

DISEASE NOTE

FIRST RECORD OF VIRUS INFECTION OF BLUE POTATO BUSH, *LYCIANTHES RANTONNETII*

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In the past two decades numerous woody plants of the family Solanaceae native to South and Central America became popular ornamentals in many European countries. These plants are vegetatively propagated and may act as sources of pathogens of new world origin. *Lycianthes rantonnetii* (syn. *Solanum rantonnetii*) known as blue potato bush is a symptomless host of viroids (Luigi *et al.*, 2011). In autumn of 2012, a three-year-old bush of *L. rantonnetii* decorating a home garden in northeastern Hungary exhibited a peculiar yellow-green mosaic on the top leaves. Inoculation of test plants with the extract of diseased leaves caused necrotic lesions on *Chenopodium quinoa*, mosaic mottling on *Nicotiana tabacum* Xanthi-NC and *Cucumis sativus*, as well as mosaic and leaf narrowing on *Capsicum annuum*, suggesting the presence of *Cucumber mosaic virus* (CMV). To confirm the presence of CMV, total nucleic acid was extracted from symptomatic tobacco leaves and used in RT-PCR with primers designed in the coat protein gene of subgroups I and II (K. Salánki unpublished information; Gellért *et al.*, 2012). A DNA fragment of the expected size of 1030 bp was amplified using subgroup I-specific primers only. The PCR product was cloned and sequenced (GenBank accession No. KC306960). Sequence analysis showed that the CMV strain from *L. rantonnetii* grouped with subgroup IA and is closely related to CMV-Fny and CMV-Rs with 99% and 100% identity at nucleotide and amino acid levels, respectively. This is the first record of a viral infection of *L. rantonnetii*, which is also a new natural host of CMV.

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DISEASE NOTE

FIRST REPORT OF *TOMATO SPOTTED WILT VIRUS* IN *IBERIS SEMPERFLORENS*

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Iberis semperflorens L. (family Brassicaceae) is a perennial evergreen shrub, endemic to southern Italy and Sicily and it has been recently proposed as flowering potted plants for commercial purposes (Iapichino and Bertolino, 2009). During summer 2013, symptoms of chlorotic/necrotic spots and rings were observed in some potted plants of *I. semperflorens*, cultivated in a greenhouse at Albenga (Northwest Italy). Twenty-five (5%) of 500 plants were symptomatic and 20 of these plants were sampled and tested by commercial DAS-ELISA kits for tospoviruses (Agdia, USA). All the samples reacted positively only with *Tomato spotted wilt virus* (TSWV) antiserum. Total RNA was extracted from leaves of ELISA-positive samples (two plants) using an EZNA total RNA kit (Omega BioTek, USA) and used as template in RT-PCR reactions to confirm the presence of TSWV by using tospo-generic primers, designed to amplify part of the coat protein (CP) gene of tospoviruses (Eiras *et al.*, 2001). PCR products of the expected size (453 bp) were cloned in pGEM-T Vector (Promega, USA) and two independent clones sequenced by MWG Biotech (Germany) yielded an identical sequence (accession No. HG475336) which was compared with other TSWV sequences available in GenBank using DNAMAN. The partial CP sequence showed 99.5% nucleotide identity with several Italian TSWV isolates (HQ839729-31, DQ376177-9, DQ376183, DQ915946). This new finding suggests that *I. semperflorens* is a newly established TSWV natural host (Parrella *et al.*, 2004) and that it may play a role as a reservoir of the virus in nature.

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