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First Report of *Iris yellow spot virus* on Onion in New York. C. A. Hoepting, Cornell University Cooperative Extension Vegetable Program, 12690 Rte. 31, Albion, NY 14411; H. F. Schwartz, Colorado State University, Fort Collins 80523-1177; and H. R. Pappu, Washington State University, P.O. Box 646430, Pullman 99164-6430. *Plant Dis.* 91:327, 2007; published on-line as DOI: 10.1094/PDIS-91-3-0327A. Accepted for publication 4 November 2006.

Iris yellow spot virus (IYSV [family *Bunyaviridae*, genus *Tospovirus*]), a potentially devastating disease of onion vectored by onion thrips (*Thrips tabaci* Lindeman), has been reported from most states in the western United States where significant onion production occurs, with the most recent report from Texas (1). In June 2006, volunteer onion (*Allium cepa*) plants in Orleans County, New York (Elba muckland) were found to have symptoms indicative of IYSV infection. The scapes (seed stalks) of the volunteer onions found at the edge of a cull pile from a 2005 onion crop exhibited diamond-shaped lesions, each with a distinct green center and a double yellow border. Approximately 25 of 100 plants of red and yellow onion cultivars exhibited characteristic IYSV lesions. The cull pile was composed primarily of locally grown onions, although a few of the bulbs were grown from imported bare-root transplants imported from Arizona. Symptomatic plants tested positive for IYSV using IYSV-specific antiserum from Agdia Inc. (Elkhart, IN) in a double-antibody sandwich-ELISA. The presence of IYSV was verified by reverse transcription (RT)-PCR using primers derived from the small RNA of IYSV (S-RNA). The primers flanked the IYSV nucleocapsid (N) gene (5(prime)-TAA AAC AAA CAT TCA AAC AA-3(prime) and 5(prime)-CTC TTA AAC ACA TTT AAC AAG CAC-3 (prime) (3). RT-PCR assays produced a PCR amplicon of expected size (approximately 1.2 kb) and the product was cloned and sequenced. Nucleotide sequence analysis confirmed the identity of the amplicon as that of the IYSV S-RNA. Sequence comparisons showed 95 to 98% identity with known IYSV N gene sequences available in GenBank. The virus is poorly transmitted to onion by mechanical inoculation and we did not have access to a noninfested colony of the onion thrips vector to transfer the virus from these samples to noninfested onions. No asymptomatic plants were tested. Among the onion-growing states in the eastern United States, IYSV has previously only been reported from Georgia (2). To our knowledge, this is the first report of IYSV in New York and the greater northeastern United States. The finding of this disease in New York confirms further spread of the virus within North America and the need for research to develop more effective management options to reduce the impact of IYSV on onion crops.

References: (1) M. Miller et al. Plant Dis. 90:1359, 2006. (2) S. W. Mullis et al. Plant Dis. 90:377, 2006. (3) H. R. Pappu et al. Arch. Virol. 151:1015, 2006.

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