

A New Root and Crown Rot Disease of Heath in California Caused by *Cylindrocladium pauciramosum*

S. T. Koike and D. M. Henderson, University of California Cooperative Extension, Salinas 93901; P. W. Crous and C. L. Schoch, Department of Plant Pathology, University of Stellenbosch, P. Bag X1, Matieland 7602, South Africa; and S. A. Tjosvold, University of California Cooperative Extension, Watsonville 95076

Heath (*Erica capensis* Salter) is a woody, evergreen plant used in California as a landscape shrub or ground cover. In 1997, a new root and crown disease was found in commercial nursery plantings of potted heath. A similar disease was found in 1998 on heath transplants being grown as liners. In both situations, roots were necrotic and crown tissue turned brown. Affected plants became gray-green in color, withered, and died. A *Cylindrocladium* species 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, (30-) 45 to 55 (-60) × (3.5-) 4 to 5 µm, placing it in the *Cylindrocladium candelabrum* Viégas species complex. Ten single-conidial isolates 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 (1). Matings with tester strains of all other species in this complex proved unsuccessful. Pathogenicity of 8 representative isolates was confirmed by applying 3 ml of a conidial suspension (3.0×10^5 conidia per ml) to the crowns of potted, 6-month-old, rooted heath cuttings that were subsequently maintained in a greenhouse (23 to 25°C). After 2 weeks, plant crowns and roots developed symptoms similar to those observed in the field, and plants later wilted and died. *C. pauciramosum* was reisolated 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 heath, and the first record of this pathogen from North America.

Reference: (1) C. L. Schoch et al. *Mycologia* 91:286, 1999.