

First record of *Afenestrata orientalis* in Florida and the United States

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On May 17, 2005, a cyst forming nematode, *Afenestrata orientalis* Kazachenco, 1990, was found infecting the roots of the ornamental grass, *Miscanthus sinensis* ‘Zebrinus’, in Escambia County, Florida (N05-00741, William L. Robinson and Laura Ooms). This species was described in 1990 by the Russian nematologist Kazachenco, who observed this nematode infecting the roots of the perennial grass *Miscanthus purepureus* in the Maritime Territory, in the far-east of Russia. The morphological identification of the Florida population was confirmed by the results of the molecular (rDNA) analysis conducted at the University of California, Riverside, which were also congruent with those of the nematode population from Russia. This is the first record of *A. orientalis* in Florida and the United States.

Is it worth mentioning that another *A. orientalis* population with the same morphological and molecular characteristics as the Florida population has been found concomitantly in Guatemala infecting the roots of *Miscanthus sinensis* ‘Variegatus’ and *Pennisetum setaceum* ‘Rubrum’.

Miscanthus species are indigenous to the Far East where this cyst forming nematode may have coevolved with these grasses.

The most probable means of introduction of the nematode from the Far East into the American continent has been through the trade of ornamental grasses between nurseries on the two continents. The intensive trade of ornamental grasses may have favored the spread of this nematode in other geographical areas of the United States and other countries in the Americas.

There is no information on the distribution, host range, damage and economic importance of this cyst forming nematode.

Literature cited

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