First report of konjac mosaic virus in *Zantedeschia* from Hungary

János Ágoston^{1,2} · Asztéria Almási³ · Katalin Salánki³ · László Palkovics¹

Received: 18 October 2018 / Accepted: 23 February 2019 / Published online: 15 March 2019
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Keywords *Zantedeschia* · Konjac mosaic virus · *Zantedeschia* mosaic virus · Potyvirus · Hungary

In the spring of 2018 a distorted *Zantedeschia* ‘Picasso’ plant was observed in Nyársapát, Hungary. The plant was shorter, had narrower, smaller and more acuminate light green leaves with greenish-yellow longitudinal mosaic compared to healthy plants. The spathe did not open; outer color was light green with longitudinal purple stripes. Healthy plants had light purple outer spathe which opened normally. The arrival of warm weather and decreasing rate of plant growth caused masked symptoms, but the leaf margin remained chlorotic. These symptoms indicated/denoted a possible virus infection.

Nicotiana tabacum cv. Xanthi, *Nicotiana benthamiana* and *Chenopodium murale* plants were inoculated, during a five week period no symptoms were observed. ACP-ELISA based on MAb PTY1 antibody (Jordan and Hammond 1991) – provided by Agdia – were carried out in duplicate of the leaf sap of *Zantedeschia* plant. Absorbance values were 1.694 and 1.698, while negative controls were 0.002 and 0.007, respectively. These results indicated potyvirus infection. To identify the virus, RT-PCR amplification was carried out on the same leaf from which ELISA tests were performed. Universal potyvirus primers, poty7941 and poly T₂ were used, as earlier described (Salamon and Palkovics 2005). A single PCR product was cloned into pGEM®-T Easy vector and the nucleotide sequence was determined (GenBank accession No. MH979038), which was 1618 nt long, including the complete coat protein region. The sequence determined included a single *Xba*I restriction site; *Xba*I digestion of the original PCR product yielded only the two predicted

restriction fragments, indicating the presence of only a single potyvirus in the infected plant tissue. BLAST analysis of the CP nucleotide sequence revealed highest identity to konjac mosaic virus (KoMV) isolates (synonym *zantedeschia* mosaic virus) available in GenBank (EU544542, LC114491, LC114492, AB219545) with 96% to 99%. In Europe, KoMV was previously detected in Germany (Lesemann and Winter 2002) and in the Netherlands (Pham et al. 2002). To our knowledge, this is the first report on the occurrence of KoMV in Hungary.

Acknowledgements Open access funding provided by Szent István University (SZIE). This research was supported by the EFOP 3.6.1-16-2016-00006 grant and the Higher Education Institutional Excellence Program (1783-3/2018/FEKUTSTRAT) awarded by the Ministry of Human Capacities.

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✉ László Palkovics
palkovics.laszlo@kertk.szie.hu

¹ Department of Plant Pathology, Faculty of Horticultural Science, Szent István University, Ménesi Road 44, Budapest H-1118, Hungary

² Department of Horticulture, Faculty of Horticulture and Rural Development, John Von Neumann University, Erdei Ferenc Square 1-3, Kecskemét H-6000, Hungary

³ Plant Protection Institute, Centre for Agricultural Research, Hungarian Academy of Sciences, Herman Ottó Street 15, Budapest H-1022, Hungary