

## ABSTRACT

Douhan, L. I., and Johnson, D. A. 2001. Vegetative compatibility and pathogenicity of *Verticillium dahliae* from spearmint and peppermint. *Plant Dis.* 85:297-302.

The vegetative compatibility of 128 isolates of *Verticillium dahliae* from spearmint and peppermint in the western and Midwestern United States was determined. Nit mutants were used to assign isolates to vegetative compatibility groups (VCGs). All isolates were assigned to VCG 2B except for one assigned to VCG 2A and two assigned to VCG 4A. VCG 2 isolates were found in all commercial mint growing regions, while the two VCG 4A isolates originated from southern Idaho. Pathogenicity assays on mint were performed using isolates from mint and other hosts, and pathogenicity assays were conducted on the potato cultivar Russet Norkotah using mint and potato isolates. Isolates originating from mint were significantly more aggressive on mint than were other host isolates, indicating that mint isolates were host-adapted. VCG 4A isolates from mint and potatoes were significantly more aggressive on potato than VCG 4B potato isolates and VCG 2B mint isolates. We speculate that the low VCG diversity of mint isolates may be due to the introduction of a single aggressive strain into Washington State mint fields via infected rhizomes.

Additional keywords: *Mentha*, pathotypes, *Verticillium* wilt