

# First Report of a Root and Crown Rot Disease of Myrtle in California Caused by *Cylindrocladium pauciramosum*

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Myrtle (*Myrtus communis*) is a woody, evergreen plant used in California as a landscape shrub or potted plant. In 2000, a new root and crown disease was found in commercial nursery myrtle being grown as potted plants. Roots were necrotic and crown tissue was brown. Affected plants became gray-green in color, withered, and died. A *Cylindrocladium* sp. was consistently isolated from roots, crowns, and lower stems of symptomatic plants. Isolates were characterized by having penicillate conidiophores terminating in obpyriform to broadly ellipsoidal vesicles. Conidia were hyaline, 1-septate, straight with rounded ends, (50-) 53 to 56 (-58) × (3.5-) 4 to 6 μm, placing it in the *Cylindrocladium candelabrum* Viégas species complex. Single-conidial isolates (STE-U 4012 to 4018) produced perithecia with viable progeny of *Calonectria pauciramosa* C.L. Schoch & Crous when mated on carnation leaf agar with tester strains of *Cylindrocladium pauciramosum* C.L. Schoch & Crous (2). Matings with tester strains of all other species in this complex proved unsuccessful. Only one mating type of *C. pauciramosum* has thus far been found in the United States. Pathogenicity of representative isolates was confirmed by applying 5 ml of a conidial suspension ( $1.0 \times 10^6$  conidia/ml) to the crowns of potted, 5-month-old, rooted myrtle cuttings that were subsequently maintained in a greenhouse (23 to 25°C). After 4 weeks, plant crowns and roots developed symptoms similar to those observed in the nursery, and plants later wilted and died. *C. pauciramosum* was re-isolated from all plants. Control plants, which were treated with water, did not develop any symptoms. The tests were repeated and the results were similar. This is the first report of *C. pauciramosum* as a pathogen of myrtle in California. The disease has been reported on myrtle in Europe (1).

*References:* (1) G. Polizzi and P. W. Crous. Eur. J. Plant Pathol. 105:407, 1999. (2) C. L. Schoch et al. Mycologia 91:286, 1999.