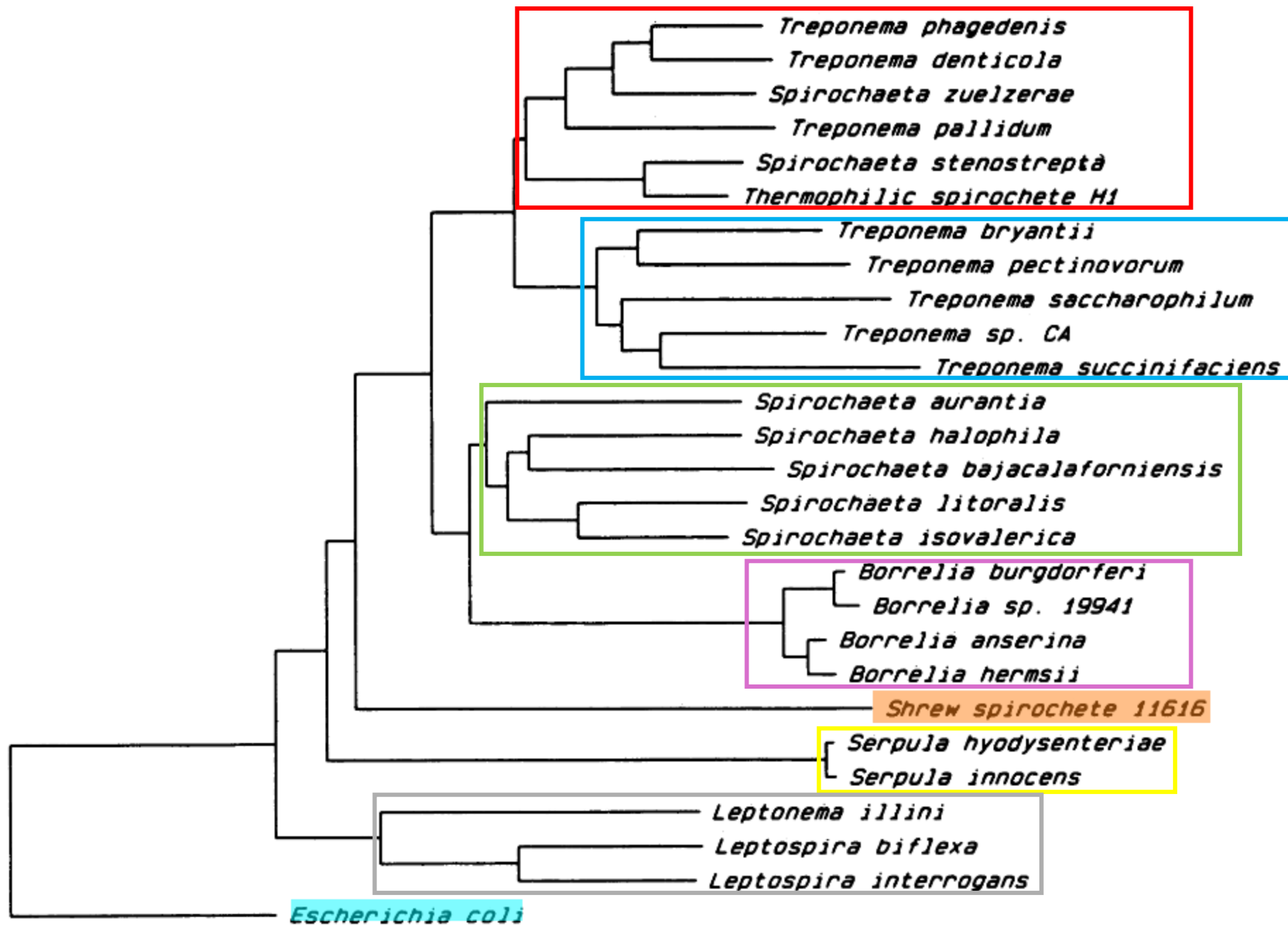


Phylogenetic Analysis of the Spirochetes



MAFT

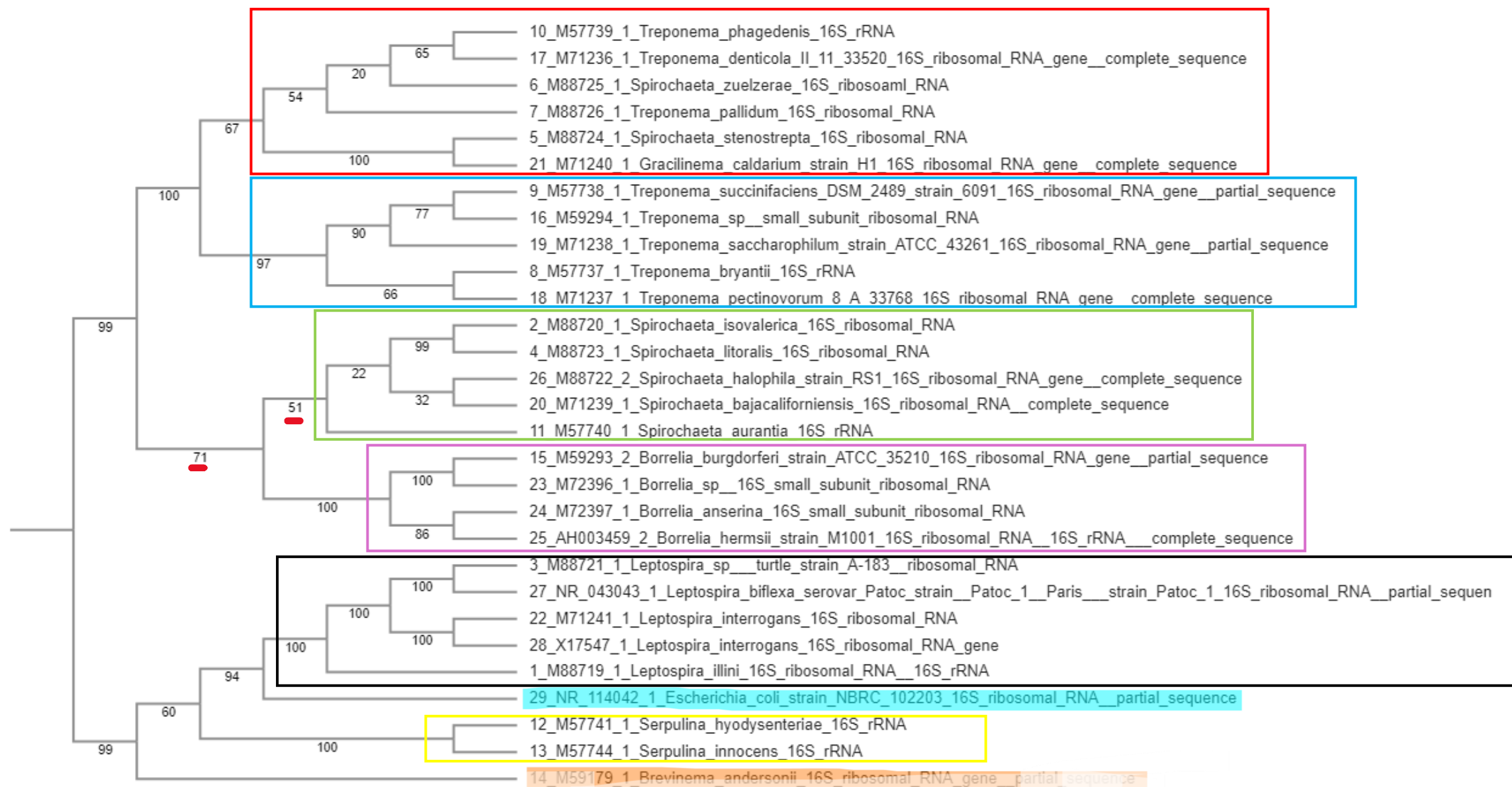
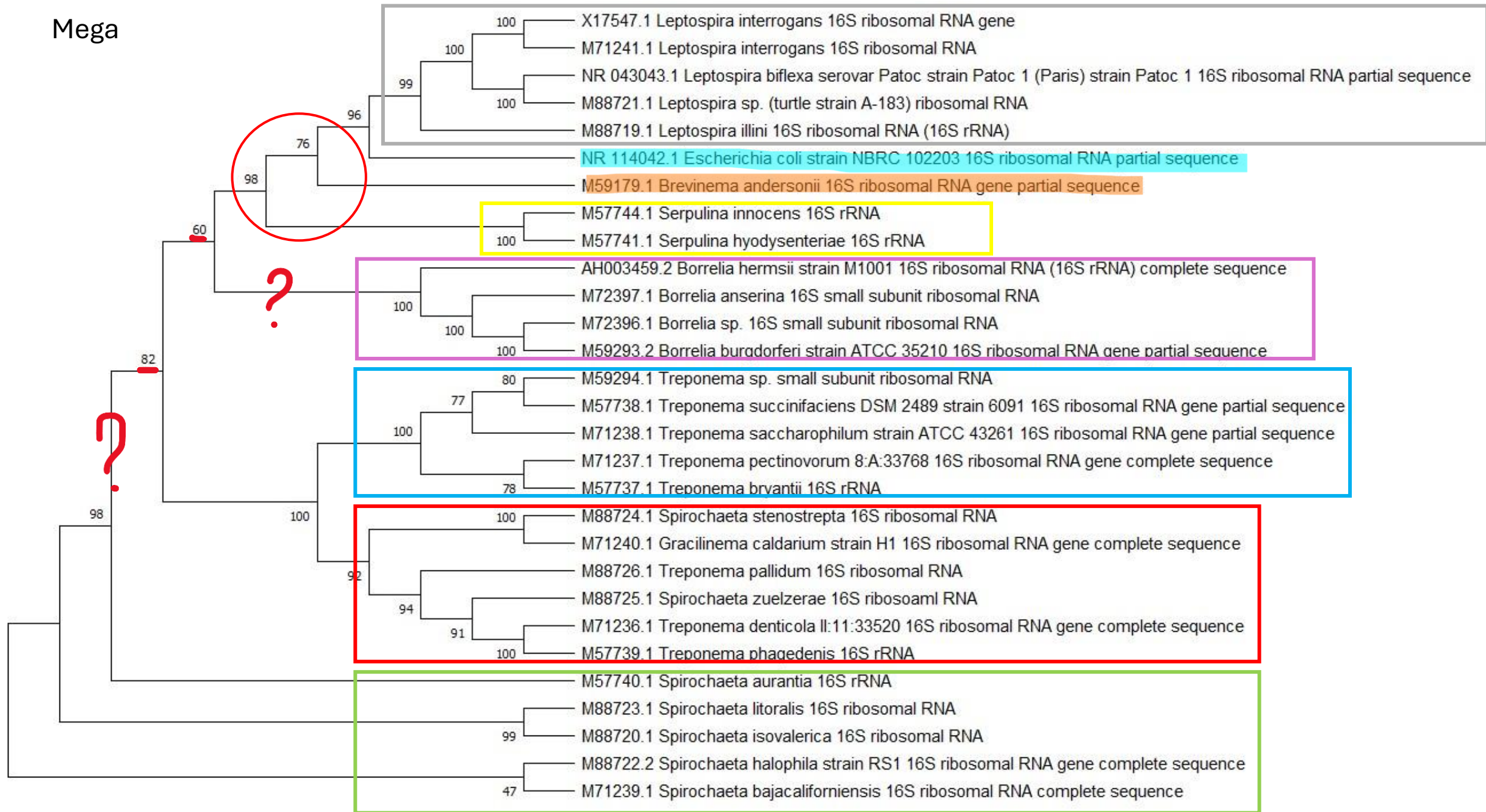


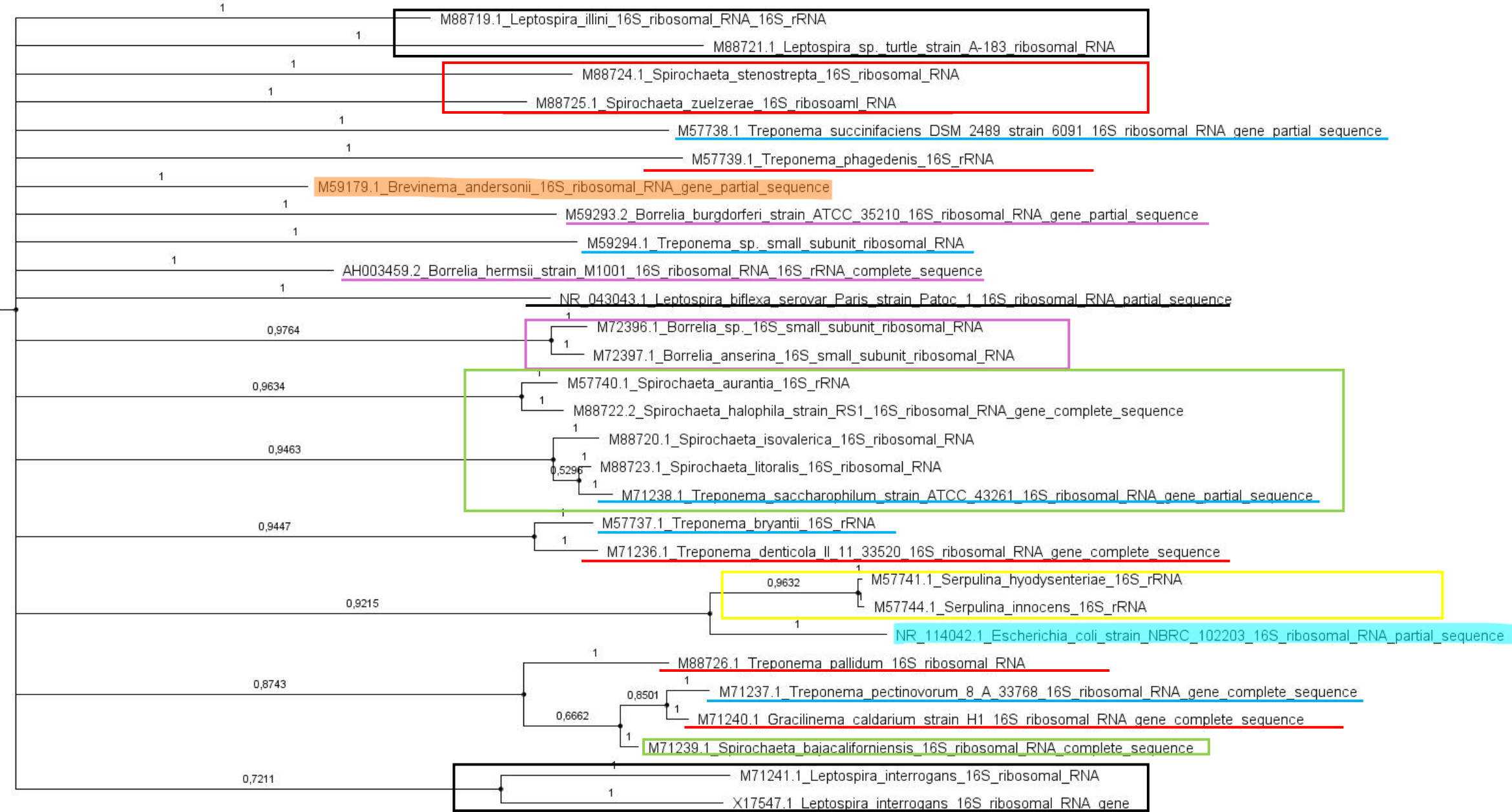
TABLE 3. Characteristics of spirochetal genera^a

Trait	Spirochete genus					
	<i>Treponema</i>	<i>Spirochaeta</i>	<i>Borrelia</i>	<i>Leptonema/ Leptospira</i>	<i>Serpula</i>	<i>Cristispira</i>
Mol% G+C	36-54	51-65	27-32	37-53	26	?
Relationship to O ₂	Obligate anaerobe	Obligate and facultative anaerobe	Microaerophilic	Aerobic	Microaerophilic	?
Size (μm)	0.3-0.7 by 5-20	0.3 by 10-20 ^b	0.2-0.5 by 8-30	0.2 by 10	0.3-0.4 by 7-9	0.5-3 by 20-100
No. of flagella	2-32	2	15-30	2	18	>100
Habitat	Host-associated (humans and other mammals)	Free-living, fresh and salt H ₂ O	Host associated (insects; humans and other mammals)	Free-living and host associated (humans and other mammals; reptiles)	Host associated (swine)	Digestive tract of mollusks
Pathogenic species	+ and -	-	+	+ and -	+ and -	?
Resistance to rifampin	+	+	+	+	+	?
Ornithine in peptidoglycan	+	+	+	-	?	?
Optimum growth temp (°C)	37-39	15-40 ^c	37	15-37	36-42	?

Mega



MrBayes



lset nst=6 rates=gamma;

mcmc ngen=2000000

samplefreq=100 printfreq=1000

burninfrac=0.25 nchains=4;

