severity in a few scattered orchards each year. In most orchards it occurs in only some seasons with crops of normal fruit in the intervening years. In 1958 it was more common and more sev. than in any previous season, especially in districts from Kelowna north. Two lines of investigation have been in progress at Summerland for several years: (1) to determine the effect of rootstock type on disease incidence and, (2) to determine whether or not the disease is of virus origin (M.F. Welsh).

LEAF SCORCH (physiological) is a fairly common condition in the St. Catharines district of Ont. where it affects only the variety Bartlett. Foliage assumes a reddish-brown coloration and leaves eventually dry out and die. It is considered to be related to shallow rooting and the occurrence of hot, dry weather (G.C.C.).

#### B. STONE FRUITS

## APRICOT

BLOSSOM AND TWIG BLIGHT (<u>Monilinia laxa</u>). A small percentage of trees in a few orchards at Osoyoos, Okanagan Falls, Penticton and Summerland were affected (D.L. McIntosh).

VERTICILLIUM WILT (V. albo-atrum). All the trees in a newly planted block of 3-year old stock were affected at Trout Creek Point, B.C. (G.E. Woolliams).

# Twisted Leaf of Cherry and Ring Pox of Apricot

T.B. Lott and F.W.L. Keane

Twisted leaf of cherry and ring pox of apricot have, for some years, been spreading slowly in the Okanagan and Similkameen Valleys of B.C. The two diseases frequently occur together in the same locations. It was shown experimentally that inoculum from diseased cherries often produced ring pox on apricot, and inoculum from ring pox infected apricots produced twisted leaf in cherry. It was also shown that the common native chokecherry could be a symptomless carrier of the twisted leaf virus. Chokecherries growing in locations where one or both of the diseases were present in commerical orchards were indexed on Bing cherry and on apricot. Ring pox appeared on some but not all of the apricots and twisted leaf on some but not all of the cherries. This work confirmed the fact that the viruses causing twisted leaf and ring pox were present in chokecherries growing adjacent to infected orchards. Further work is in progress to test for the presence of the viruses in chokecherries growing at some distance from commerical orchards.

## CHERRY

CORYNEUM BLIGHT (<u>Clasterosporium</u> carpophilum) occurred in a home garden at Vancouver, B.C. (H.N.W. Toms).

BLACK KNOT (Dibotryon morbosum). Specimens on sour cherry were received from La Malbaie, Quebec City and Duchesnay, Que. (D. Leblond), and was sev. on Montmorency at Ste. Anne de la Pocatiere, Que. (R.O. Lachance).

BITTER ROT (Glomerella cingulata) was particularly sev. on sour cherry throughout the lower St. Lawrence district of Que. (D. Leblond).

SHOT HOLE (<u>Higginsia hiemalis</u>), Sl. infections were observed in July in the St. Catharines district, Ont. The disease became more sev. in the fall and caused partial defoliation in Oct. It was generally less serious than in recent years (G.C. Chamberlain). Shot hole was recorded from Quebec City, Mont Joli and Montmagny, Que. (D.L.). Unsprayed trees at Kentville, N.S. were completely defoliated (C.O. Gourley).

BLOSSOM AND TWIG BLIGHT (Monilinia fructicola). Bing had 13% infection at St. Catharines, Ont. (G.C.C.). Early Rivers at Tupperville and most varieties at Kentville, Grand Pre and Round Hill, N.S. were 1-2% infected with resultant die back of twigs (C.O.G.).

BROWN ROT (Monilinia fructicola, M. laxa). Diseased fruit from Vernon, B.C. was infected with M. laxa. At Osoyoos, 20% of the fruit on a few trees in 1 orchard were infected with M. fructicola (D.L. McIntosh). Bing was 20% affected at harvest at St. Catharines, Ont. (G.C.C.), and was 50% rotted on an unsprayed tree at Kentville, N.S. (C.O.G.).

POWDERY MILDEW (Podosphaera oxyacanthae) was seen on a few young nursery trees at Ocean Park, B.C. (H.N.W.T.). Unsprayed trees of Montmorency and Sam in the Creston Valley, B.C. had 60% of the new growth affected (J.M. Wilks), and infections were found throughout the Summerland, B.C. district on young leaves and fruit. Affected fruits were much smaller than healthy fruits (G.E. Woolliams). It was commonly encountered in the St. Catharines, Ont. district causing a curling of terminal leaves (G.C.C.).

VERTICILLIUM WILT (V. albo-atrum). Wilt was found in bearing sweet cherry trees in several orchards in the Summerland, B.C. district (G.E.W.).

#### Cherry

LITTLE CHERRY (virus). Symptoms were sev. on Lambert in the Creston Valley, B.C. rendering much of the crop unmarketable. Bing was only mildly affected (J.M.W.).

# Little Cherry and K.+S. Disease

T.B. Lott and F.W.L. Keane

Kwanzan and Shiro-fugen flowering cherries at Summerland, B.C. were indexed for the virus causing K.+ S. disease. This virus causes a disease in sweet cherry very similar to little cherry. The indexing showed that the stocks of Kwanzan in use at Summerland were infected but that the Shiro-fugen stocks were not. The Kwanzan stocks have been eliminated.

Despite the proximity of the Kwanzan stocks to sweet cherry trees of bearing age and to the indexed stocks of Shiro-fugen there was no evidence of natural spread of the K.+S. virus from Kwanzan to sweet cherry or Shiro-fugen. Flowering cherries are present to a limited extent as ornamentals throughout the Okanagan Valley. It appears probable that the K.+S. virus, similar to, and perhaps identical with, the little cherry virus, is now present and has been present for years in at least some of the flowering cherry trees. In the absence of spread to sweet cherries, and in the absence of symptoms in the flowering cherries, the K.+S. virus could remain present and undetected in the flowering cherries indefinitely.

Little cherry is as yet unreported in the Okanagan and Similkameen Valleys.

# Yellows and Necrotic Ring Spot of Cherry

## T.R. Davidson

In the Niagara Peninsula leaf symptoms of yellows accompanied by leaf drop was widespread in 1958 but not as sev. as in 1957. Etch symptoms of necrotic ring spot were somewhat more prevalent than in 1957 but did not reach the proportions of 1956. Weather conditions in the spring of 1958 seem to have favored the development of yellows rather than ring spot symptoms.

Spread of these diseases appears to depend upon the age of trees, internal inoculum and isolation from diseased orchards. The greatest spread occurs in orchards 5-10 years of age. One non-isolated virus-free orchard remained healthy for 4 years but in the fifth year 4,5% of the trees