

DISEASE NOTE

HOST RANGE OF *RHIZOCTONIA ZEA*
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In summer and autumn 1998 and 1999, during a survey for diseases of Gramineae in the central regions of Mazandaran province (Iran), a seemingly new disease was observed in sugarcane (*Saccharum officinarum*) fields at Babol, Babolsar, and Sari, with an incidence of up to 90%. Cream-to-light brown lesions with a purple-to-dark brown border, surrounded by a deep orange-to-red halo were observed on leaf sheaths and stems up to 50 cm above the ground. A second broad orange halo was present at the periphery of the lesions on the leaf sheath. A loose web of fungal hyphae occurred under the sheath and, sometimes, lateral stems were rotten. An orange multinucleate *Rhizoctonia* was consistently isolated from infected tissue, which produced minute reddish orange sclerotia on and within potato dextrose agar (PDA), after 10 to 14 days of growth. Based on cultural, morphological, and growth characteristics, this fungus was identified as *Rhizoctonia zea* Voorhees (Voorhees, 1934; Sneh *et al.*, 1991). The same fungus was also isolated from the soil and from sheath and culm tissues of *Zea mays*, *Sorghum bicolor*, *S. vulgare* var. *sudanense*, *S. halepense*, *Cynodon dactylon*, *Saccharum ravennae*, and *Eragrostis barrelieri*. The average number of nuclei was 6.1 per hyphal cell. Hyphal diameter ranged from 3.3 to 9.9 (average 5.7) μm . Sclerotia averaged 0.3 \times 0.35 mm. Minimum, optimum, and maximum temperatures for growth were 10, 32 and 40°C, respectively, and the maximum radial growth rate was 27 mm/day. For pathogenicity tests, 8 mm disks from the margin of actively growing fungal colonies from each of the seven hosts were placed underneath the sheath of each host grown in a greenhouse at a temperature of 28 and 15°C (day/night) and 70-75% relative humidity. Within 1 week from inoculation, lesions began to appear in all hosts, from which the fungus was consistently re-isolated. To our knowledge this is the first report of *R. zea* from Iran. All plant species mentioned above, except for of *Z. mays* and *S. halepense*, are new hosts (*matrix nova*) for *R. zea*.

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DISEASE NOTE

FIRST REPORT OF STEM BLIGHT
ON *METROSIDEROS KERMADECENSIS*
INDUCED BY *PESTALOTIOPSIS*
UVICOLA IN ITALY

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Metrosideros (Banks ex. Gaertn) is a genus comprising ca. 50 species (trees, shrubs, and vines) native to New Zealand and Polynesia. During spring 2007, stem blight was observed on Kermadec pohutukawa (*Metrosideros kermadecensis* W.R.B. Oliv.) in a private garden in Catania (southern Italy). Plants showed stem blight and cankers starting from the insertion point of the branches. Parts of the stem, including diseased tissues, were placed in a moist chamber at room temperature for five days. Small pieces of diseased tissues were surface-sterilized by 2 min immersion in 0.2% NaOCl, rinsed three times with sterile distilled water, dried with sterile blotting paper, and placed in Petri dishes with potato dextrose agar (PDA). Plates were incubated at 21 \pm 2°C. After about two weeks acervular conidiomata appeared both on the surface of infected stem tissues and in the cream-coloured fungal colonies grown on the artificial medium. Acervuli produced long and twisted black cirri bearing 4-septate conidia 19.5-25.1 \times 5.5-7.2 μm in size. Conidia had three or four 20 μm long apical appendages and a basal pedicel. Morphological and biometric data identified the isolated fungus as *Pestalotiopsis uvicola* (Speg.) Bisset (Nag Raj, 1986). Identification was confirmed by the CABI Bioscience Centre (UK). Pathogenicity tests were carried out by inoculating stems of 2-year-old *M. kermadecensis* potted plants with the fungal isolate. A mycelial plug 10 mm² in size was inserted into a cut in the bark, which was covered with moist cotton wool for 10 days. Five control plant were inoculated with sterile PDA. Inoculated and control plants were grown at 25 \pm 2°C. After 25 days, wilting symptoms followed by blight and cankers appeared on the inoculated plants, whereas control plants remained healthy. To our knowledge this is the first report of *Pestalotiopsis uvicola* on *Metrosideros kermadecensis*.

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