Powdery Mildew of Peach

G.O. Gourley

On the 15 July, 1958, an abnormal spotting was noticed on the fruit of a peach tree growing in a home garden at Kentville, N.S. This proved on examination to be a species of powdery mildew, possibly Sphaerotheca pannosa (Wallr.) Lev. Cleistothecia were not produced on the peach fruit.

Subsequent examinations of commercial peach orchards revealed that powdery mildew was present on the fruit in all orchards visited ranging in intensity from a trace to approximately five per cent. Mildew was not found on the twigs, buds or leaves of the peach tree. Infected areas on the fruit ranged from barely visible greyish spots to spots of 1-1 1/2 inches in diameter.

A survey of the variety trial orchard situated on the Kentville Experimental Farm showed that the possibility of varietal resistance to powdery mildew is quite remote. Of the 68 varieties examined 58 had mildew infection on the fruit, seven had no fruit and three had less than a dozen peaches per tree. Since this is the first time that powdery mildew has been found on the peach in Nova Scotia it is difficult to explain the sudden widespread infection that occurred in 1958.

An application of sulfur fungicide, on the recommendations of the Kentville laboratory, arrested the growth of established infections and no new infections developed on sprayed trees. The color of the infected areas, after the fungicidal application, gradually faded until at harvest the spots were scarcely discernible.

LEAF CURL (Taphrina deformans) affected 10 trees early in April in the University orchard, Vancouver, B.C. (H.N.W.T.). A few unsprayed trees at Port Weller, Ont. were almost 100% infected.. No leaf curl was seen in sprayed orchards (G.C.C.). Infection was sev. at Woodville Mills, P.E.I. (J.E. Campbell). In N.S. dormant sprays of ferbam or Bordeaux did not give complete control in 1958. Specimens were received from most peach growing areas of the Annapolis Valley (C.O.G.).

VERTICILLIUM WILT (V. albo-atrum). Most of the 3-year old trees in a newly planted block of Valient and Jubilee were mod.-sev. affected at Trout Creek Point, B.C. The disease is also present in older trees in

several other orchards in the district (G.E. Woolliams). It caused the loss of 25% of the trees in a 6-acre, 2-year old block in Essex Co., Ont. Tomatoes, peppers and other susceptible crops had been planted on this land for several years prior to the setting out of the orchard (R.W. Walsh). At Virgil, Ont. wilt caused defoliation of 1 side of 8/100 trees (G.C.C.).

WINTER INJURY. In many orchards in Essex Co., trees died from injury attributed to the low temperatures and drying winds of the previous winter. Necrotic areas 3-10 inches wide occurred in the bark of the trunks from ground level to a height of 2 feet. In many cases the trunk was completely girdled. Necrotic spots 10-50 mm. in diameter appeared in the cambium layer of scaffold limbs. Losses ranged from a few to 10% of the trees in orchards of 2-10 acres in size and from 2-12 years of age (R.W.W.).

PLUM

BLACK KNOT (Dibotryon morbosum) occurred in a home garden at Kelvington, Sask. (T.C. Vanterpool). Many trees in the Saint John, N.B. area were sev. affected (S.R. Colpitts). Approximately 25 trees in a neglected plum orchard at Canard, N.S. were killed by the black knot fungus (C.O. Gourley). Damson plum trees were sev. affected in the South East Placentia district of Nfld. (O.A. Olsen).

BLOSSOM AND TWIG BLIGHT (Monilinia fructicola) affected about 1% of the twigs of Magnum Bonum at MacDonald's Corner, N.S. (C.O.G.).

PLUM POCKETS (Taphrina pruni) destroyed 50% of the fruit of trees in a home garden at Ottawa, Ont. (I.L. Conners). Trees in a small orchard at St. Stepehen, N.B. were sev. infected (S.R.C.). Infection was 10% on Burbank at Upper Dyke, N.S. (C.O.G.).

LOW TEMPERATURE INJURY. About 80% of the fruit in a carload of California plums showed internal evidence of protracted storage at temperatures close to 32°F. (J.L. Howatt).

PRUNE

BLACK KNOT (Dibotryon mobrosum). Fellenburg prune trees at Port Weller, Ont. were sev. attacked. Italian prune was much less seriously affected. Scattered infections were reported on Stanley prune at Niagara Falls, Ont. (G.C. Chamberlain).