

Verticillium wilt in Canadian redbud

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Verticillium wilt, caused by *Verticillium dahliae*, is recorded in Canadian redbud, *Cercis canadensis*, for the first time in Canada.

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Le verticilliose, cause par le *Verticillium dahliae*, est enregistré dans le gainier du Canada, *Cercis canadensis*, pour la première fois au Canada.

In July 1978, at the Harrow Research Station in Essex County, S.W. Ontario, a 10-year-old, 2-m specimen Canadian redbud tree, *Cercis canadensis* L, showed wilting and death of the leaves of some branches. Many of the branches had leaves with incurved laminae, showing the paler green adaxial surface. As the disease progressed, the leaves drooped and interveinal chlorosis appeared, followed by light-brown necrosis at the tip and the margin, which soon spread over the entire leaf. The dead leaves remained for a short time, and then dropped off.

In section the petioles and wood showed vascular browning typical of Verticillium wilt and isolations from petioles and one-and two-year-old wood on acidified potato-dextrose agar yielded colonies of *Verticillium dahliae* Kleb. Mycelium was seen in microscopic sections of the vessels.

Although pathogenicity of these isolations was not tested, we presume that *V. dahliae* was the probable cause of the wilt. The Canadian redbud is rare in Canada and restricted to the extreme southwest of Ontario between Lake St. Clair and Lake Erie (1) but it has a wider distribution in the eastern United States (3). We know of no record of *V. dahliae* on *Cercis* spp., save one of *Verticillium* sp. on *C. canadensis* in Ohio (2), and no other wilt disease of *Cercis* spp.

Literature cited

1. Hosie, R.C. 1969. Native trees of Canada. Can. For. Serv. Bull. 61.
2. Miller, P.R. (ed.) 1960. Index of plant diseases in the United States. U.S. Dep. Agric. Agric. Handb. 165.
3. Van Dersal, W.R. 1938. Native woody plants of the United States. U.S. Dep. Agric. Misc. Publ. 303.

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