

Naturally occurring recombinant isolate of *Pea seed-borne mosaic virus* – Short Communication

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Electronic supplementary material (ESM)

Table S 1. The primers designed for amplifying the complete genome of PSbMV

Primer	Sequence (5'→3')	Annealing temperature (°C)	Primer position at DPD1 isolate (nt)	PCR product length (bp)	Reference
PSbMVP1F	AAAATAAAACAACCTCAACAAAACATAATC	55	1–29	1430	this study
PSbMVP1R	GATTCCTCCAACACAGTCATGGTC		1 430–1 407		
PSbHCPROf	GCGCAAGATGTTTCAAATTGACC	55	1 307–1 329	1494	this study
PSbHCPROr	TTTGGCCTGTAAATGGCTCGTATC		2 800–2 777		
PSbP3F	ATAAGTTTTGCGCATGGTGCA	55	2 658–2 678	1411	this study
PSb6K1R	CCATCTGATTTTGCCACCATTCA		4 068–4 046		
PSbCIF	AGAAACATGGAGAAATCCGGT	55	3 790–3 810	2268	this study
PSbCIR	TGTTGTCGCGAGCCTGTCTAA		6 057–6 037		
PSbVPgF	TTTATGGCTAAGTGGAACGAACC	53	5 973–5 995	696	this study
PSbVPgR666	GACCCCTGTGTTTGTATTCTAC		6 668–6 646		
PSbVPgRf	GTCGCTACATTTTGGCTTGCGCGA	53	6596–6 619	2354	this study
PSbNibR	TTTTCTTTCTGTCTCCTCCTCTT		8 949–8 926		
PSb8812	TTGAGAAATACACGGAAGC	48	8 812–8 830	1139	ŠAFÁŘOVÁ <i>et al.</i> (2008); VAN DER VLUGT <i>et al.</i> (1997)
P9502	GCGGATCCTTTTTTTTTTTTTTTTTT		9 941–9 925		
Sequencing primers					
PSB4486f	GTGCCATGTCATTTTACTG		4 486–4 504		this study
PSB4676r	AATATTGTGCCCCTTCTTA		4 694–4 676		this study
PSB5063f	AACCGAAATACCTGTAGCCATAGC		5 063–5 086		this study
PSB5315r	CACTATTTGGTATTGCTTCCTTA		5 337–5 315		this study
PSB7237f	AGCTACTAGATGATAAYGAACCTG		7 237–7 260		this study
PSB8198r	TCTGGTGTTGCTATTGGAGTGTA		8 221–8 198		this study

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Table S2. RDP4.0 results confirming a recombination event in PSB204CZ isolate

Methods	Average <i>P</i> -value
RDP	1.824×10^{-38}
GENECONV	4.451×10^{-36}
BootScan	1.037×10^{-38}
MaxChi	1.307×10^{-17}
Chimarea	$3,273 \times 10^{-17}$
SiScan	6.611×10^{-18}
3Seq	3.885×10^{-15}

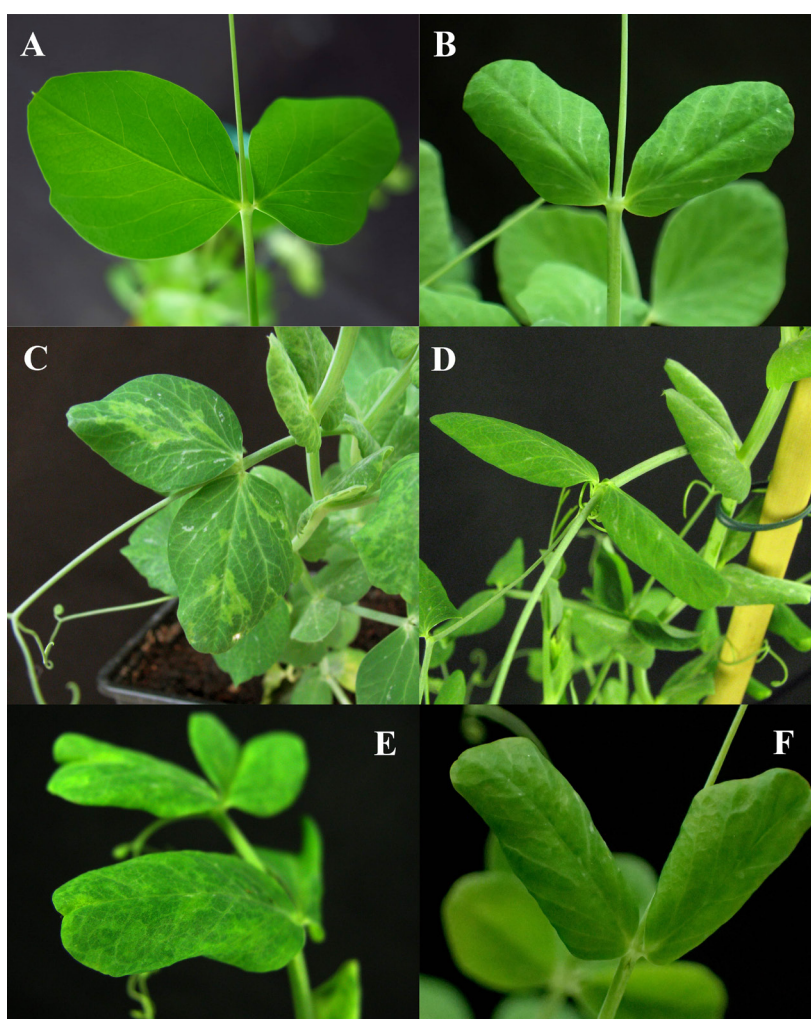


Figure S1. Symptoms of PSbMV infection observed on pea plants of cv. Bohatýr: Healthy plant (A); mild mosaic caused by major parent isolate PSB194CZ (B); severe mosaic and leaf rolling caused by recombinant isolate PSB204CZ (C, D) and by minor parent isolate PSB262CZ (E, F)