

**TableS2.1 Sequence information for the divergence time analysis**

Types	Species	GenBank Accession Numbers
the COI gene of <i>Gelechiidae</i>	<i>Scrobipalpa costella</i>	OX463325.1
	<i>Teleiodes luculella</i>	OX419612.1
	<i>Keiferia lycopersicella</i>	JN305836.1
	<i>Phthorimaea operculella</i>	NC_057501.1
	<i>Scrobipalpa atriplicella</i>	JARACY010001406.1
	<i>Tuta absoluta</i>	NC_050874.1
	<i>Pectinophora gossypiella</i>	KM225795.1
	<i>Carpatolechia fugitivella</i>	OX579675.1
	<i>Athrips mouffetella</i>	OX383987.1

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<i>Aproaerema taeniolella</i>	OX465273.1
<i>Anarsia innoxia</i>	OX387421.1
<i>Plutella xylostella</i>	NC_025322.1
<i>Spodoptera frugiperda</i>	NC_027836.1
<i>Helicoverpa armigera</i>	NC_014668.1
<i>Drosophila melanogaster</i>	AF200828.1

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**TableS2.2 Sequence information for haplotypes**

Types	Species	GenBank Accession Numbers
the haplotype of <i>VGSC</i>	<i>PoVGSC</i> exon19-H1	OR963514
	<i>PoVGSC</i> exon20-H1	OR963515
	<i>PoVGSC</i> exon20-H2	OR963516
	<i>PoVGSC</i> exon20-H3	OR963517
	<i>PaVGSC</i> exon17-H1	OR963518
	<i>PaVGSC</i> exon17-H2	OR963519
	<i>PaVGSC</i> exon17-H3	OR963520
	<i>PaVGSC</i> exon17-H4	OR963521
	<i>PaVGSC</i> exon17-H5	OR963522
	<i>PaVGSC</i> exon17-H6	OR963523

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	<i>PaVGSC</i> exon17-H7	OR963524
	<i>PaVGSC</i> exon17-H8	OR963525
	<i>PaVGSC</i> exon17-H9	OR963526
	<i>PaVGSC</i> exon18-H1	OR963527
the haplotype of <i>Acel</i>	<i>PoAcel</i> -H1	OR963498
	<i>PoAcel</i> -H2	OR963499
	<i>PoAcel</i> -H3	OR963500
	<i>PoAcel</i> -H4	OR963501
	<i>PoAcel</i> -H5	OR963502
	<i>PoAcel</i> -H6	OR963503
	<i>PaAcel</i> -H1	OR963504

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the haplotype of <i>RDL</i>	<i>PaAcel</i> -H2	OR963505
	<i>PaAcel</i> -H3	OR963506
	<i>PaAcel</i> -H4	OR963507
	<i>PoRDL</i> -H1	OR963508
	<i>PaRDL</i> -H1	OR963509
	<i>PaRDL</i> -H2	OR963510
	<i>PaRDL</i> -H3	OR963511
	<i>PaRDL</i> -H4	OR963512
	<i>PaRDL</i> -H5	OR963513

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