

SURVEY FOR VIRUS DISEASES OF CEREALS IN MANITOBA
AND SASKATCHEWAN

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In July 1962, a survey for virus diseases on spring cereals was made in Manitoba and Saskatchewan in co-operation with personnel of the Canada Department of Agriculture Research Stations at Winnipeg and Saskatoon,

Barley yellow dwarf was found in trace amounts only in about one-third of the grain fields examined in Manitoba in the vicinity of Winnipeg and south-west to the Saskatchewan border. Diseased plants were more readily found in oats than in wheat or barley. Most of the symptoms observed appeared to be in early stages of development, but some of the affected plants were slightly stunted. Although several species of aphids known to be vectors, including Rhopalosiphum padi (L.), R. maidis (F.), Macrosiphum avenae (F.) and M. dirhodum (Walker), were found in most areas surveyed, so few were present that it did not appear likely that barley yellow dwarf virus could spread rapidly enough to cause an appreciable effect on yield of any of the grains this year, unless larger numbers of aphids appeared on the late-sown crops in the Winnipeg area, where many fields were sown very late.

In Saskatchewan; barley yellow dwarf symptoms and a few aphids were found on several plants in one-third to one-half of the fields of oats, barley and spring wheat examined in the south-east from Carnduff to Melville, but both virus symptoms and aphids were extremely rare along a route through Regina, Moose Jaw and Swift Current, then north through Outlook to Saskatoon, and in the area north-east to Melfort,

In both Manitoba and Saskatchewan a search was also made for wheat striate mosaic virus and its vector Endria inimica (Say). The **later leafhopper** is often abundant during July in grasses along roadsides and in pastures, but this year populations were sparse. There was no evidence of wheat striate mosaic in any of the areas of southeastern Saskatchewan and southern Manitoba where it occurred in trace amounts **in nearly all wheat fields** examined in 1961. Although several plants with leaf **symtoms** similar to wheat striate mosaic were found in a field of durum wheat in Manitoba and one in western Saskatchewan, tests did not indicate the presence **of** wheat striate mosaic virus,

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