Manitoba and south-eastern Saskatchewan experienced the most severe rust epidemic since 1954. Overall losses in 1962, however, were relatively small because the predominant wheat varieties were resistant or partially resistant to the rust races prevalent. Varieties susceptible to wheat stem rust (Puccinia graminis f. sp. tritici) were virtually destroyed by mid-August. Leaf rust of wheat (Puccinia recondita) was severe on susceptible varieties such as Marquis and Thatcher and more than the usual amount developed on the moderately resistant varieties Selkirk and Pembina. The probable loss from wheat leaf rust was estimated at 6 million bushels in Man. Late oat fields in south-eastern Man, were moderately damaged by crown rust (Puccinia coronata).

Common root rots of wheat and barley (Bipolaris sorokiniana, Fusarium spp.) were more destructive in Sask. than in 1961 and browning root rot (Pythium arrhenoanes) was more commonly encountered than it has been for many years. Ergot (Claviceps purpurea) occurred commonly in all wheats, but especially durum, in Sask. Powdery mildew (Erysiphe graminis) of wheat, normally rare in north and central Alta., developed moderately, There was a spectacular increase in loose smut (Ustilago tritici) in durum wheat in western Canada in 1962, partially attributed to the greater susceptibility of the variety Ramsey. Soil-borne mosaic of wheat was again observed in winter wheat fields in southern Ont.

Speckled leaf blotch (Septoria avenae f. sp. avenae) of oats appeared later than normal in eastern Ont. but eventually became severe. Magnesium deficiency caused yield reductions in oats grown on soils with high organic matter content in the Peace River District of Alberta.

Common leaf spot (Pseudopeziza trifolii f. sp. medicaginis-sativae) of alfalfa was prevalent and destructive in P. E. I. Phyllody, a virus disease, continues to be a problem on ladino and red clovers in Que. and the Maritime Provinces, There was a significant increase in the incidence of white rust (Albugo cruciferarum) on rape in north and central Alta. Downy mildew (Plasmopara halstedii) was more prevalent than normal on sunflowers in Man. and leaf mottle (Verticillium albo-atrum) caused considerable damage to sunflowers in the same province.

Northern leaf blight (Bipolaris turcicum) was prevalent and occasionally severe on field corn in south-western Ontario. Black root rot (Thielaviopsis basicola) caused extremely heavy losses in tobacco fields in western Ont. and tobacco etch virus was responsible for considerable losses in fields of burley tobacco in the same district,

Anthracnose (Colletotrichum lindemuthianum) and stem rot (Sclerotinia sclerotiorum) caused significant losses in bean crops in Que. and the Maritime Provinces. Xanthomonas campestris, apparently seed-borne, produced vascular discoloration and head rot in a large acreage of brussels sprouts in N, B. Areas of infestation by the root-rot nematode (Meloidogyne hapla) continue to spread in muck soil areas in Ont. and Que.

Stern rot (Botrytis cinerea) was troublesome on greenhouse crops of cucumbers and tomatoes in western Ont, and in N. S. Greenhouse-grown cucumbers in Ont. also suffered heavy damage from powdery mildew (Erysiphe polygoni). Few fields of lettuce in western Ont. were free of big vein

(tobacco mosaic virus and Olpidium sp. associated), Stunt, caused by an undetermined species of Pythium, caused losses in lettuce crops on muck soils in western Ont.

Onion blast (Botrytis cinerca) reduced yields in Man., Ont., Que., arid N. S. White rot of onions (Sclerotium cepivorum) appeared for the first time in eastern Canada and caused heavy losses in fields in south-western Que. Tobacco etch virus drastically reduced yields in pepper fields in western Ont.

Bacterial ring rot (Corynebacterium sepedonicum) of potato was at a greatly reduced level of incidence in Que. and P. E. I. The reduction in both provinces is attributed to vigorous programs of disinfection of planting machinery, Blackleg (Erwinia atroseptica) was the principal cause of rejection of seed potato fields. There was a four-fold increase in its incidence in P. E. I, The golden nematode (Heterodera rostochiensis) was found, for the first time in Canada, infesting potato fields in Nfld.

Early blight (Alternaria solani) caused appreciable reductions in tomato yields and subsequent heavy losses from fruit rot in the B. C. Interior, Bacterial canker (Corynebacterium michiganense) was responsible for significant losses in field-grown tomatoes in B. C., and in greenhouse crops in western Ont. Losses from late blight (Phytophthora infestans) of tomato in N. S. were the heaviest in years,

Both European canker (Nectria galligena) and perennial canker (Neofabraea perennans) caused damage in B. C. apple orchards. Collar rot (Phytophthora cactorum) killed or damaged apple and cherry trees in the same province. Scab (Venturia inaequalis) infections resulted in some losses in apple crops in Que. and N, S. Trellis rust of pear (Gymnosporangium fuscum) is well established in a localized area of Vancouver Island and was also found at one location on the B. C. Mainland. Moderate losses of pear fruit in Ont. and N. S. were attributed to Phytophthora cactorum.

Some losses of apricots and peaches occurred in B. C. following infection by Coryneum blight (Stigmina carpophila) Wilt (Verticillium dahliae) affected both sweet and sour cherry trees in B. C. and crown gall (Agrobacterium tumefaciens) seriously affected peach nursery stock in the same province. Canker (Valsa cincta) has become a serious problem in peach orchards in western Ont.

Gray mold wilt (Botrytis cinerea) and anthracnose (Elsinoë veneta) caused losses in raspberry plantations in Que. and N. S. Crown gall (Agrobacterium tumefaciens) affected highbush blueberries in N. S. Some grape varieties were seriouslv damaged bv dead arm (Fusicoccum viticola) in the Niagara Peninsula, Ont. where powdery mildew' (Uncinula necator) also caused considerable losses.' Gray mold (Botrytis cinerea) was responsible for much fruit rotting in strawberry plantings in N. S. and P. E. I. Wilt (Verticillium albo-atrum) was damaging to strawberries in the Maritime Provinces, especially where the crop followed other susceptible crops. Green petal, a virus disease of 'strawberry was serious in parts of Que. and in P. E. I.

Leaf blotch (Guignardia aesculi) of horsechestnut was widespread and caused estensive defoliation in the Maritime Provinces. Leaf blight (Fabraea maculata) resulted in defoliation of hawthorn hedges in B, C. Rust (Puccinia sparaganioides) was very severe on white ash in western Nova Scotia and severe infections of leaf blister (Taphrina caerulescens) occurred on oak in Que. Leaf blight (Herpobasidium deformans) was commonly found on Lonicera in hedges and nurseries in Que. Infections of powdery mildew (Sphaerotheca pannosa) were especially severe on roses in N. S, Dutch elm disease (Ceratocystis ulmi) continues to spread in Ont., Que. and N. B.

Tuber rot (Erwinia carotovora) was responsible for losses of Cyclamen plants in B. C. Rhieoctonia solani caused a severe root and crown rot in commercial plantings of Dianthus in eastern Ont. Glomerella cingulata continues to be a serious disease of imported Ficus plants in B. C. Losses in gladiolus plantings from dry rot (Stromatinia gladioli) were unusually heavy and there was a high incidence of mosaic in commercial gladiolus stocks in N. S. Heavy infections of ledf spot (Didymellins macrospora) of iris were reported in eastern Canada. Blight (Botrytis elliptica) was severe on lilies in Que. and N. S. as was fire (Botrytis tulipae) on tulips in Alta. and N. S. Leaf blight (Centrospora acerina) caused the abandonment of a commercial planting of pansies in N.S.