

race because Richland and White Russian types of resistance are ineffective against it. Like race 8, it can attack varieties such as Ajax, Exeter and Fortune which are widely grown in Western Canada. Race 7A, the only race capable of attacking the new variety Rodney, was scarce; this race was found only in Man., where Rodney is most widely grown, and 4 of the 5 isolates of the race were from that variety. The new variety Garry was resistant to all races. Some fields of these two varieties showed rather heavy infections of small pustules in 1955. But as these pustules yielded races to which the varieties were resistant it is believed that this year's high summer temperatures had caused a partial breakdown of resistance and permitted some rust development.

Puccinia coronata var. avenae

From 94 isolates obtained from collections on oats in many localities in Eastern and Western Canada in 1955, 18 physiologic races were identified. These races (with the number of isolates in brackets) were as follows: 201 (14); 202 (23); 203 (2); 209 (8); 210 (1); 211 (3); 212 (3); 226 (1); 228 (6); 231 (4); 232 (5); 234 (2); 235 (2); 237 (1); 238 (2); 239 (6); 240 (10); and 280 (1). All these races except 280 have been found in Canada in previous surveys.

There were few changes from the races identified in 1954. Only races 205, 216 and 229 failed to reappear in 1955. However, there was a slight change in the prevalence of some races. In 1954, 80.5% of the isolates from Western Canada and 49.5% from Eastern Canada belonged to races that heavily attack varieties possessing the Bond type of crown rust resistance. In 1955, the corresponding figures were 72.8% for Western Canada and 41.3% for Eastern Canada.

No races were found in Canada this year capable of attacking the varieties that are currently being used in breeding.

Isolates from Aecia collected on Rhammus cathartica

Collections of aecia on Rhammus cathartica were obtained from Man., Ont., N.B. and P.E.I. in 1955. Two varieties of crown rust, avenae and secalis were isolated when the aeciospores were transferred to cereal and grass hosts that differentiate the various varieties. Apparently the variety avenae was the predominant crown rust variety in 1955. Five physiologic races were represented as follows: race 202 (8); 212 (1); 239 (1); and 240 (2). Var. secalis was isolated 3 times. The prevalence of race 202 was in agreement with the results obtained from the race survey using the uredinial collections on oats.