

**Table S3|** Primers used in this study

	Forward Primer	Primer Sequence	Reverse Primer	Primer Sequence
<b>Amplicon primers</b>				
Potato blight ( <i>Phytophthora infestans</i> )	RXLR effector_Fa	5'-ACCGATTTCTGCGTCGGGATGA-3'	RXLR effector_Ra	5'-ACCCCATCCGCGTGCCAAC-3'
Giant squid ( <i>Architeuthis dux</i> )	mtDNA ND4_Fa	5'-GCCTCTACATGAGCCTTAGGAGCCA-3'	mtDNA ND4_Ra	5'-CGGAGCGTTTACAAGCGGGGA-3'
Pigeon ( <i>Columba livia</i> )	mtDNA COL_Fa	5'-TCGTACAGCCCATGCCTTCG-3'	mtDNA COL_Ra	5'-CCGGCGTGAGCTAGGTTGCC-3'
Grape ( <i>Vitis vinifera</i> )	rbcl (ribulose-bisphosphate carboxylase)_Fa	5'-AGAAGCAGGGGCCGCGTAG-3'	rbcl_Ra	5'-ACGTAGAGCGCGCAGAGCTT-3'
<b>Bait primers</b>				
Potato blight ( <i>Phytophthora infestans</i> )	RXLR_F	5'-AGTGGCGGGCGACATACCCC-3'	RXLR_R	5'-TTCCAGCAACTCGTCGGCCA-3'
Pigeon ( <i>Columba livia</i> )	mtDNA COL_F	5'-TTGGTGCCCCCGACATAGCA-3'	mtDNA COL_R	5'-GCTTCGACTGTGGAGAGGCT-3'
Escherichia coli	Thr_synthase_F1	5'-TGCGCAAGCCGTAACCCAGG-3'	Thr_synthase_R1	5'-CACGCGGCCAGTTGTTGGC-3'
	ssu_C_F1	5'-CCAGGGGGCAACGCGCAATA-3'	ssu_C_R1	5'-GGCGACGGCGGTCTCCTTGA-3'
	polyk_synthase_F1	5'-CCGGCGTTGCGCGAGAGTAT-3'	polyk_synthase_R1	5'-GTTGCGTTGGCAGGTGGGGT-3'
	tas_F1	5'-CCTGCGGTTTCGCTGCTGGA-3'	tas_R1	5'-TGCTGATTGGCGTGCTGGGG-3'
	xanthine/uracil permease_F1	5'-TAACGCGCGCCAGGCTTGAA-3'	xanthine/uracil permease_R1	5'-TGGCACTGGCTCCGGCAATG-3'
Rodent mtDNA control region	Rodent CR_Fb	5'-ATAAACATTACTCTGGTCTTGTAAACC-3'	Rodent CR_R*	5'-ATTAAATTAAAGCCAGGACCAAACT-3'
Koala Retrovirus	PCI-KoRV-F1	5'-AGGAGGCAGAAATCATGAGG-3'	PCI-KoRV-R1	5'-AGAAACCCTCCAGGATCAA-3'
	PCI-KoRV-F2	5'-TCGTAAGTTCAATAAACCTCTTGC-3'	PCI-KoRV-R2	5'-ACGTATATTA AAAAGACAGGAAAAAGA-3'
	PCI-KoRV-F3	5'-GAGATTCACCCCAAGGAC-3'	PCI-KoRV-R3	5'-CAGTGATCTAGTGAAGAGAGAGAGG-3'
	PCI-KoRV-F4	5'-CCTGTCTTTTTAATATACGTCTACGC-3'	PCI-KoRV-R4	5'-CGACTTTCGCCGTTATC-3'
	PCI-KoRV-F5	5'-GGGTGAGTCGACCCCTCT-3'	PCI-KoRV-R5	5'-GAGTCCCTCAGCCATTAGGC-3'
	PCI-KoRV-F6	5'-AAGATCGCCGTTGCCTCT-3'	PCI-KoRV-R6	5'-AGGAGCTGCTGGCAATCG-3'
	PCI-KoRV-F7	5'-ATCCAAAGTCCCTCCAC-3'	PCI-KoRV-R7	5'-GATCCCACTGAGGTCGATT-3'
	PCI-KoRV-F8	5'-TTTTCCACCAGCCTACTTG-3'	PCI-KoRV-R8	5'-AGATCCTCGAAGGAATGGTC-3'
	PCI-KoRV-F9	5'-GCCCTACACAACCTAGGAA-3'	PCI-KoRV-R9	5'-TTTCTGCTGGCGCTGTG-3'
	PCI-KoRV-F10	5'-TTACAAAGGCTGGAAGACTC-3'	PCI-KoRV-R10	5'-GCTTGGTCAATACTGAATGTTTCG-3'
	PCI-KoRV-F11	5'-GAGACAGAGGAAGAGAGAGACG-3'	PCI-KoRV-R11	5'-AAGAATGAGTGGGTCACTTGC-3'
	PCI-KoRV-F12	5'-CTGAGTTTTTGGTTGATACCG-3'	PCI-KoRV-R12	5'-TTGCTCATTGGGTACTGTGC-3'
	PCI-KoRV-F13	5'-CAAGAGACTTTTAAAAATGGACA-3'	PCI-KoRV-R13	5'-CGATAGTCATTGGTTCCAGTG-3'
	PCI-KoRV-F14	5'-TGAAGTCAGATGCCCTACCA-3'	PCI-KoRV-R14	5'-GTTGAGAGCCCTGAAGGATG-3'
	PCI-KoRV-F15	5'-CCTGGAACACCCTTTGTTA-3'	PCI-KoRV-R15	5'-TTGGCCGACACTCGGTAT-3'
	PCI-KoRV-F16	5'-ACTCTCCACCCTCTTCGAT-3'	PCI-KoRV-R16	5'-GCCCTTTTATACGGCCAAA-3'
	PCI-KoRV-F17	5'-GGGACACGAAGGCTCTTACA-3'	PCI-KoRV-R17	5'-GGCCACCAGGATCTAATTTTT-3'
	PCI-KoRV-F18	5'-TCCCTTTACCTGGACTGAGG-3'	PCI-KoRV-R18	5'-ATTGGGGTGTGCTGACTC-3'
	PCI-KoRV-F19	5'-CCCGGTAGCTTACCTGTCAA-3'	PCI-KoRV-R19	5'-GTTCCCTCTGGCAGGTTG-3'
	PCI-KoRV-F20	5'-CGGCCATTCTGAATCCTG-3'	PCI-KoRV-R20	5'-CGGGGCAATGGATGATAG-3'
	PCI-KoRV-F21	5'-GCCATTGTGGACAACAGC-3'	PCI-KoRV-R21	5'-GATGCAGCCGTTGAATGAAT-3'
	PCI-KoRV-F22	5'-TGCTAGAGGCCATCCATCTC-3'	PCI-KoRV-R22	5'-GCTTGTCTGGCCCTAAGTG-3'
	PCI-KoRV-F23	5'-CTACACGGGGGAAGATCAAG-3'	PCI-KoRV-R23	5'-TGTCGGACCCGAGTACCTTA-3'
	PCI-KoRV-F24	5'-GAGAGAGCTCACCCCTGACC-3'	PCI-KoRV-R24	5'-CCAATCAATCCCCAGTTGAG-3'
	PCI-KoRV-F25	5'-ACTCGGGTCCGACAATGG-3'	PCI-KoRV-R25	5'-CTTCCACCAGGCTCAAG-3'
	PCI-KoRV-F26	5'-GGTCGGGGTGGTCACTAG-3'	PCI-KoRV-R26	5'-GGTGGTCACTAGCACCAGGTA-3'
	PCI-KoRV-F27	5'-GTGCTGGTTAGAGCTATCG-3'	KoRVes-R4.1*	5'-GGCCTGGCCTGTTGAGAG-3'
	KoRVes-F1.1*	5'-TGAAGGTTGACGGTATTGCT-3'	KoRVes-R6.1*	5'-TCAAGTCCCGCACCTC-3'
	KoRVes-F5.1*	5'-CCGGAACCTACTGCATCG-3'	KoRVes-R11.1*	5'-AGGATCGGRGCCACTAC-3'
	KoRVes-F7.1*	5'-GGTCCCAGTTCTACGTGTGC-3'	KoRVes-R13.1*	5'-CGTGGTGGGAGATGGAGTA-3'
	KoRVes-F12.1*	5'-CAGTTGACCAYACGACTAGTGA-3'	KoRVes-R17.1*	5'-GGGTATAGTCAGGTTGCAGAGA-3'
	KoRVes-F14.1*	5'-ATCCCCACGGTACAGGTA-3'	KoRVes-R19.1*	5'-GGACAAGCTGGATCTGGATA-3'
	KoRVes-F18.1*	5'-CGGGTTATGTATAGGGAAAGTACC-3'	KoRVes-R23.1*	5'-GCACTACTTCAGACAGGGAGGT-3'
	KoRVes-F20.1*	5'-TCTACATCAGTCTTCAACCAGTCT-3'	KoRVes-R25.1*	5'-AACCTTTCTTGTGCTCCTCAT-3'
	KoRVes-F24.1*	5'-GGCCCTTCAAGACTCCATAA-3'	KoRVes-R30.1*	5'-TCATTTCCCAATTTTCTTTG-3'
	KoRVes-F26.1*	5'-GGAATGCTGTTTCTATGTTGACC-3'	PCI-KoRV-R28	5'-TTTGGCACTCCAAATCTCC-3'
	PCI-KoRV-F29	5'-CAGACCCTAGACAACGAGGA-3'	PCI-KoRV-R29	5'-GAGACTCGGGCGACTCAG-3'
	PCI-KoRV-F30	5'-GTGCCCTCAGCAGTTTCTA-3'	PCI-KoRV-R30	5'-TGAAGACCCCAATGTTCCG-3'
koala mtDNA control region	PCI-CR-NF	5'-CATCAACACCCAAAGCTGAT-3'	PCI-CR-NR	5'-TTCTAGTACGTCGCCAATCT-3'

a Amplicon primers were also used for qPCR assays. b Primers were published in Riccardo et al. (2005) c Primers were published in Ávila-Arcos et al. (2012).