

**Supplemental Table S1** Primers and probes used in this study

<b>Name</b>	<b>Sequence</b>
<b><i>penA</i> mosaic XXXIV PCR</b>	
<b><i>penA</i>-F</b>	5'-GGTCAATACGCCTGCCTATGAG-3'
<b><i>penA</i>-R</b>	5'-ACCGGGTTCGATCATGTTCG-3'
<b><i>penA</i>-FL</b>	5'-GGCGCGGTTACGCCTCTGT-FAM-3'
<b><i>penA</i>-Cy5</b>	5'-Cy5-CGCTGTCTGCCTGACCGGGTTTG-Phos-3'
<b>Sanger sequencing of <i>penA</i> allele</b>	
<b><i>penA</i>-FOR2</b>	5'-GGGAGACGGTCCGATTTTAT-3'
<b><i>penA</i>-REV3</b>	5'-TTACCGATATTGACGGCAAAG-3'