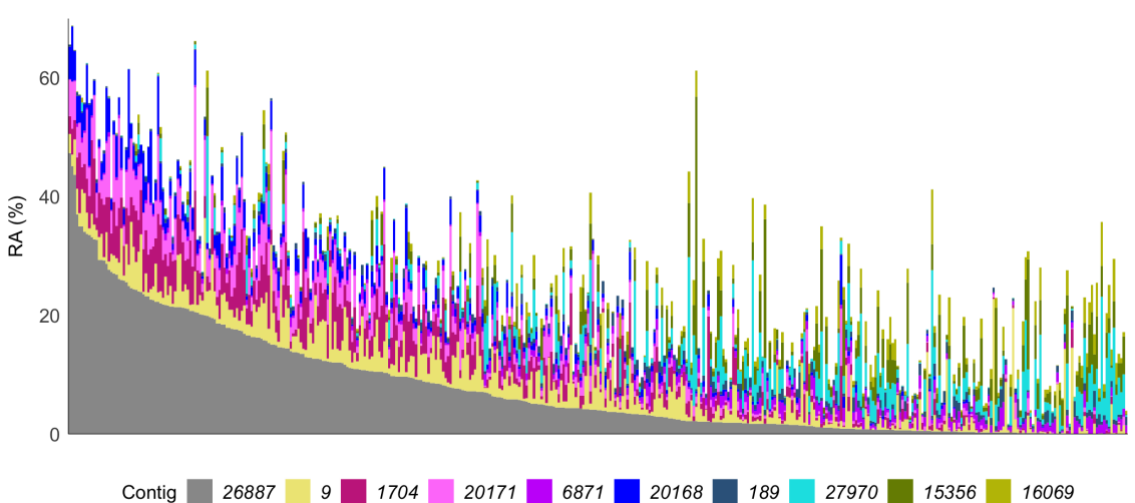


Supplementary Figure 1 | Relative abundance of viral classes (Class) in the rumen of cows. Each bar represents the relative abundance of viral classes in the rumen of a single cow. Colours represent different classes.



Supplementary Figure 2 | Relative abundance of the 10 most abundant viral operational taxonomic units (vOTUs; Contig) in the rumen of cows. Each bar represents the relative abundance of vOTUs in the rumen of a single cow. Colours represent different vOTUs.



Supplementary Table 1 | Classification of vOTUs as either bacteriophages (phage) or eukaryote-infecting viruses (euk) using the Host Taxon Predictor tool (HTP; https://github.com/wojciech-galan/viruses_classifier) with each of the four available models (KNN, SVC, LR and QDA).

VOTU	KNN	SVC	LR	QDA
7585	phage	euk	euk	euk
5372	euk	euk	euk	euk
10891	phage	euk	euk	phage
23527	phage	euk	euk	euk
24555	phage	euk	euk	euk
21919	phage	euk	euk	euk
5108	euk	euk	euk	euk
18384	euk	euk	euk	phage
19166	phage	euk	euk	phage
25786	euk	euk	euk	euk
28990	euk	euk	euk	phage
12877	phage	euk	euk	euk
7572	euk	euk	euk	euk
11079	phage	euk	euk	phage
19349	phage	euk	euk	phage
18156	euk	euk	euk	euk
13276	euk	euk	euk	euk
19125	euk	euk	euk	euk
17842	euk	euk	euk	euk
19889	euk	euk	euk	phage
11442	euk	euk	euk	euk
22214	phage	euk	euk	phage