

Supplementary

Effects of *Bacillus amyloliquefaciens* LFB112 on Growth Performance, Carcass Traits, Immune, and Serum Biochemical Response in Broiler Chickens

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Table S1. Effect of *Bacillus amyloliquefaciens* LFB112 on immune organ index (g/kg) of broilers.¹

Item	Treatment ²						SEM	P-value
	CON	AB	C+M	C	M	CICC		
				21 d				
Thymus	2.42c	2.75abc	3.17a	3.02ab	2.35c	2.50bc	0.009	0.032
Bursa of Fabricius	2.48bc	2.68ab	2.65ab	2.73ab	2.17c	2.07c	0.008	0.031
Spleen	1.00b	1.28a	1.00b	1.33a	0.77c	0.97bc	0.004	<0.001
				39 d				
Thymus	2.18abc	2.53a	2.50a	2.65a	2.30ab	1.72c	0.008	0.003
Bursa of Fabricius	2.18abc	1.97ab	1.90ab	2.02ab	2.12a	1.60b	0.006	0.041
Spleen	1.10bc	1.32ab	1.48a	0.97c	0.98c	1.07bc	0.005	<0.001

SEM=standard error of the mean. ^{a-c} Within a row, numbers with different superscripts differ statistically at $P<0.05$. ¹ Six replicates per treatment group ($n=6$). ² Dietary treatments were as follows: CON= basal diet; AB (Antibiotics)=basal diet +aureomycin150 mg/kg; C+M=basal diet + LFB112 fermentation dry powder with *Bacillus* cell +metabolite (5×10^8 CFU/g); C=basal diet+LFB112 *Bacillus* cells powder with removed metabolite (5×10^8 CFU/g); M=basal diet+LFB112 metabolite powder with removed *Bacillus* cells (5×10^8 CFU/g); CICC=basal diet +*Bacillus Subtilis* 20179 (5×10^8 CFU/g).

Table S2. Effect of *Bacillus amyloliquefaciens* LFB112 on serum immune factors (g/L) of broiler ¹.

Item	Treatment ²						SEM	P-value
	CON	AB	C+M	C	M	CICC		
				21 d				
IgA	0.97ab	0.89b	1.05a	1.04a	0.96ab	0.86b	0.017	0.002
IgG	6.61bc	5.91c	7.80ab	8.50a	7.01bc	7.23b	0.182	<0.001
IgM	0.90ab	0.76b	0.94ab	0.88ab	1.04a	0.82b	0.023	0.004
				39 d				
IgA	1.02a	0.86b	1.20ab	1.18ab	1.09ab	1.03ab	0.034	0.027
IgG	7.65ab	6.42b	8.24a	8.07a	8.04a	7.35ab	0.150	0.001
IgM	0.95	0.85	0.99	1.07	0.84	0.95	0.026	0.077

SEM=standard error of the mean. Ig = immunoglobulin. ^{a-c}Different superscripts within a row shows significant difference ($P < 0.05$). ¹ Number of replicates per group (n =6). ² Experimental group assigned were: CON= basal diet; AB (Antibiotics)=basal diet +aureomycin150 mg /kg; C+M=basal diet + LFB112 fermentation dry powder with *Bacillus* cell + metabolite (5×10^8 CFU/g); C=basal diet+LFB112 *Bacillus* cells powder with removed metabolite (5×10^8 CFU/g); M=basal diet+LFB112 metabolite powder with removed *Bacillus* cells (5×10^8 CFU/g); CICC=basal diet+ *Bacillus subtilis* 20179 (5×10^8 CFU/g).