VI. DISEASES OF ORNAMENTAL PLANTS

ALTHAEA - Hollyhock

Rust (Puccinia malvacearum) was widespread in the Okanagan Valley, B.C.; infection sl. to sev. (G.E. Woolliams). Rust was fairly heavy on specimens received from Toronto and Perth, Ont., Montebello and St. Rose de Lima, Que. It was reported to be heavy in a garden at Lunenburg, N.S. (H.S. Thompson). Tr.-sev. infections were general about Quebec City (D. Leblond). A heavy infection was recorded at Southport, P.E.I. (J.E. Campbell).

ANTIRRHINUM - Snapdragon

Leaf Spot (Phyllosticta antirrhini) was found in 1954 at La Redemption, Matapedia Co., Que. (D. Leblond).

AQUILEGIA

Powdery Mildew (Erysiphe polygoni) was quite prevalent in the Okanagan Valley, B.C. (G.E. Woolliams).

BEGONIA

Foliar Nematode (Aphelenchoides sp.). All of 300 plants in a greenhouse at Hamilton, Ont., showed dark brown spots on the foliage. Many nematodes were found in leaf material when macerated in water (W.G. Kemp).

Powdery Mildew (Erysiphe cichoracearum). To judge from representative material received and from observations made at Ottawa, powdery mildew was very destructive in Ont. to tuberous begonias once the disease appeared. In one local nursery out of 1200 plants nearly half had been lost and of the 256 still in the nursery on 15 June, 20 were reduced to stems, which occasionally put out a new shoot. As a result of experiments conducted on these plants and others, it was found that 3 applications of Karathane used at the rate recommended by the manufacturer with a spreader-sticker sprayed on the plants at 3-day intervals controlled the disease. At weekly intervals control was less effective. Karathane dust proved about equally effective. Captan 50-W was also used but it only controlled the disease on the less sev. infected plants (H.S. Thompson). A tr. was observed on 32/150 plants in a greenhouse at Hamilton on 2 Dec. (W.G. Kemp).

Wilt and Leaf Spot (Xanthomonas begoniae). Diseased specimens received from Calgary, Alta. (A.W. Henry).

CALADIUM

Soft Rot (Erwinia carotovora). About 90% of the tubers in a Florida shipment intercepted at Niagara Falls, Ont. were badly affected. The bacterium was regularly isolated from the advancing margin of the rot (W.G. Kemp).

CALENDULA

Yellows (Callistephus virus 1) was sev. in 8 gardens in Fredericton, N.B.; infection was 21-68% (D.J. MacLeod). Early-planted Calendula were 100% infected whereas very few were attacked in a late planting 60 feet away in

the same garden at Kentville, N.S. (K.A. Harrison). Yellows was general in a garden at Charlottetown, P.E.I. (R.R. Hurst).

CALLISTEPHUS - China Aster

Wilt (Fusarium oxysporum f. callistephi). About 20% of the plants were wilting in a greenhouse at Ayer's Cliff, Que. (J. Ringuet).

Yellows (Callistephus virus 1) was prevalent in early plantings of China aster at Lethbridge, Alta. (M.W. Cormack). A mod. infection was present throughout the summer in the University garden, Winnipeg, Man. (W.E. Sackston). Infections of 47-70% were noticed in 7 gardens in Fredericton, N.B. (D.J. MacLeod). About half the plants were attacked in a bed at Charlottetown, P.E.I. (J.E. Campbell).

CAMPANULA

Grey Mold (Botrytis cinerea) was sev. on the leaves and especially the flowers of C. persicifolia at Gaspé, Que., in late August 1954 (D. Leblond).

CHEIRANTHUS - Wallflower

Downy Mildew (Peronospora ?cheiranthi) heavily infected older seedlings in a propagating bed at Vancouver, B.C., on 1 Sept.; however, it is thought that the plants will flower normally next spring (H.N.W. Toms).

CHRYSANTHEMUM

Foliar Nematode (Aphelenchoides sp.). A tr. infection was seen on several hardy varieties in a commercial propogating greenhouse in Essex Co., Ont.

Grey Mold (Botrytis cinerea). Water-soaked spots were prevalent on the florets on chrysanthemum at Falmouth, N.S.; B. cinerea isolated (K.A. Harrison).

Powdery Mildew (Erysiphe cichoracearum) was heavy on the lower leaves of 200 fully matured Starlite plants growing in ground beds in a greenhouse at Hamilton, Ont. on 25 Nov. It was also sev. in May on a few potted Shasta and Pinocchio plants at St. Catharines (W.G. Kemp). It was also heavy in a greenhouse at Quebec City in Nov. 1954 (D. Leblond).

Leaf Spot (Phyllosticta chrysanthemi) was mod. in a garden at Cap St. Ignace, Que. in 1954 (D. Leblond).

Stem Rot (Rhizoctonia solani). Plants in localized areas in a newly-planted chrysanthemum bench showed a black stem rot in Middlesex Co., Ont.; R. solani was recovered from 6/9 rooted cuttings brought to the laboratory (W.G. Kemp).

Leaf Spot (Septoria sp.). A mod. infection was observed on propogating stock of Starbright and Lollipop in Essex Co., Ont. (W.G.K.).

Stunt (virus) was observed in a nursery at Lethbridge, Alta. (R.P. Stogryn). Stunt sev. reduced the stem length of plants of Snowcap and Minstrel and of Good News and Detroit News in greenhouses in Essex Co., Ont. (W.G. Kemp).

Yellows (virus) affected a few plants in a nursery at Lethbridge, Alta. (R.P. Stogryn), and 2 plants in a garden at Charlottetown, P.E.I. (R.R. Hurst).

CONVALLARIA

Grey Mold (Botrytis cinerea) was sev. in plantings of C. majalis at Deschambault and Cap St. Ignace, Que. in 1954. Leaf Spot (Phyllosticta convallariae) was also present in these plantings (D. Leblond).

COSMOS

Yellows (Callistephus virus 1) was less prevalent in a garden at Saskatoon, Sask., in plants set out as young transplants than those from seed sown in the open (T. C. Vanterpool).

CYCLAMEN

Grey Mold (Botrytis cinerea). Sl. spotting of the petals was observed on a few plants in a greenhouse at Hamilton, Ont. (W. G. Kemp).

DAHLIA

Crown Gall (Agrobacterium tumefaciens). A single plant was infected in a large bed at the Farm, Charlottetown, P. E. I. (J. E. Campbell). However about 20% of the plants were affected at Central Royalty (G. W. Ayers).

Mosaic (virus). Several plants were sev. affected in a commercial garden at Charlottetown, P. E. I. (R. R. Hurst).

Ring Spot (virus) was conspicuous on two plants in a small garden at Summerside, P. E. I. (J. E. Campbell).

DELPHINIUM

Powdery Mildew (Erysiphe polygoni). Sl. infection was observed in a perennial border at Charlottetown, P. E. I. (J. E. Campbell). A few cleistotheca were present but Cicinnobolus was present and probably suppressed ascus formation (J. E. Campbell, D. B. O. Savile). Later rather heavy infections were seen (R. R. Hurst).

Bacterial Blight (Pseudomonas delphinii) caused mod. damage in a garden at Lethbridge, Alta. (M. W. Cormack). Tr. infections were noted in a garden at Charlottetown, P. E. I. (R. R. Hurst).

Stunt (virus) sev. affected several plants in 2 gardens at Lethbridge, Alta. (M. W. Cormack).

DIANTHUS

Leaf Spots (Alternaria dianthicola and Ascochyta dianthi). Traces at Ste. Foy, Que., 31 July 1954 on D. barbatus (D. Leblond).

Bud Blight (Fusarium ?poae) was sev. on carnations at Rimouski, Que. (D. L.).

Bacterial Spot (Pseudomonas woodsii). For the second year the disease was destructive in a small planting of Dianthus in a garden at Kentville, N. S.; apparently introduced with the seed, it overwintered in the dead leaves and stems (K. A. Harrison).

Stem Rot (Rhizoctonia solani). About 5% of the carnation plants in a bed of 2000 were killed in a greenhouse at Leamington, Ont.; the extreme heat during the summer months apparently favored the disease. A diseased plant was received from Clarkson and the pathogen isolated (W. G. Kemp).

Rust (Uromyces caryophyllinus) mod. infected Northland, whereas Victory Red, Midas, Apollo, Sydney Littlefield and Wm. Sim was free in a greenhouse at Leamington, Ont. (W.G.K.). Rust was heavy in a commercial greenhouse at Charlottetown, P.E.I. in Sept. (R.R. Hurst).

Mosaic (virus). All plants of Wm. Sim and Sydney Littlefield showed typical mosaic symptoms on the young foliage in a greenhouse at Leamington, Ont. in April (W.G. Kemp).

ECHINOCYSTIS

Leaf Spot (Septoria cucurbitacearum) seriously disfigured the foliage of E. lobata permitted to grow on the wall of a house at Gaspé, Que., in 1954 (D. Leblond).

EUPHORBIA

Stem Rot (Pythium sp.). A tr. of rot was found on poinsettia in a propogating bed in a greenhouse at Leamington, Ont., in October (W.G. Kemp).

GLADIOLUS

Core Rot (Botrytinia draytoni) caused sev. damage in corms stored by one grower at Nanton, Alta. (M.W. Cormack). The disease was very prevalent in one garden at Kentville, N.S.; about 30% of the corms were lost (J.F. Hockey). About 1% of the corms were destroyed in one lot examined in May (R.R. Hurst).

Fasciation (Corynebacterium fascians). Two corms showing typical symptoms were received from Prince Albert, Sask. Gladiolus had been grown in the plot for 3 years and the disease was first noticed last year. This year the disease was much more severe, some varieties being almost 100% infected. This is the second report of this disease in Sask. where it was found in 1950 (P.D.S. 30:125) (H.S. Thompson).

Leaf Spot and Corm Rot (Curvularia trifolii). Affected corms were received from London, Ont., where both Curvularia and Fusarium had affected about 20% of the crop. A few affected plants were also found in a small planting in a private garden at Ottawa by E.H. Peters. Leaf specimens were forwarded by a Montreal grower from a planting of 1000 or more corms at Essex, Vt. The corms from which the plants were grown were planted in new soil (H.S. Thompson). Both E.S. Luttrell (Plant Dis. Reptr. 40:57-60. 1956) and J.A. Parmelee (Proc. Can. Phytopath. Soc. 23:18-19. 1956) point out that the pathogen on gladiolus morphologically is indistinguishable from C. trifolii; it is not C. lunata as previously reported (I.L.C.)

Yellows (F. oxysporum f. gladioli) was sl. on Spot Light, mod. on Destiny and Red Charm and sev. on Margaret Hood, Ravel, Rosea and True Love in a planting at Ste. Foy, Que. (D. Leblond). About 5% of the plants were affected in a commercial garden at Charlottetown, P.E.I. Reports of similar infections were received from other centres (R.R. Hurst).

Dry Rot (Fusarium sp.) was observed at the University, Edmonton, Alta. (A.W. Henry).

Scab (Pseudomonas marginata). About 1% of the plants were sev. damaged by neck rot in a planting nr. Lethbridge, Alta. (M.W. Cormack).

Hard Rot (Septoria gladioli) affected a few corms in 2 lots brought in for examination from Queens Co., P.E.I. (R.R. Hurst).

Mosaic (Phaseolus virus 2) affected 3% of the plants in a garden in Fredericton, N.B. (D.J. MacLeod). Up to 25% of the plants were affected in several small plantings visited; the disease is increasing rapidly in N.S. gardens (J.F. Hockey).

GODETIA

Rust (Pucciniastrum epilobii) was found affecting plants being grown in outdoor concrete pots at La Redemption, Matapedia Co., Que. in Aug. 1954 (D. Leblond).

HYACINTHUS

Yellows (Xanthomonas hyacinthi) was found affecting 1/6 varieties of one grower on the mainland, B.C. (N. Mayers).

Rust (Uromyces scillarum (Grev.) Lév.) was heavy on a specimen collected "in garden" 14 May 1919 by J. Macoun at or nr. Sidney, B.C. and recently received for deposit in DAOM. Presumably the rust came from Europe on imported bulbs and persisted briefly without spreading. The rust, according to Arthur (Manual, p. 225. 1934) was collected on Scilla hispanica at Berkeley, Calif., by W.C. Blasdale in March 1931; apparently the circumstances were similar (D.B.O. Savile).

HYDRANGEA

Powdery Mildew (?Erysiphe cichoracearum). Newly potted plots were sl. infected 8 Aug. in a greenhouse at St. Catharines, Ont. (W.G. Kemp).

IRIS

Leaf Spot (Didymellina macrospora) affected 4/18 plantings of bulbous iris inspected on Vancouver Island, B.C.; infection was sl. (N. Mayers). The disease was heavy in a home garden and common at the University, Vancouver (H.N.W. Toms). The disease was heavy on all plantings in Battlefield Park, Quebec City, in September 1954 (D. Leblond).

Bulb Nematode (Ditylenchus dipsaci). A sl. infection was found in 2 plantings, causing their rejection, on Vancouver Island, B.C. (N. Mayers).

Soft Rot (Erwinia carotovora). Affected rhizomes were received from Gerald, Sask. (T.C. Vanterpool). Sl. infections were noted in single small plantings at Berwick, N.S. (K.A. Harrison), and Queens Co., P.E.I. (R.R. Hurst).

Mosaic (virus) was found in one planting of bulbous iris on Vancouver Island, B.C. (N. Mayers).

LATHYRUS

Root Rot (Fusarium sp.) caused sev. damage at Lethbridge, Alta., to L. odoratus, which were planted in the same location for the third season (M.W. Cormack).

LILIUM

Blight (Botrytis elliptica) was observed in the University plots, Edmonton, Alta. (L. E. Tyner). Blight was common and often sev. in Que. in 1954 (D. Leblond). Blight affected about 10% of the leaves on a few plants of L. regale at Kentville, N. S.; a sev. outbreak occurred in this garden in 1954, but careful removal of affected leaves and stalks plus a dry season kept the disease in check (K. A. Harrison).

Mosaic (virus) affected about 20% of the plants in a garden at Kentville, N. S. L. regale that had been growing for 20 years in an isolated garden became infected from lily varieties introduced from Ont.; the plants became very distorted and bore misshapen flowers (K. A. Harrison).

MAHONIA

Rust (Cummingsiella mirabilissima (Pk.) Nannf.) Apparently a single affected leaf was found by J. Paxton on some 50 plants of M. aquifolium in a nursery at Waterdown, Ont., during a general nursery survey; the rust was identified from the specimen (H. S. Thompson). The rust was recorded previously in Eastern Canada in eastern Que. in 1930 (P. D. S. 30:128) (I. L. C.).

NARCISSUS

Neck Rot or Smoulder (Botrytinia narcissicola (Gregory) Seaver, N. Amer. Cup-fungi (Inoperculates), p. 63. 1951) was noted in tr. amounts in 17% of plantings on Vancouver Island. The disease was seen in 28% of the plantings on the mainland; in one field 30% of the plants were affected, but in the others the infection was usually sl. (N. Mayers).

Bulb Nematode (Ditylenchus dipsaci) was found in one-third of the plantings inspected on Vancouver Island but the infestations were very sl. On the mainland it was found on 7% of the plantings, infestations being very sl. and localized (N. M.).

Basal Rot (Fusarium bulbigenum) was observed affecting 2% of the bulbs in one lot of commercial stock grown on Vancouver Island and examined at shipping time (N. M.).

Leaf Scorch (Stagonospora curtisii) was found in 33% of the plantings on the mainland, B. C.; infection was very sl. (N. M.).

White Streak and associated virus diseases were noted in every planting on Vancouver Island, B. C., and infection exceeded 2.5% in 17% of the plantings. On the mainland, these diseases were evident in 51% of the plantings and infection averaged 2%. Except that the plants lack vigor and tend to mature early, no symptoms are visible in other than the trumpet varieties (N. M.).

Mosaic (virus). A tr. was present in every planting on Vancouver Island but the infection never exceeded 0.5%. On the mainland 5% of the plantings were affected with an average infection of 0.1%. Early spring roguing effectively controls the disease (N. M.).

NASTURTIUM

Yellows (Callistephus virus 1). Symptoms similarly to those in calendula appeared in nasturiums growing in a row adjacent to calendula in a garden at Kentville, N. S., soon after yellows appeared the latter plant. Every plant became infected (K. A. Harrison).

PAEONIA - Peony

Blight (Botrytis paeoniae) was sl.-sev. in 3 nursery plantings of 3 1/2 acres at Calgary, Alta. (R.P. Stogryn) and in several gardens at Lethbridge (M.W. Cormack). Sl. infections of bud rot were observed at Quebec City in June and at Gaspé in August; in the second case the causal fungus appeared to be B. cinerea (D. Leblond). Blight sev. infected 7 plants in a garden at Charlottetown, P.E.I. (R.R. Hurst).

Ring Spot (virus). A single infected plant was seen in a garden at Charlottetown, P.E.I. (R.R.H.).

Stunt (undetermined): 13% of the plants in a test plot at the Farm, Fredericton, N.B., showed sev. stunting and an upward rolling of the leaves (D.J. MacLeod).

PELARGONIUM - Geranium

Basal Stem Rot (Botrytis cinerea and Pythium sp.) sev. injured 25-75% of the cuttings of P. zonale being rooted at Summerland, B.C. (G.E. Woolliams). Grey mold caused mod. damage to a shipment of cuttings from California examined at Calgary (R.P. Stogryn).

Oedema (nonparasitic). Leaves from house plants received from Kamloops, B.C., in March 1954 and 1955 were found affected (G.E. Woolliams).

PHILADELPHUS

Leaf Spot (Ascochyta philadelphi Sacc. & Speg.) mod. infected P. coronarius at Deschambault, Que., 4 Aug. 1954. Spores 5-10 x 2.4-3.5 microns, 0-1 septate; center of spots tend to weather away. Not previously reported in Canada (D. Leblond, D.B.O. Savile).

Leaf Spot (Septoria ?philadelphi) was sev. on a bush in a home garden at Queens Bay, B.C. on 4 Aug. (D.L. McIntosh).

PHLOX

Root and Stem Namatode (Ditylenchus dipsaci). Badly stunted P. paniculata were found sev. infested by nematodes in a nursery in Lincoln Co., Ont.; nematodes were present in both the roots and the lower part of the stem (W.G. Kemp).

Powdery Mildew (Erysiphe cichoracearum) was general on P. paniculata in the laboratory garden, St. Catharines, and noticed elsewhere in the area (W.G. Kemp). Observations made at Ottawa and specimens received from Limoges, Ont., and St. Hermas and St. Eustache sur le Lac, Que., indicated that infection was often mod.-sev. (H.S. Thompson). A mod. infection was observed in a garden at Aylmer East, Que. (R. Crete). Infection was heavy in a garden in Queens Co., P.E.I. (R.R. Hurst).

RIBES

Powdery Mildew (Sphaerotheca mors-uvae) was observed on R. alpina at the University, Edmonton, Alta. (A.W. Henry).

ROSA

Crown Gall (Agrobacterium tumefaciens). A grower at Winona, Ont., removed about 200 greenhouse plants of Pink Rosette on account of their extreme

unthriftiness. Many small galls were found on the fibrous roots and frequently large galls were present on the stem at the soil line. A large gall was found on the crown of a hybrid tea brought to the laboratory from Montabello Park, St. Catharines. A number of these roses showed lack of vigor the previous season (W.G. Kemp). A few galls were observed on stems of Crimson Rambler bushes at Avonport, N.S. (J.F. Hockey). Heavy infections were noted on both Dorothy Perkins and Crimson Rambler roses in Queens Co., P.E.I. (R.R.Hurst).

Grey Mold (Botrytis cinerea) was found causing sl. infections on buds at Rimouski, Que. (D. Leblond), and Georgetown, P.E.I. (J.E. Campbell).

Black Spot (Diplocarpon rosae) was sev. on hybrid teas in the laboratory garden at St. Catharines, Ont., many plants being badly defoliated by mid-July. In June a tr. was present on the lower leaves of floribunda rosea, Fashion and Edna Paulsen in a nursery in Lincoln Co. (W.G. Kemp). Black spot had half defoliated hybrid roses at Montmagny, Que., by mid-August. Defoliation was sev. on hybrid roses at St. Roch a month later with slightly less sev. infection on floribundas and polyanthas (L.J. Coulombe). The disease was common on R. eglanteria growing in an old pasture at Rougement (L. Cinq-Mars). Black spot was very prevalent and sev. by late September on hybrid teas with somewhat lighter infections on floribundas at Kentville, N.S. (J.F. Hockey). Black spot was present on practically all varieties of roses growing at the Farm, Charlottetown, P.E.I. (J.E. Campbell).

Rust (Phragmidium spp.) was heavy on the leaves of garden roses in a private garden at Victoria, B.C. (H.N.W. Toms). Lightly infected specimens received from Rockyford, Alta. (H.S. Thompson). Rust caused sev. defoliation on hybrid perpetuals in a garden at St. Roch, Que. (L.J. Coulombe). A light infection was noted at Charlottetown, P.E.I. (J.E. Campbell).

Powdery Mildew (Sphaerotheca pannosa). Sl. infected specimens were received from South Junction, Man., and on hybrid teas and floribunda roses from Toronto, Ont.; it was also heavy on Crimson Glory climber nr. Windsor (H.S. Thompson). The disease was sev. on floribunda roses in the laboratory at St. Catharines, Ont. (W.G. Kemp). Infection was mod. on R. multiflora in a nursery nr. Montreal, Que. (J. Ringuet). It was also heavy on hybrid perpetual and polyantha roses at St. Roch (L.J. Coulombe). Powdery mildew was sev. on climbing roses at Bridgetown, N.S. (D.W. Creelman), and a sl. infection was already present on 27 June on a climber on which it had been sev. in 1954 at Charlottetown, P.E.I. Mildew was also quite prevalent on hybrid teas at the Farm towards the end of the season (J.E. Campbell).

SAINTPAULIA

Physiological Ring Pattern. The condition has been under observation for a few years in 2 potted plants in the University greenhouse, Vancouver, B.C. Attempts by R. Stace-Smith to transmit a possible virus to cucumber by rubbing were negative. M. Hallings (Plant Path. 4:123-128. 1955) concludes that the condition is due to watering plants with cold water in sunlight (H.N.W. Toms).

SEDUM

Leaf Spot (Septoria sedi) was heavy on S. purpureum in a garden at St. Clement, Que., on 18 Aug. 1954 (D. Leblond).

SPIRAEA

Nectria Canker (N. cinnabarina). The imperfect stage was found fruiting on specimens of S. vanhouttei collected at Charlebourg, Que. (H. S. Thompson).

SYRINGA

Powdery Mildew (Microsphaera alni) was heavy in August on common lilac in Queens Co., P. E. I. (R. R. Hurst).

Bacterial Blight (Pseudomonas syringae) sev. affected several branches on lilac bushes at Lethbridge and Calgary, Alta. (M. W. Cormack).

TAGETES

Yellows (Callistephus virus 1) was common in T. erecta in many gardens in Edmonton, Alta. (W. P. Campbell).

TULIPA

Fire (Botrytis tulipae). Although plantings were constantly rogued some secondary infection was present in almost every planting inspected in coastal B. C. Spraying has not given consistent results (N. Mayers). Fire infection was heavy in one planting observed at Kentville, N. S. (J. F. Hockey). The disease was general throughout P. E. I. causing sl.-sev. damage (R. R. Hurst).

Bulb Rot (Penecillium sp.) was sev. in one planting observed at Edmonton, Alta. (A. W. Henry).

Break (virus) was observed in tr. amounts in plantings of tulips grown for certification in coastal B. C. (N. Mayers).

Topple (physiological) was observed in 4 gardens in Fredericton, N. B.; 50-60% of the plants were affected. Injured plants developed watersoaked spots with exudation of liquid on the lower parts of the flower stalks. These stalks then shrivelled and collapsed (D. J. MacLeod).

VERONICA

Powdery Mildew (Sphaerotheca humuli) was conspicuous on V. longifolia var. subsessilis at the end of the season in 1954 in a park at Quebec, P. Q. (D. Leblond).

VIOLA

Leaf Spot (Cercospora violae) was found by V. R. Preston in 1/3 beds of violets examined at Elgin Mills, Ont. (H. S. Thompson). A mod. infection was observed on V. tricolor var hortensis at Ste. Foy, Que. (D. Leblond).

Powdery Mildew (Sphaerotheca humuli var. fuliginea) mod. affected pansies in a bed at Ottawa, Ont.; plants exposed to little sunlight and poor air drainage (H. S. Thompson).

ZINNIA

Leaf Spot (Alternaria zinniae) was common everywhere on Z. elegans at Quebec, Que., in 1954; when the disease is sev. the symptoms are those of a blight (D. Leblond).

Grey Mold (Botrytis cinerea) was affecting heavily about 25% of the plants in several flats held for late orders at Centreville, N.S., on 24 June (K. A. Harrison).

Powdery Mildew (Erysiphe cichoracearum) was present in late September on most plants growing in the laboratory gardens at St. Catharines, Ont. (W.G. Kemp).

Yellows (Callistephus virus 1, western strain). About 2% of the plants were affected in a garden in Fredericton, N.B. (D.J. MacLeod). Yellows infections of 30 and 15% respectively were recorded at Summerside and Charlottetown (J.E. Campbell, R.R. Hurst).