

Management of Boxwood Blight Caused by *Calonectria pseudonaviculata*[©]

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Calonectria pseudonaviculata causes leaf and stem lesions resulting in defoliation and dieback of boxwood. Trials were conducted to evaluate fungicide management of boxwood blight under greenhouse and container nursery conditions in Connecticut using fungicides previously determined to have in vitro activity against conidial germination or mycelial growth. Plants of different boxwood cultivars were inoculated 48 h after fungicide application. Disease progression was monitored over 6 weeks and progressed from leaf and stem lesions to defoliation. The level of disease control achieved by fungicides was generally good, with the most efficacious treatments averaging from 95% to nearly 100% control. Products containing propiconazole, myclobutanil, thiophanate-methyl, fludioxonil, pyraclostrobin, kresoxim-methyl, and chlorothalonil had significant efficacy. The combination of systemic plus protectant fungicides in a single application resulted in superior disease control compared to the use of a systemic fungicide. There were no differences between the fungicide treatments that included thiophanate-methyl and those that included propiconazole as the systemic fungicide. Korean and 'Winter Gem' (*Buxus sinica* var. *insularis*) were the least susceptible of the taxa evaluated, common boxwood (*B. sempervirens*) and true dwarf (*B. sempervirens* 'Suffruticosa') were the most susceptible, and 'Green Mountain' (*B. sinica* var. *insularis* × *B. sempervirens* 'Suffruticosa') and 'Green Velvet' (*B. sinica* var. *insularis* × *B. sempervirens* 'Suffruticosa') were intermediate. These results suggest that *B. sinica* var. *insularis* may have some level of resistance to boxwood blight. Management of boxwood blight will rely on integrated best management practices that include inspection of incoming plant material, sanitation, cultural controls including use of cultivars tolerant to infection, and fungicide application.

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Full Manuscript Reference

Plant Disease: <<http://apsjournals.apsnet.org/doi/pdf/10.1094/PDIS-02-14-0217-RE>>.

