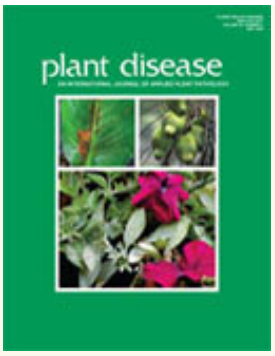

plant disease

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Disease Notes

First Report of *Streptocarpus flower break virus* in Streptocarpus in the United States

H. R. Pappu and **K. B. Druffel**, Department of Plant Pathology, P.O. Box 646430, Washington State University, Pullman 99164-6430

Streptocarpus flower break virus (SFBV) belongs to the genus *Tobamovirus* and was described from naturally infected streptocarpus plants in 1995 (2). The complete genomic sequence was recently reported (1). Prominent symptoms include flower breaking while foliar symptoms are often lacking. In March 2007, four streptocarpus plants (cv. Indigo Dream) from San Diego County, CA were tested for the presence of SFBV by ELISA and reverse transcription (RT)-PCR. Symptoms suggestive of a virus infection were not present on these mother plants at the time of sampling. ELISA with SFBV-specific antiserum showed that all samples were infected with SFBV. The ELISA results were verified by RT-PCR followed by cloning and sequencing. Two sets of primer pairs were used in separate RT-PCR tests. One was a degenerate tobamovirus group-specific primer pair and the second primer pair was specific to SFBV (1). The tobamovirus group-specific primer pair consisted of Tob Uni1, 5'-ATT TAA GTG GAG GGA AAA CCA CT-3' and Tob Uni2, 5'-GTY GTT GAT GAG TTC GTG GA-3'. The SFBV-specific primers were SFBVcpF: 5'-AAA ATG TCG TAC GTG GTG GT and SFBVcpR: 5'-ACC CAC AGA ACT TCC TTC AA-3' (1). PCR amplicons of the expected size (686 bp for the tobamovirus group-specific primer pair and 562 bp for the SFBV-specific primer pair) were obtained for each primer pair. The positive PCR test using the SFBV-specific primer pair confirmed the presence of SFBV. To further verify the identity of the virus, the amplicons obtained with each primer pair were separately cloned and sequenced. At least two clones for each amplicon were sequenced in both directions. Sequence comparisons with those available in GenBank showed 98% sequence identity with the corresponding genomic region (GenBank Accession No. NC_008365) of SFBV (1). To our knowledge, this is the first report of SFBV in the United States and it highlights the need for testing for this virus to ensure

propagation and distribution of virus-free material.

References: (1) C. Heinze et al. Arch. Virol. 151:763, 2006. (2) J. Th. J. Verhoeven et al. Eur. J. Plant Pathol. 101:311, 1995.