigraphed).

THE DISTRIBUTION OF THE WHEAT MIDGE, SITODIPLOSIS MOSELLANA (Gehin), IN BRITISH COLUMBIA

J. C. ARRAND A/Provincial Entomologist

The wheat midge, Sitodiplosis mosellana (Gehin), was first reported in the Pacific Northwest in 1904 at Chilliwack, B.C. Since that time it appears to have spread through the province. It was listed as an important pest of grain in the lower Fraser Valley in 1905. In 1921 serious damage was reported in the Salmon Arm district. A wheat field was damaged by this pest near Lumby in 1936 when there was also serious damage on Vancouver Island and in coastal districts. Light damage was recorded at Merritt in 1951 and at Nelson in 1953. In 1954 infestations were reported from Larkin, Armstrong and Enderby. Damage occurred on spring wheat at Revelstoke, Grindrod, Enderby and Salmon Arm in 1955.

In 1957 a heavy infestation was examined in a field of Garnet wheat at Kersely, south of Quesnel. According to the farmer this field had been similarly infested in 1956. In 1958 several fields were infested in the Kersely area and serious damage occurred. This infestation appears to be so severe that unless it subsides it is questionable whether the farmers in the area can continue profitably to grow grain. The farmers report that fall wheat and barley as well as spring wheat have been attacked. In the literature, these grains as well as oats are listed as hosts of the pest.

Since the wheat midge has become so well established at Kersely, it seems reasonable to assume that it may eventually move into the Peace River area.

References

Reeher M. M. 1945. The Wheat Midge in the Pacific Northwest. U.S.D.A. Circ. 732. B.C. Dep't. of Agriculture Annual Report—1921, 1936, 1951, 1953, 1954, 1955, 1957, 1958.

18