

**Supplementary Table 6. Potential pathogenic genes in *Neorickettsia* species**

Organisms <sup>1</sup>	NHO	NRI	NSE
<b>Type I Secretion System (T1SS):</b>			
ATP-binding cassette (ABC) transporter HlyB	+	+	+
Membrane fusion protein (MFP) HlyD	+	+	+
Outer membrane channel protein TolC	+	+	+
<b>TAT Pathway:</b>			
twin-arginine translocation protein, TatA/E family	+	+	+
twin-arginine translocation protein, TatB	+	+	+
Sec-independent protein translocase TatC	+	+	+
<b>Type IV Secretion System (T4SS):</b>			
VirB1	-	-	-
VirB2	+ (3)	+ (2)	+ (2)
VirB3	+	+	+
VirB4	+ (2)	+ (2)	+ (2)
VirB5	-	-	-
VirB6	+ (4)	+ (4)	+ (4)
VirB7	+	+	+
VirB8	+ (2)	+ (2)	+ (2)
VirB9	+ (2)	+ (2)	+ (2)
VirB10	+	+	+
VirB11	+	+	+
VirD4	+	+	+
<b>Two-component Systems:</b>			
PleC/PleD <sup>2</sup>	+	+	+
CckA/CtrA	+	+	+
NtrY/NtrX	-	-	-
<b>Putative Secreted Effectors:</b>			
Ankyrin-repeat domain proteins	4	4	3

<sup>1</sup> Numbers inside parentheses indicate the copy numbers of the genes; otherwise, only a single copy is present. Abbreviations: NHO, *N. helminthoeca* Oregon; NRI, *N. risticii* Illinois; NSE, *N. sennetsu* Miyayama.

<sup>2</sup> All *Neorickettsia* spp. encodes two copies of sensor histidine kinase PleC.