

Supplementary material

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3 Supplementary Table 1

4 Chemical composition of feeds and ingredient of the experimental diets as fed

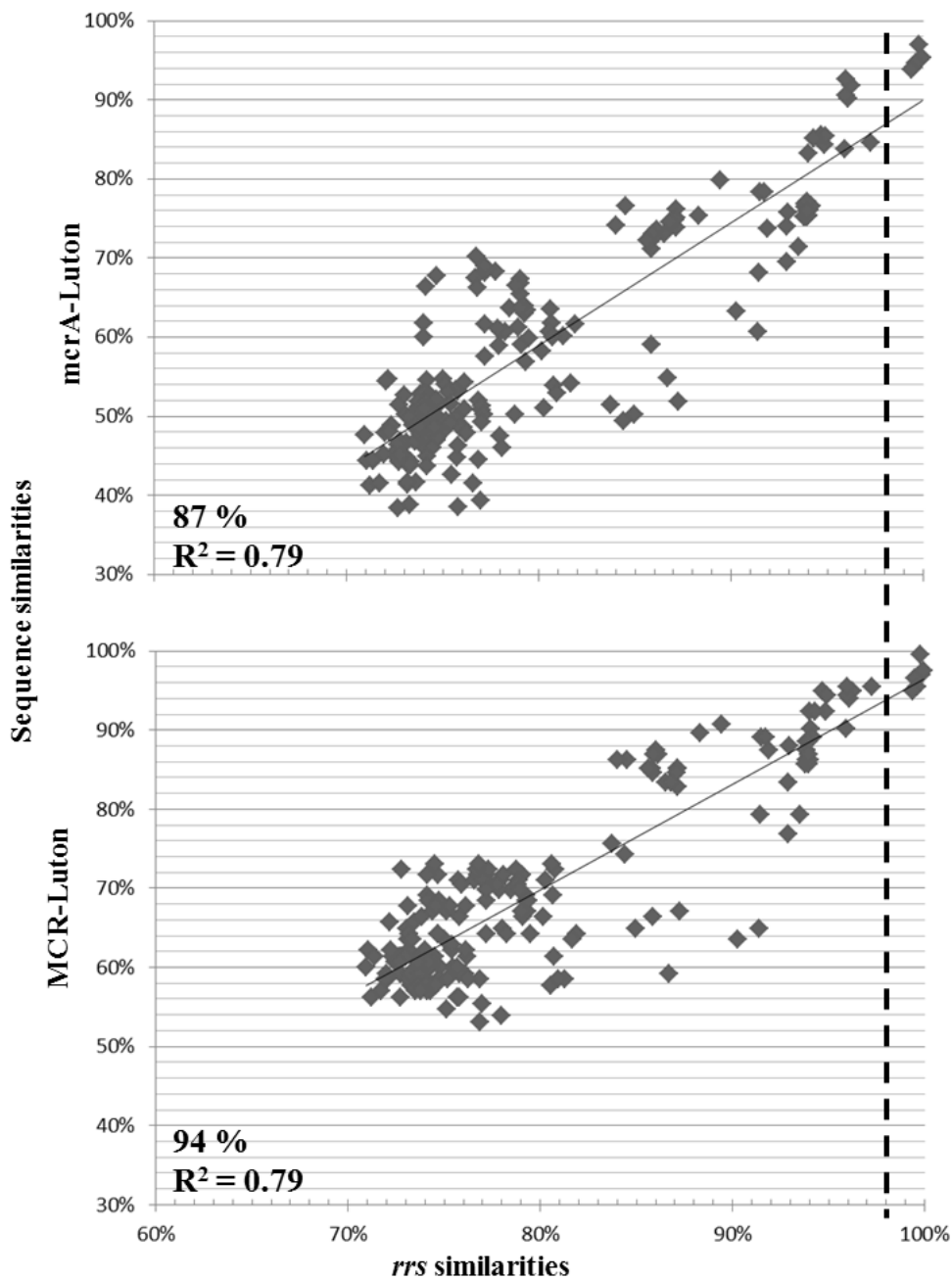
Chemical composition (% of DM)	Wheat	Corn	Hay
Neutral detergent fibre	7.7	6.3	42.2
ADF	2.8	1.3	22.3
CP	5.8	5.6	5.0
Starch	40.1	37.4	nd
Ingredient (% of DM)	Wheat Diet	Corn Diet	
Hay	55.0	56.8	
Cereal	44.1	42.3	
Bicarbonate	0.84	0.87	

5 nd, not detected

6

7 Supplementary Figure 1

8 Correlation of DNA and protein sequence similarity of mcrA-Luton and MCR-Luton
9 versus *rrs* similarity (21 pairwise comparisons of methanogenic strains). The
10 dashed line represents the 98% species cutoff value based on the *rrs* gene.
11 Percentage values indicate the similarity cutoff value for species level OTUs
12 based on mcrA-Luton and MCR-Luton sequences (intersection of the dashed and
13 the regression line).



15 Supplementary Figure 2

16 Rarefaction curves for the four different clone libraries (RW, rumen wheat; RC rumen
17 corn; CW cecum wheat; CC cecum corn) at different OTU specifications (0.00 - 0.02
18 - 0.03 - 0.05 - 0.13 for 100% - 98% - 97% - 95%- 87% of similarity between
19 sequences)

