

## List of Abbreviations

ABPV	Acute bee paralysis virus
AFB	American Foulbrood
ALPV	Aphid lethal paralysis virus
AmFV	<i>Apis mellifera</i> filamentous virus
ARMS-PCR	Amplification-refractory mutation system-PCR
ARV	<i>Apis mellifera</i> rhabdovirus
<i>atp6</i>	<i>ATP synthase subunit 6</i>
Bar-HRM	Barcode-high resolution melting analysis
BeeMLV	Bee macula like virus
BQCV	Black queen cell virus
CBPV	Chronic bee paralysis virus
CC	clonal complexes
CCD	Colony Collapse Disorder
cgMLST	Core genome MLST
<i>cox1 - cox3</i>	<i>Cytochrome c oxidase subunit 1 - 3</i>
<i>cytb</i>	<i>Cytochrome b</i>
DGGE-PCR	Denaturing-gradient gel electrophoresis
DWV	Deformed wing virus
EFB	European Foulbrood
ERIC	Enterobacterial repetitive intergenic consensus
<i>Fur</i>	Ferric uptake regulator family
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase gene
<i>gyrB</i>	DNA gyrase subunit B gene
HRM	High resolution melting analysis
IAPV	Israeli acute paralysis virus
IIV	Iridescent invertebrate virus
IRES	Internal ribosome entry site
<i>ItuC</i>	Iturinic lipopeptide subunit C
KBV	Kashmer bee virus
KV	Kakugo virus
LAMP	Loop mediated isothermal amplification
LSV	Lake Sinai virus
MLST	Multi-locus sequence typing
MLVA	Multiple locus variable number of tandem repeat analysis
msa	Multiple sequence alignment
MV	Moku virus
<i>napA</i>	Na <sup>+</sup> /H <sup>+</sup> antiporter gene
NaVCh	Voltage-gated sodium channel gene
<i>nd4/ nad5</i>	NADH dehydrogenase subunit 4 - 5 gene
OIE	International Office of Epizootics
ORF	Open reading frame
PCR-RFLP	PCR-restriction-fragment length-polymorphism
PCR-SSPC	Single-strand conformation-polymorphism analysis after PCR-amplification
<i>plx1</i>	<i>Paenibacillus larvae</i> toxin 1
qPCR	Quantitative PCR
RAPD	Randomly-amplified polymorphic DNA
RdRp	RNA-dependent RNA polymerase gene
REP	Enterobacterial repetitive extragenic palindromic

rep-PCR	Repetitive element sequence-based PCR
<i>rpb1</i>	DNA-directed RNA polymerase II subunit gene
<i>rpoB</i>	RNA polymerase beta subunit gene
RT-PCR	Reverse transcription PCR
RT-qPCR	Reverse transcription qPCR
SBPV	Slow bee paralysis virus
SBV	Sacbrood bee virus
SHB	Small hive beetle
SNP	Single nucleotide polymorphism
<i>sodA</i>	Manganese-dependent superoxide dismutase gene
ssRNA	Single string RNA
ST	Sequence types
TBM	Thoracic disc method
<i>tnp60</i>	Putative transposase gene
tRNA <sup>cys</sup>	tRNA <b>gene</b> for cysteine
VDV-1/DWV-B	<i>Varroa destructor</i> virus 1/deformed wing virus B
VL	Viral load
VNTR	Variable number of tandem repeats
VOV	Varroa orthomyxovirus
VP	Virus portein
wgMLST	Whole genome MLST
WGS	Whole-genome sequence
wgSNP	Single-nucleotide polymorphism of a query isolate genome