

Cherry Necrotic Rusty Mottle and Cherry Green Ring Mottle Viruses in Czech Cherry Germplasm

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Electronic supplementary material (ESM)

	5'	->	3'		3'	<-	5'
primer CNR-8242U:	TAAACCTCTGCAAACCCAATC			primer CNR-8432L:	AGGAAGTCAAAAGATGCTCTC		
CZ31 KY178274:	.....			HG796179:	.....		
HG796178:	.....			FN546178:	.....		
KC432620:	.....			FN669138:	.....		
KC432619:	.....			LK392370:	.....		
KC432621:	.....			HG796178:	.....		
KF030843:	.....			AF237816:	.....		
KF030844:	.....			KF030875:	??		
KC136843:	.....			KR820549:	????		
KF030835:	.....			KC218930:	GA..A.????		
EU188439:	.....			KF030844:	A.ATTC???		
EU188438:	.....			EU188438:	AGGCAA.??		
KF030832:	.....			EU188439:	AG.ATC???		
KC136845:	.....			KF030839:	AG.AAC???		
KC136841:	.....			KF030835:	G....AGG.TA.??		
KF030875:	.....			KF030828:	CG.T.TACG??		
KC136839:	.....			KF030832:	G.A..A.????		
KC136842:	.....			KF030843:	A....GA.A...TC?		
AF237816:	.....			CZ31 KY178274:	...????????????????		
KR820549:	.....						
KC136837:	.....						
KC136840:	.....						
KC218930:	T.....						
KF030839:	G.....						
KF030828:	GCTGTTG.AG						
FN546178:	?G.T.....						
FN669138:	?G.T.....						
LM993809:	???????????						
LM993810:	???????????						
HG796179:	?						
LK392370:	?						
KC136838:	?						
KC136844:	???????						

Figure S1. Comparison of the sequences of Czech isolates (bold) and available GenBank sequences to the sequence of primers CNR8242U (forward) and CNR8432L (reverse) designed by ISOGAI *et al.* (2004) for detection of CNRMV. Dot = identity with primer sequence, question mark = no sequence available (i.e. short sequences); 5'3' direction is indicated above each prim

doi: 10.17221/160/2016-PPS

5' -> 3'			3' <- 5'		
<u>primer CGRMV1: CCTCATTCACATAGCTTAGGTTT</u>			<u>primer CGRMV2: GTGCCCCGCTTCGATTTC</u>		
CZ31 KY178274:		CNRMV	CZ31 KY178274:		CNRMV
FN669138:	.....		KC218930:	.....	
KC136843:	.....		HG796179:	.....	
EU188438:	.....		FN546178:	.....	
LC064751:	.....		FN669138:	.....	
KF030832:	.....		LK392370:	.....	
KC136845:	.....		HG796178:	.....	
AF237816:	.....		KF030843:	.....	
KR820549:	.....		KF030844:	.....	
KC136837:	.....		KF030839:	.....	
KC136840:	.....		EU188439:	.....	
EU188439:	..C.....		EU188438:	.....	
KC136842:	T.....		KF030832:	.....	
KF030828:	?.....		KF030875:	.....	
KC218930:	?.....		AF237816:	.....	
KF030843:	?.....		KR820549:	.....	
KF030844:	?.....		KC136837:	.....	
KF030835:	?.....		KF030835:	C.....C.....	
KF030839:	?.....		KF030828:	.G..TA..AAA.....	
KF030875:	?.....	CGRMV	KC432620:	T???????	CGRMV
KC136841:	???????????????		KC432619:	?????????	
KC136844:	???????????????		KC432621:	?????????	
KC136839:	???????????????		KC136843:	?????????????	
			KC136845:	?????????????	
			KC136842:	?????????????	
			KC136840:	?????????????	
CZ74 KY178277:	.....		CZ74 KY178277:	.....	
CZ54 KY178276:	.....		AY172334:	.....	
CZ43 KY178275:	.....		JX501671:	.....	
JX501671:	.....		KR820548:	.....	
JX501670:	.....		JX501670:	.....	
LC064752:	.....		KF030874:	.....	
KC218931:	.....		KF030837:	.....	
AF017780:	.....		KF030851:	.....	
AY172334:	..C.....		KF030860:	.....	
KR820548:	C..		AJ291761:	.....	
KF030861:	?.....		KF030831:	.....	
KF030866:	?.....		KF030879:	.....	
KF030874:	?.....		KC218931:	.....	
KF030837:	?.....		AF017780:	.....	
KF030851:	?.....		CZ54 KY178276:	..A.....	CGRMV
KF030868:	?.....		CZ43 KY178275:	..A.....	
KF030872:	?.....		KF030872:	G.....	
KF030847:	?.....		KF030861:	C.....	
KF030860:	?.....		KF030868:	C.....	
KF030831:	?.....		KF030847:	C.....	
KF030879:	?.....		KF030838:	A.....T..G..T.	
KF030838:	?.....		KF030866:	.G.....C.....G....	

Figure S2. Comparison of the sequences of Czech isolates (bold) and available GenBank sequences to the sequence of primers CGRMV1 (forward) and CGRMV2 (reverse) used in this study for detection of both CGRMV and CNRMV, designed by ISOĞAI *et al.* (2004) for detection of CNRMV

Dot = identity with primer sequence, question mark = no sequence available (i.e. short sequences); 5'3' direction is indicated above each primer

Table S1. Primers used for RT-PCR screening of other viruses infecting cherry trees

Virus	Primer	Sequence 5'→3'	Reference
ACLSV	ACLSV2 ACLSV2r	TAAACAGCACCTCTGAGATG GTTCCCTTTTCCACCATACTG	This study
APLPV	S A	GGTCGTCAAGGGAGAGGC GGCCCCAAGGGTCATTTTC	SÁNCHEZ-NAVARRO <i>et al.</i> (2005)
ApMV	108N7 87E6	TCGTGAAGAAGTTTtagGTTGG ATGCTTTAGTTTCTCTCGG	PETRIK and LENZ (2002)
ArMV	ArMVi1 ArMVi2	AATTATATGCTGAGTTTGG AAAATTATACACCTTATGAGTA	BERTOLINI <i>et al.</i> (2003)
ASGV	ASGV2 ASGV2r	AAATCTCCGCTGTTTCTGG CCCCTTTTGTCTTCAGTAC	Lenz <i>et al.</i> (2008)
ASPV	ASPV2 ASPV2r	GGAATGAGGAGACGTCTTGACTC GCCAAAGTTCACAGCCTGAGTAC	Lenz <i>et al.</i> (2008)
CLRV	CLRVi1 CLRVi2	GTTAACGAATATCTACTGC CAAATATTGCTAAACAACC	BERTOLINI <i>et al.</i> (2003)
CMLV	CMLV77494 CMLV80034	AGATTTCGAGAAGGCGGAGTG ATAGTAAAATATTTAAAAGTCTATAG	ISOGAI <i>et al.</i> (2004)
CRLV	JQ3D3FF JQ3D3FR	GCCAGTTTCTCCAGTGAACC CAGTTGAAACGGATTTAAAC	JAMES <i>et al.</i> (2001)
CVA	CVA7097U CVA7383L	GCTTAACTGCCAGAGCAATTAA AAGGAAAAAGAATAAAAAAGTCCTA	ISOGAI <i>et al.</i> (2004)
	CVA-fw1 CVA-rev1	CAACTGCCGCAGATGTTGG AGMCCTACATGAATTTGACCT	MARAIS <i>et al.</i> (2012)
LChV 1	LCV1U16390 LCV1L16809	TCCGCCTGAAGCACCTAATCCA GGTAAGCGGTATAAAACCCTCCTCT	ROTT and JELKMANN (2001)
LChV 2	LCV2UP2 LCV2LO2	CTCGGCGTATATGGTGGATGTTTA CCGAATGCAGTGGGGATAGG	ROTT and JELKMANN (2001)
PDV	PDV1 70E5	CGATTGGTTAACTCACTTTG AGCAGCATTTCCAACCTACGA	LENZ <i>et al.</i> (2008)
PNRSV	PNRSV2 PNRSV2r	GCCGAATTTGCAATCATACC GGGGCATCCACAACCTTCAC	LENZ <i>et al.</i> (2008)
PPV	PPV1 PPV1r	TAGCTACAGCTTGCCACTTTC CGACCAGCTTAACTCTTTCC	LENZ <i>et al.</i> (2008)
SLRSV	SLRSVi-1 SLRSVi-2	TGGCCTTTATTGGTTGGAT ATCTGCCACTGATTCTCAC	BERTOLINI <i>et al.</i> (2003)
ToRSV	ToRSV-F ToRSV-R	CCTGGCGGCCAGTATGC CACGCCCGAAAGGATTTTTC	Bertolini (unpublished)

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doi: 10.17221/160/2016-PPS

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