

Supplementary Information

Supplementary Table 1. Percent nutrient changes during two step fermentation of wheat bran (WB) and rice bran (RB) with rumen liquor for 3 h and 6 h. Values were calculated from the original data

Parameters		From stage 2-3 (1 st fermentation step)		From stage 4-5 (2 nd fermentation step)		From stage 1-3 (Fresh bran to 1 st fermentation step)		From stage 1-5 (Fresh bran to 2 nd fermentation step)	
		3 h	6 h	3 h	6 h	3 h	6 h	3 h	6 h
CF (%)	WB	5.3±0.09	7.1±0.23	4.8±0.12	11.1±0.29	2.8±0.06	2.8 ± 0.10	4.4±0.08	7.5±0.08
		(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)
	RB	3.8±0.14	2.0±0.22	5.9±0.33	9.2±0.52	5.9±0.15	1.3±0.18	0.5±0.26	4.1±0.23
		(↑)	(↓)	(↓)	(↓)	(↑)	(↓)	(↑)	(↓)
ADF (%)	WB	6.8±0.12	6.7±0.27	3.2±0.28	7.5±0.19	6.8±0.08	0.6±0.15	0.5±0.38	13.4±0.60
		(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↑)	(↑)
	RB	2.2±0.36	6.7±0.42	8.4±0.32	8.7±0.39	3.2±0.43	8.8±0.33	8.9±0.70	6.9±0.29
		(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)
NDF (%)	WB	10.7±0.55	17.0±0.78	9.1 ±0.72	17.4±1.13	8.8 ±0.34	15.0±0.70	13.4±0.33	23.1 ± 0.97
		(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)
	RB	2.3±0.30	7.5±0.69	9.3±0.46	10.0±0.68	3.8±0.73	4.6±0.58	7.1±0.91	11.8±0.78
		(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)	(↓)

Stage 1: Fresh bran Stage 2: bran before 1st fermentation step after addition of rumen liquor and buffer Stage 3: bran after 1st fermentation step (1st fermented dried bran) Stage 4: bran before 2nd fermentation step after addition of rumen liquor and buffer with 1st fermented dried bran Stage 5: bran after 2nd fermentation step (2nd fermented dried WB). The values are Mean of % change ± Standard error of mean; n = 6; ↑ = increased, ↓ = decreased.