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Kemptville District, 1969  
Reports of Forest Research Technicians

Applejohn, M.J.

Information Report  
(Forest Research Laboratory, Ontario Region)

O-X-117



OUR FILE NO.  
NOTRE DOSSIER N°  
  
YOUR FILE NO.  
VOTRE DOSSIER N°

DEPARTMENT OF FISHERIES AND FORESTRY  
CANADIAN FORESTRY SERVICE

MINISTÈRE DES PÊCHES ET DES FORÊTS  
LE SERVICE CANADIEN DES FORÊTS

FOREST RESEARCH LABORATORY  
BOX 497  
SAULT STE MARIE, ONT.

25 May 70

Dear Sir:

This is a composite of 18 individual Information Reports of Forest Insect and Disease Surveys which were issued and mailed several weeks ago to district foresters and other key forestry personnel in the various districts across Ontario. These reports were numbered consecutively as listed under the table of contents beginning with Lindsay District as O-N-115 and continuing to Fort Frances District as O-N-134, with Geraldton and White River combined as O-N-131. The content is confined to the results of field surveys of insect and disease conditions exclusive of those directly associated with aerial spraying operations carried out by the Ontario Department of Lands and Forests in 1969. Brief resumés of these operations as prepared for the Interdepartmental Committee on Forest Spraying operations in November are provided for your information as supplement reports at the back.

Yours very truly,

W.L. Sippell,  
Head, Insect and Disease Survey,  
Ontario Region.

WLS/ar



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 Ontario, 1969

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Regional Supervisors \*

## FOREWORD

The Forest Insect and Disease Survey Unit carried out their annual damage detection and censusing program in Ontario between May 1 and September 12, 1969. The results are reviewed in detail for the area shown in the title of each specific report. The following is a general summary of the more important insect and disease situations in the Province.

The spruce budworm was the dominant forest insect problem in 1969. In northeastern Ontario, new or enlarged infestations occurred in the forest districts of Chapleau, Kapuskasing, Cochrane, Sudbury, Swastika, and Sault Ste. Marie. In southeastern Ontario heavy infestations persisted in parts of Pembroke, Tweed and Kemptville districts, and in the western part of the Province two small areas of severe defoliation appeared in the Port Arthur District. Jack pine budworm population levels increased sharply; heavy infestations recurred in the Sault Ste. Marie and Pembroke districts and new areas of severe defoliation were recorded in the districts of Sudbury, North Bay, and Parry Sound.

Aerial spraying operations were carried out against the spruce budworm by the Ontario Department of Lands and Forests in the Port Arthur and Fort Frances districts and against the jack pine budworm and white pine weevil in the Sault Ste. Marie District. Jack pine budworm infestations on the Canadian Forces Base (Petawawa) and on the Petawawa Forest Experiment Station were sprayed by the Canadian Forestry Service. Field technicians were heavily involved in the delineation of areas to be treated, in the timing of spray applications, and in the assessment of populations before and after spraying. Separate reports of these operations are in preparation.

Disease surveys emphasized the evaluation of incidence, infection levels and degree of damage by various pathogens on infected stands. Although no extensive changes in the distribution of the Dutch elm disease occurred in 1969, the pathogen caused considerable mortality of elm, particularly in southern Ontario. Two important diseases of poplar were ink spot and Hypoxylon canker. Scleroderris canker of pine continued to be a major problem in pine plantations. Cankers of pines and hardwoods were evaluated in many stands and details on these and other problems are discussed in the following report.

On January 16, 1970 the Unit lost the valuable services of its Chief Field Technician, J.E. MacDonald, who retired after guiding the Survey Field Service in its various programs and in the compilation of annual district reports for the past 25 years.

The objectives and working principles of the Insect and Disease Survey are currently being thoroughly reviewed and re-evaluated, and it is now clear that fewer technicians will be involved in carrying out surveys of forest insect and disease conditions in Ontario in 1970. Future reports on the details of these surveys will probably cover five regions or sections of the Province.

L. S. MacLeod  
Acting Chief Technician

April, 1970.

KEMPTVILLE DISTRICT

1969

INTRODUCTION

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## INTRODUCTION

The following report deals with the status of forest insects and tree diseases in the Kemptville District in 1969. In a departure from the format of previous years tree diseases as well as insects are dealt with on a district rather than a regional basis.

The spruce budworm, jack pine sawfly, and the birch leaf miner were the major insect pests in the district. Important insects which showed increasing population levels but did not reach outbreak proportions in 1969 were the saddled prominent and the jack pine budworm. The discovery of the European pine sawfly for the first time in the district is of particular importance for plantation owners in general and Christmas tree growers in particular. Populations of another important plantation pest, the red-headed pine sawfly, remained generally low after their decimation by egg parasites in 1968. Surveys for several important insects such as the European spruce sawfly and the native and European elm bark beetles were curtailed due to early termination of the field season.

Forest pathology surveys concentrated on sampling and evaluation of various canker diseases. *Eutypella* canker of maple was found to be present in most maple stands in the district. A heavy infection of a spruce canker disease, *Cytospora kunzei* Sacc. was located in Mountain Township.

The author wishes to express sincere appreciation for the co-operation and assistance extended to him by personnel of the Department of Lands and Forests.

M. J. Applejohn



Black-headed Budworm, Acleris variana Fern.

Light infestations of this budworm recurred on eastern hemlock along the south side of Rideau Lake in South Burgess Township and on white spruce plantings in the Leeds County Forest in South Crosby Township. New, light infestations were located on mature hemlock near the Ivy Lea Bridge in Front of Leeds and Lansdowne Township and on three-foot hemlock reproduction near Maberley in South Sherbrooke Township. Quantitative sampling results are summarized in Table 1.

TABLE 1

Summary of Black-headed Budworm Larval Counts in the Kemptville District in 1968 and 1969

Location (township)	Host	Av. d.b.h. of sample trees in inches	Total no. of larvae per 15-tray sample	
			1968	1969
South Burgess	eH	10	58	79
Fitzroy	wS	10	21	19
Cambridge	wS	6	3	11
South Crosby	wS	4	39	40

Fall Cankerworm, Alsophila pometaria (Harr.)

This insect again caused severe defoliation of open-grown trees and small deciduous woodlots in Lavant, Pakenham and North Gower townships. Roadside elm were light-to-moderately defoliated near Jasper in Kitley Township. Elm and basswood were the preferred hosts.

Cedar Leaf Miners, Argyresthia thuiella Pack.,  
Argyresthia aureoargentella Brower, and  
Argyresthia freyella Wlsh. m.

Infestations of these leaf miners were observed at many locations in the southern and eastern parts of the district. Severe browning of cedar foliage occurred throughout Leeds, Grenville, and southern Lanark counties. Less extensive areas of severe damage were noted in Stormont and Glengarry counties. Elsewhere in the district damage was light. Severe browning of the foliage of ornamental trees prompted numerous enquiries from private owners particularly in the Kemptville, Smiths Falls, and Perth areas.

Spruce Budworm, Choristoneura fumiferana Clem.

Heavy infestations persisted in the lower Ottawa Valley for the third consecutive year. The largest of these occurred on scattered white spruce from the Antrim-Fitzroy Harbour area to the outskirts of Ottawa. Large, heavy infestations also occurred north of Pakenham, in Pakenham Township and north of Almonte in Ramsay Township. Smaller, isolated pockets of heavy infestation were noted near Poland in Dalhousie Township, north of Hallville in Mountain Township, and south of Lavant Long Lake in Lavant Township. Approximately fifty acres of white spruce plantations were heavily infested in the Larose Forest in Clarence Township. Medium infestations occurred on scattered white spruce and balsam fir in Goulbourn and Marlborough townships (see map). Larvae were found in all stands examined in the district in 1969. Egg sampling carried out in the fall of 1969 indicated that heavy infestations will persist in 1970. Results of these egg counts and defoliation forecasts for 1970 are summarized in Table 2.

TABLE 2

Summary of Spruce Budworm Egg Mass Counts and Defoliation Estimates in the Kemptville District in 1968 and 1969 and Defoliation Forecasts for 1970

Location (township)	Host	Per cent defoliation		Cumulative no. egg masses per 100 sq. ft. of foliage in 1969	Defoliation forecast for 1970
		1968	1969		
Clarence	wS	93	92	237	H
Clarence	wS	3	42	50	M
Marlborough	bF	63	24	107	H
Pakenham	wS	91	40	120	H
Dalhousie	bF	67	61	155	H
Fitzroy	bF	--	4	11	L
Goulbourn	bF	--	11	105	H
March	wS	--	25	296	H
Ramsay	wS	--	8	9	L

Walnut Caterpillar, Datana integerrima G. & R.

This insect was found more commonly in 1969 than in recent years. Walnut hedges and ornamental trees in Charlottenburgh and Montague townships were severely defoliated for the second consecutive year (see photograph). A new, heavy infestation caused severe defoliation of scattered white oak, basswood, and shagbark hickory in Front of Leeds and Lansdowne Township.

Eastern Pine Shoot Borer, Eucosma gloriola Heinr.

A general decline in population levels of this insect was evident in 1969. In Beckwith Township, quantitative sampling showed a decline from 940 to 182 infested shoots on 100 trees examined (Table 3). Similar declines were observed elsewhere in the district.

TABLE 3

Summary of Eastern Pine Shoot Borer Damage in the Kemptville District in 1968 and 1969

Location (township)	Host	Av. d.b.h. in inches	Number of infested leaders		Number of infested laterals	
			1968	1969	1968	1969
Matilda	wP	2	4	0	17	8
Oxford	wP	4	3	1	14	23
Cambridge	rP	3	2	4	77	40
Beckwith	ScP	2	0	8	940	182
Marlborough	ScP	3	2	2	24	15

Pine Bud Moth, Exoteleia dodecella (L.)

Although a general downward trend in population levels of this insect was revealed in quantitative sampling results at five locations (Table 4), moderate-to-severe infestations persisted in Goulbourn, Oxford, and Wolford townships.

TABLE 4

Summary of Pine Bud Moth Counts in the Kemptville District in 1968 and 1969

Note: Counts were based on examination of 100 Scots pine bud clusters at each location.

Location (township)	Av. d.b.h. of sample trees in inches	Per cent bud clusters infested	
		1968	1969
Wolford	4	37	26
Cumberland	4	26	10
Goulbourn	6	52	38
Kitley	6	19	6
Oxford	5	46	26

Birch Leaf Miner, Fenusa pusilla (Lep.)

Population levels of the birch leaf miner remained high for the sixth consecutive year. Heavy infestations persisted in most white and wire birch stands in Prescott, Russell, Grenville, Dundas, Stormont, and Glengarry counties and in the eastern parts of Carleton and Leeds counties (see map). An isolated pocket of medium infestation in South Sherbrooke Township declined to light intensity in 1969. As in previous years, the second generation was considerably reduced in numbers, possibly because of a lack of oviposition sites due to the extensive damage caused by the first generation. Quantitative sampling at five locations is summarized in Table 5.

TABLE 5

Summary of Damage Caused by the First Generation of the Birch Leaf Miner in the Kemptville District from 1967 to 1969

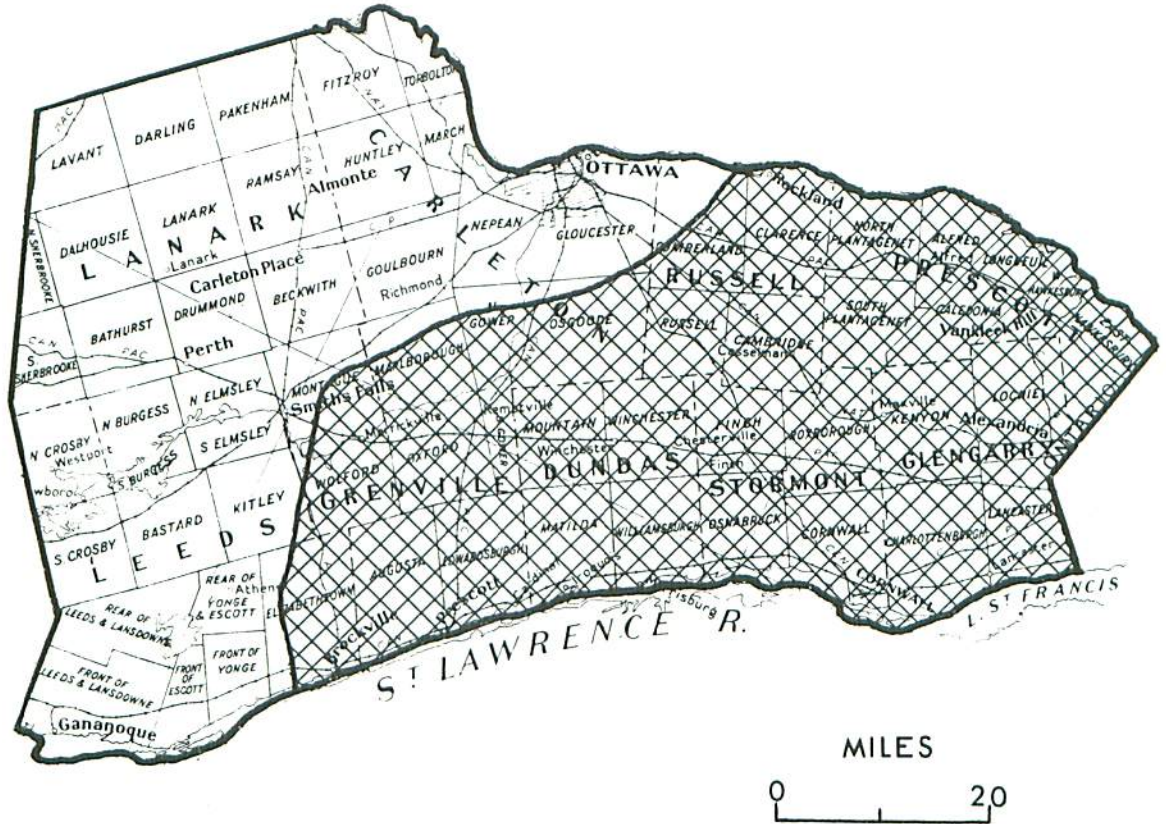
Note: Counts were based on examination of 100 leaves taken at random from three trees at each location.

Location (township)	Host	Av. d.b.h. of sample trees in inches	Per cent of leaves infested			Total no. of mines		
			1967	1968	1969	1967	1968	1969
Elizabethtown	wB	4	99	100	96	215	271	288
East Hawkesbury	wiB	3	92	97	53	183	203	97
Williamsburg	wiB	2	91	100	89	228	310	197
Cambridge	wiB	3	100	89	93	237	190	213
Oxford	wB	3	93	100	100	218	281	237

Fall Webworm, Hyphantria cunea (Drury)

Populations of the fall webworm increased markedly in 1969. Heavy infestations persisted along the north shore of the St. Lawrence River between Cornwall and Lancaster, and between Brockville and Prescott. Small pockets of medium infestation were noted along the Poonamalie Road in South Elmsley Township, along Highway 43 west of Winchester and north of the village of St. Raphael in Charlottenburgh Township. Small numbers of nests were observed along roadsides and in orchards throughout the district.


# KEMPTVILLE DISTRICT



## BIRCH LEAF MINER

Areas within which infestations occurred in 1969.

### Legend

Heavy infestation ..... 

The Solitary Oak Leaf Miner, Lithocolletis hamadryadella Clem.

Heavy infestations of this leaf miner caused severe browning of white and red oak foliage in southern Leeds County along the north shore of the St. Lawrence River. Medium-to-heavy infestations were noted in small groves of white and bur oak in Beckwith, Kitley, and Drummond townships. Light damage was observed at numerous other locations.

Forest Tent Caterpillar, Malacosoma disstria Hbn.

A single pocket of heavy infestation caused severe defoliation of scattered aspen, willow, and balsam poplar in a four-square-mile area northwest of Winchester in Mountain Township. A light infestation which occurred in Clarence Township in 1968 subsided in 1969. Single colonies and wandering larvae were observed commonly in the remainder of the district.

Balsam Fir Sawfly, Neodiprion abietis complex

This insect, in conjunction with the spruce budworm, caused severe defoliation of scattered balsam fir at several locations in Fitzroy, Huntley and Pakenham townships. Heavy infestations also occurred in Lavant, Torbolton, Cumberland, and Beckwith townships. Light-to-medium infestations were observed in Drummond, Montague, Beckwith, and South Sherbrooke townships. Single colonies were common throughout the district.

Red-headed Pine Sawfly, Neodiprion lecontei (Fitch)

Little change in population levels of this insect occurred in 1969 (Table 6). A single, medium infestation was observed in a small red pine plantation near Maberley in South Sherbrooke Township. Small, light infestations were recorded on planted red pine in Oxford and Marlborough townships.

TABLE 6

Summary of Red-headed Pine Sawfly Colony Counts on Red Pine  
in the Kemptville District in 1968 and 1969

Note: 100 trees were examined at each location.

Location (township)	Av. d.b.h. of sample trees in inches	Av. no. of colonies per tree	
		1968	1969
South Crosby	2	0.0	0.70
Oxford	4	0.06	1.0
North Elmsley	3	0.05	0.2
Dalhousie	2	0.01	0.0
Bathurst	1	0.02	0.04

A Jack-pine Sawfly, Neodiprion pratti paradoxicus Roh.

Little change in population levels of this defoliator occurred at five permanent sampling points (Table 7). Heavy infestations were again recorded in Bathurst, Lanark, Nepean, and Clarence townships. Small, medium infestations occurred in Drummond and South Crosby townships. Light infestations and scattered single colonies were observed commonly in the Limerick Forest and the City of Ottawa Greenbelt.

TABLE 7

Summary of Jack-pine Sawfly Colony Counts in the Kemptville District  
in 1968 and 1969

Note: 100 trees were examined at each location.

Location (township)	Av. d.b.h. of sample trees in inches	Av. no. of colonies per tree	
		1968	1969
Lanark	3	10.0+	6.2
Nepean	1	6.6	1.2
Oxford	3	0.3	0.4
Torbolton	4	0.1	0.0
Bastard	2	0.9	0.7
Bathurst	3	10.0+	10.0+

European Pine Sawfly, Neodiprion sertifer (Geoff.)

This introduced pest of pine was found in the district for the first time in 1969. Although larvae and cocoons were recovered from ornamental mugho pine at several locations in the city of Ottawa proper, careful inspections showed no sawflies or defoliation in the N.C.C. Greenbelt plantations surrounding the city.

White Pine Weevil, Pissodes strobi Peck

Generally higher populations of the white pine weevil were observed in the district in 1969. A heavy infestation persisted in a 12-foot white pine plantation in Dalhousie Township where 50 per cent of the leaders examined were infested (Table 8). Heavy infestations also occurred in Fitzroy, Augusta, North Sherbrooke, and Rear of Leeds and Lansdowne townships. Medium infestations were noted in Bathurst, Cambridge, and Front of Leeds and Lansdowne townships.

TABLE 8

Summary of Damage by the White Pine Weevil in the Kemptville District from 1967 to 1969

Note: Counts were based on the examination of 100 white pine trees at each location.

Location (township)	Av. d.b.h. of sample trees in inches	Per cent of trees weevilled		
		1967	1968	1969
Fitzroy	3	36	34	37
Bathurst	4	8	15	17
Cambridge	3	5	2	15
Dalhousie	4	49	49	50
Wolford	4	6	11	25

Larch Sawfly, Pristiphora erichsonii Htg.

Population levels of the larch sawfly remained low in 1969. Medium infestations which occurred in Dalhousie and Montague townships in 1968 declined to light intensity in 1969. Light infestations were noted on small stands of larch in Clarence and Goulbourn townships.



TABLE 9

## Other Noteworthy Insects

Insect	Host(s)	Remarks
<i>Acleris cornana</i> McD.	Do	Medium infestation on clumps of dogwood west of Gananoque
<i>Acrobasis caryivorella</i> Rag.	bHi	Medium infestation
<i>Acrobasis juglandis</i> Le Bar.	Bu	Medium infestation in leaf and flower buds near Little Crosby Lake
<i>Aphrophora parallela</i> Say	JP	Medium infestation in plantation near Hopetown
<i>Arge pectoralis</i> (Leach)	yB, wB, wiB	Medium infestation in Oxford Township
<i>Argyresthia oreasella</i> Clem.	ecCh	High population at one location in Drummond Township
<i>Bucculatrix ainmeliella</i> Murt.	rO	Heavy on roadside trees near Mallorytown
<i>Cecidomyia reeksi</i> Vock	JP	Medium infestation in a small plantation in Bathurst Township
Cecidomyidae	ScP	Caused severe needle drop on leaders of Christmas trees in Oxford Township
<i>Cenopsis</i> sp.	Ba, sM	Light-to-medium infestations in Lavant and North Crosby townships
<i>Chrysomela</i> sp.	bPo	Medium infestation along abandoned railway in Lavant Township
<i>Coleophora ulmifoliella</i> McD.	wE	Heavy infestation on a few trees near the village of Rockport

TABLE 9 (continued)

Insect	Host(s)	Remarks
<i>Datana ministra</i> (Drury)	wE	Heavy infestation on ornamentals along Highway 17 in Gloucester Township
<i>Dioryctria disclusa</i> Heinr.	ScP	Heavy infestation in the Marlborough Township Forest
<i>Erannis tiliaria</i> (Harr.)	Ba	Small medium infestation near Little Crosby Lake
<i>Eriophes fraxiniflora</i> Felt	gAs	Light damage in Howard G. Ferguson Nursery in Oxford Township
<i>Exoteleia pinifoliella</i> (Cham.)	jP	Heavy infestation in Bastard Township
<i>Heterocampa guttivitta</i> Wlk.	sM	Single, light infestation in North Sherbrooke Township
<i>Hylobius pales</i> (Hbst.)	ScP, bF	Heavy infestations occurred in Christmas tree plantations in Oxford Township
<i>Lecanium</i> sp.	rO	Heavy infestation causing twig mortality to small oak and ironwood in North Crosby Township
<i>Leucanthiza dircella</i> Braun	Leather- wood	Heavy leaf mining near Elphin in North Sherbrooke Township
<i>Lithocolletis aceriella</i> Clem.	rM	Medium infestation in Larose Forest, Cambridge Township
<i>Lithocolletis ostryarella</i> Cham.	I	Medium infestation on understory trees near Maberley
<i>Lithocolletis robiniella</i> Clem.	bLo	Heavy infestation near Rideau Narrows in South Burgess Township
<i>Macremphytus varianus</i> Nort.	Do	Heavy infestation on understory trees in Bathurst Township

TABLE 9 (continued)

Insect	Host(s)	Remarks
Membracidae	tL	Caused severe damage to small larch plantation in North Gower Township
<i>Parectopa robinella</i> Clem.	bLo	Heavy infestation near Rideau Narrows in South Burgess Township
<i>Pareophora minuta</i> MacG.	bAs	Severe defoliation along Highway 7 near Carleton Place
<i>Phenacaspis pinifoliae</i> (Fitch)	mP	Heavy scale infestation on ornamentals in Gananoque
<i>Phytogromyza populicola</i> Wlk.	cPo lombardy poplar	Heavy on ornamentals in Ottawa, Kemptville, and Gananoque
<i>Pleroneura borealis</i> Felt	bF	Heavy infestation on roadside trees near Pointe Fortune, East Hawkesbury Township
<i>Pseudexentera oregonana</i> Wlshm.	tA	Light infestation near Hallville in Mountain Township
<i>Sciaphila duplex</i> Wlshm.	tA, lA	Light infestations near Hallville and near Robinson Lake
<i>Scolytus multistriatus</i> Marsh.	wE	No change in distribution of this introduced vector of Dutch elm disease
<i>Zelleria haimbachi</i> Busck.	jP	High numbers in plantations in Lanark, Drummond, and Nepean townships

Dutch Elm Disease, Ceratocystis ulmi (Buism.) C. Moreau

This disease continued to devastate stands of white elm throughout the district. As in 1967 and 1968 the most severe infections occurred in the Brockville-Prescott area along the St. Lawrence River, where most elms are dead or dying. Quantitative sampling at five locations is summarized in Table 10.

TABLE 10

Summary of the Occurrence of Dutch Elm Disease Symptoms  
in the Kemptville District in 1969

Note: Fifty trees were examined at each location.

Location (township or municipality)	Per cent of trees showing disease symptoms
Lancaster	8
Town of Merrickville	18
March	39
Bathurst	9
Drummond	27

Ink Spot of Aspen, Ciborinia whetzellii (Seaver) Seaver

Light leaf spotting was observed in trembling aspen stands in Oxford, Wolford, and Winchester townships. A small, isolated stand of trembling aspen was heavily infected in South Crosby Township. The disease was not found in other stands examined in 1969.

Needle Rust of Pine, Coleosporium asterum (Diet.) Syd.

A heavy infection occurred in a seven foot red-pine plantation in the Lanark County Forest in Darling Township. Trace-to-light infections were observed throughout the remainder of the district.

Branch and Stem Canker of Spruce, Cytospora kunzei Sacc.

Little change occurred in the status of this organism in 1969. A new heavy infection was discovered in a mature white spruce plantation in Mountain Township where the incidence was 27.5 per cent. A medium infection persisted in white spruce windbreaks in the Kemptville Nursery while light infections were noted in plantations in Oxford and Clarence townships.

Eutypella Canker of Maple, Eutypella parasitica Davidson & Lorenz

This canker was found in red and sugar maple stands throughout the district. Quantitative sampling revealed heavy infections in Lavant, South Sherbrooke, and Dalhousie townships and medium infections in Drummond and Wolford townships (Table 11). The disease was observed at trace-to-light infection levels at numerous other locations.

TABLE 11

Summary of Incidence and Level of Infection of Eutypella Canker of Maple in Kemptville District in 1969

Note: Based on examination of four trees in each of ten plots at each location.

Location (township)	Host	Tree height in feet	Level of incidence	Level of infection
Drummond	sM	70	Moderate	Moderate
South Sherbrooke	sM	50	High	High
Dalhousie	sM	100	Moderate	High
Lavant	sM	60	High	High
Lancaster	rM	25	Moderate	Moderate
Wolford	sM	70	Moderate	Moderate

Annosus Root Rot, Fomes annosus (Fr.) Cooke

No change occurred in the status of this root rot in 1969. In Clarence Township, Larose Forest, no spread was observed from the fourteen infection centres located and treated in 1968.

Leaf and Twig Blight of Poplar, Pollaccia radiosa (Lib.) Bald. & Cif.

A light infection of this disease occurred on Carolina poplar cutting stock in the Howard G. Ferguson Nursery in Oxford Township. Small numbers of infested shoots were observed on roadside and fringe trees in Plantagenet, Lavant, and South Crosby townships.

## Frost Injury

Late frosts in the spring of 1969 severely damaged the foliage of deciduous trees, particularly oak and ash, throughout the southern part of the Kemptville District. Small trees, up to 15 feet, and the lower branches of larger ones were most severely affected. Light damage was observed on deciduous seedlings in the Howard G. Ferguson Nursery.

## Ice Damage

A severe ice storm early in 1969 caused extensive damage throughout the district. Particularly severe damage was observed in plantations in Roxborough and Dalhousie townships and in the Larose Forest in Prescott and Russell counties. Species most severely affected were Scots pine and eastern white cedar, many of which were broken. Hardwoods suffered mainly branch damage.

## Winter Drying

This abiotic condition caused severe browning of foliage in red and white pine plantations along Highway 2 between Morrisburg and Cornwall where particularly heavy damage was noted in the St. Lawrence Seaway plantations near Chryslers Farm. Severe discoloration was also observed in plantations near Finch, in Finch Township and to a lesser extent in the Greenbelt Plantations surrounding the city of Ottawa. Light damage was observed commonly elsewhere.

TABLE 12

## Other Noteworthy Diseases

Organism	Host(s)	Remarks
<i>Chrysomyxa ledi</i> (Alb. & Schw.) d By.	Labrador tea	Heavy levels of infection in Montague and March townships
<i>Chrysomyxa</i> sp.	wS, bS	Trace infection level at several widely separated locations
<i>Cronartium comptoniae</i> Arth.	jP	Re-collected in Torbolton Township for third consecutive year
<i>Davisomycella ampla</i> (Davis) Darker	jP	Medium infection on natural reproduction in Torbolton Township
<i>Dothiorella quercina</i> (Cke. & Ell.) Sacc.	rO	This stem canker causing light mortality in a stand of young red oak in Front of Yonge Township
<i>Linospora tetraspora</i> G.E. Thomson	bPo	High levels of infection on roadside trees in Lavant, Bathurst, and Oxford townships

TABLE 12 (continued)

Organism	Host(s)	Remarks
<i>Melampsora abieti-capraearum</i> Tub.	bF	First herbarium record of the O-1 stage on balsam fir
<i>Mytilidion</i> sp.	tL	Collected from swollen spindle shaped butt cankers on plantation trees in Oxford Township