

VEGETABLE DISEASES ON MUCK SOILS IN THE MONTREAL AREA IN 1960

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During the summer of 1959 a preliminary survey for plant diseases was initiated in the muck soil vegetable producing areas of Ste. Clotilde and Sherrington, south of Montreal. The results of this survey are given elsewhere (3). In 1960, the survey was extended to other muck soil areas in the Montreal region. For convenience, 15 observation stations were established in the following districts: Sherrington, 5; Ste. Clotilde, 4; St. Remi, 1; Napierville, 1; St. Michel, 1; Ste. Sabine, 1; L'Ange-Gardien, 1; and Huntingdon, 1.

From time to time during the summer, the fields at these stations were visited and records taken on the diseases occurring on the different crops. The following disease index was used.

Index	Disease Intensity	Percent Affected Plants
0	None	0
1	Traces	1-10
2	Light	10-30
3	Moderate	30-60
4	Heavy	60-100

The diseases observed in 1960, and their intensity, are presented here in tabular form.

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<sup>3</sup> Simard, J. and René Crête. 1959. Observations sur quelques maladies des cultures de légumes sur terre organique du sud de Montréal. 41e Rapport de la Société de Québec pour la Protection des Plantes. In press,

CROP	DISEASE	REMARKS
ASPARAGUS	Root rot ( <u>Fusarium</u> spp.)	Light in one field.
BEET	Leaf spot ( <u>Cercospora beticola</u> )	Traces in one field.
CABBAGE	Bacterial leaf spot ( <u>Xanthomonas vesicatoria</u> var. <u>raphani</u> ) Drop ( <u>Sclerotinia sclerotiorum</u> ) Downy mildew ( <u>Peronospora parasitica</u> )	Traces in one field. Light in one field. Light in a one-acre experimental plot on the Ste. Clotilde Substation.
CARROT	Leaf blights ( <u>Alternaria dauci</u> and <u>Cercospora carotae</u> )  Root-knot nematode ( <u>Meloidogyne</u> spp.) Aster yellows (aster yellows virus)	Light at the end of June; light to moderate in six fields at the end of August; heavy in three fields in September. Light to moderate in five fields. Light to moderate in two fields. Leafhopper populations were low most of the summer.
CELERY	Damping-off ( <u>Rhizoctonia</u> and <u>Pythium</u> spp.)  Early blight ( <u>Cercospora apii</u> ) Late blight ( <u>Septoria apii-graveolentis</u> )  Pink rot ( <u>Sclerotinia sclerotiorum</u> ): Aster yellows (aster yellows virus) Magnesium deficiency	Moderate to heavy in three seed beds. Heavy losses (40-50%) in one bed. Light in one field. Light in one field. Traces in one field. Traces in one field. Traces in three fields.
CUCUMBER	Angular leaf spot ( <u>Pseudomonas lachrymans</u> ) Scab ( <u>Cladosporium cucumerinum</u> ) Anthracnose ( <u>Colletotrichum lagenarium</u> )	Moderate in one field. Traces in one field. Traces in one field.
LETTUCE	Downy mildew ( <u>Uremia lactucae</u> ) Drop ( <u>Sclerotinia sclerotiorum</u> ) Bottom rot ( <u>Rhizoctonia solani</u> ) Aster yellows (aster yellows virus) Mosaic (virus) Calcium deficiency	Light to moderate in five fields. Traces to light in five fields. Traces in four fields. Traces to light in four fields. Light in six fields. Traces in one field, especially along ditches.

CROP	DISEASE	REMARKS
ONION	Purple blotch ( <u>Alternaria porri</u> ) Smut ( <u>Urocystis cepulae</u> ) Nitrogen and calcium deficiencies	Traces to light in four fields. Light in one field. Light in <b>two</b> fields.
POTATO	Wilt ( <u>Verticillium albo-atrum</u> ) Purple top (aster yellows virus) <b>Frost injury</b>	Light in one field. Traces in one field. Traces to light in two fields at the end of May and at the end of August,
TOMATO	Curly top (beet curly top <b>virus</b> )	One plant was seen in exper- imental plots on the Ste. Clotilde Substation.

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