SOME PLANT DISEASES IN HOME GARDENS IN THE TORONTO AREA, 1973[1]

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During a research project on minimizing the use of chemical pesticides in the home garden, pests, diseases, and weeds occurring in 25 gardens in and around Toronto, Ontario, were brought to our attention by participating gardeners. In addition, a few other gardens were visited and the diseases present recorded. Considering the pronounced site diversity that characterizes the home garden only a small proportion of all diseases that affect ornamentals, vegetables, and trees were found.

As a rule home gardeners were more concerned about pest insects and weeds than about plant diseases. Unless diseases were severe they had to be pointed out to the gardener. Even if diseases were recognized, gardeners experienced great difficulty in diagnosing them. Plant diseases were not a serious problem in gardens we have seen regardless of whether or not controls were applied.

In the following table plant pathogens are listed as they were observed throughout the growing season. Virus diseases are not listed because of the difficulties involved in proper identification. Bacterial diseases were recorded only if they could be identified through characteristic symptoms. Fungal diseases were identified by symptoms and spore characteristics.

Table 1. Fungal and bacterial pathogens detected in home gardens in the Toronto area 1973

Host	Pathogen	Disease rating/ occurrence*
Hollyhock	Puccinia malvacearum	Mod/Sp
Tulip	Botrytis tulipae	Mod/R
peach	Taphrina deformans	Sev/W
Plum	Dibotryon *morbosum*	Sl/R
Maple	Rhytisma *acerinum*	Sl/Sp
Almond	*Monilia* laxa	Sl/Sp
Apple	*Venturia* inaequalis	Tr-Sev/W
Onion	*Peronospora* destructor	Tr/R
Euonymus; Forsythia	Agrobacterium tumefaciens	Sl/R
Rose	Sphaerotheca pannosa	Tr-Mod/Sp
Currant	Sphaerotheca mors-uvae	Sl/R
Rhubarb	Ascochyta rhei	Sl/R
Tomato	*Alternaria* tomato	Sl/R
Maple	Gloesporium apocryptum	Sl/R
Rose	Diplocarpon *rosae*	Tr-Sev/W
Phlox: Zinnia	*Erysiphe* cichoracearum	Mod/Sp
Grape	Guignardia *bidwellii*	Sl/Sp
Grape	*Plasmopara* viticola	Sl/Sp
Hawthorn	Pabraea *thuemenii*	Mod/Sp
Lilac; Viburnum	*Microsphaera penicillata*	Mod/W
Chrysan-themum	*Septoria chrysanthemi*	Mod/R
Sunflower	*Puccinia* helianthi	Sl/R

* Tr = trace, Sl = slight, Mod = moderate, Sev = severe.

† R = rare, Sp = spotty, W = widespread.

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