



# First report of clematis chlorotic mottle virus on clematis in Russia

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Clematis chlorotic mottle virus (CICMV, genus *Pelarspovirus*, family *Tombusviridae*) was discovered on clematis (*Clematis* spp.) in the USA (McLaughlin et al. 2017). In July 2017, some plants from the clematis collection of the Nikita Botanical Gardens, Yalta, Russia, were found to display vein yellowing, mosaic and yellow mottling, similar to CICMV-infected plants from the USA. The symptoms developed mainly on the upper leaves of the shoot. RT-PCR analysis was done on total RNA extracted from 56 symptomatic and symptomless leaf samples of local and introduced cultivars using random hexamer primers and two CICMV-specific primer sets CIRdRp\_F/CICP\_R2 and CICP\_F/CICP\_R (McLaughlin et al. 2017). RT-PCR yielded 768 and 1043-bp products of the expected sizes from all 29 symptomatic and three symptomless cultivars. These included ‘Ramona’ and ‘Hagley Hybrid’, which had previously tested positive for CICMV (McLaughlin et al. 2017). The remaining 24 asymptomatic samples were CICMV-negative. The PCR products from infected plants of the cvs ‘Isago’, ‘Mrs Cholomondeley’, ‘Mrs N Thompson’, ‘Slava’, ‘Etoile Violette’, ‘Proteus’ and ‘Rüütel’ were sequenced directly (MH108622 - MH108628). They shared 98.0 to 99.2% nucleotide identity to each other and to the

corresponding genomic region of an American CICMV isolate (KX712140). Similarly to the US isolate, the ORF4 of the Russian isolates that encodes the movement protein 2 contains a non-canonical UUG start codon (Scheets et al. 2015). To our knowledge, this is the first report of CICMV on clematis in Russia. Earlier, CICMV had been detected in clematis cultivars from the UK (McLaughlin et al. 2017). Thus, our results indicate a broad distribution of this virus in Europe.

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## References

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