

Supplementary material

FIGURE S1 | Rarefaction curves of observed species in all samples

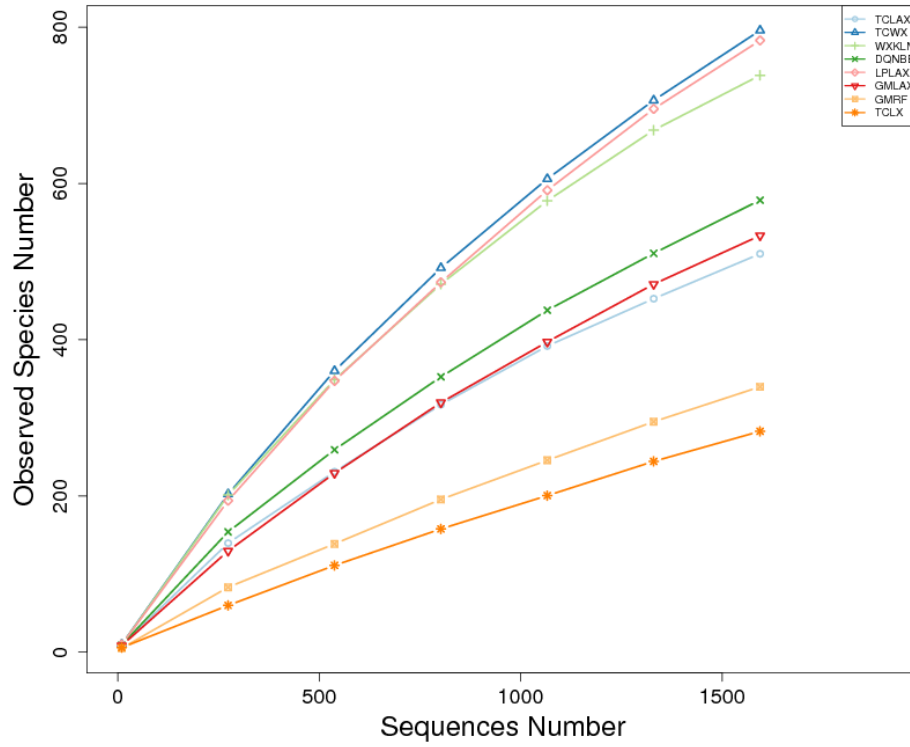


FIGURE S2 | A: Number of OTUs clustered in each sample. B: Distribution of the unique OTUs clustered in samples collected from same region.

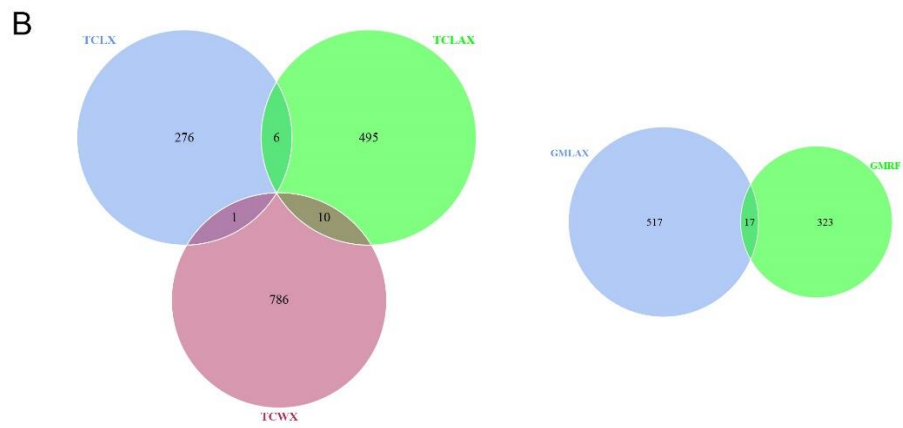
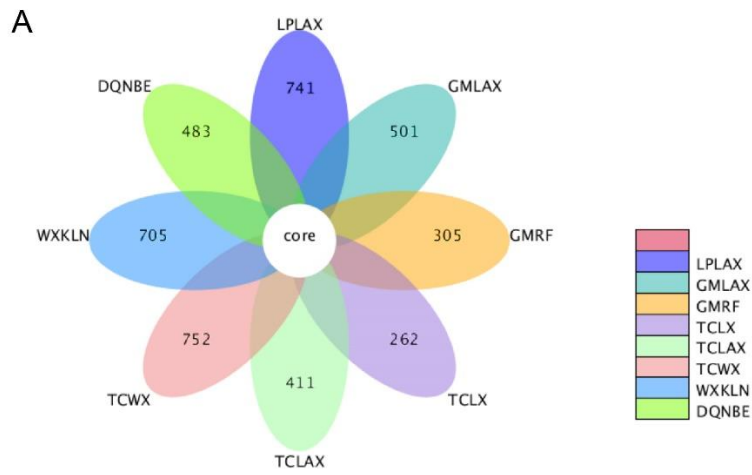


FIGURE S3 | Beta diversity heatmap

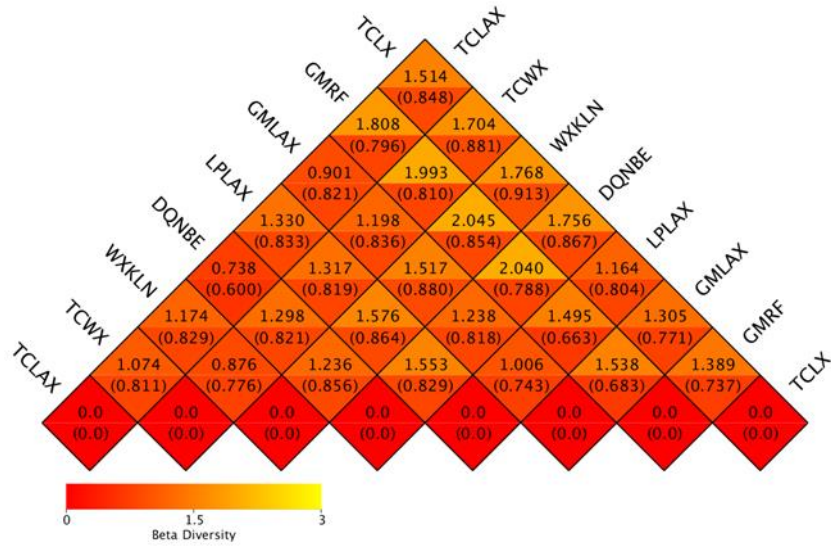


TABLE S1 | Number of positive ticks for different pathogen species of Order Rickettsiales by PCR.

Sample Name	<i>Anaplasma</i>			<i>Candidatus</i>	<i>Rickettsia</i>							
	<i>A.phagocytophilum</i>	<i>A.bovis</i>	<i>A.centrale</i>	<i>Neoehrlichia</i>	<i>C.N.mikurensis</i>	<i>R.heilongjiangensis</i>	<i>R.raoulti</i>	<i>R.tarasevichiae</i>	<i>R.sp.</i>	<i>R.sp.</i>	<i>R.</i>	<i>R.</i>
									<i>YN02</i>	<i>YN01</i>	<i>YN03</i>	<i>sp.</i>
LPLAX	5				2		1	3				
GMLAX	1	7		1			1					
GMRF							4		2			
TCLX	2									4		
TCLAX												4
TCWX												14
WXKLN			5									2
DQNBE												8

Note: Suspected new species were highlighted in red.