

Supplementary materials for the article:

Yang Y. et al. Effects of Different Ambient Temperatures on Caecal Microbial Composition in Broilers

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Table SI  
Temperature management.

Day	HC group	MC group	LC group
1	36.5	33.5	30.5
2	36	33	30
3	35.5	32.5	29.5
4	35	32	29
5	34.5	31.5	28.5
6	34	31	28
7	33.5	30.5	27.5
8	33	30	27
9	32.5	29.5	26.5
10	32	29	26
11	32	29	26
12	31.5	28.5	25.5
13	31	28	25
14	31	28	25
15	30.5	27.5	24.5
16	30.5	27.5	24.5
17	30	27	24
18	30	27	24
19	29.5	26.5	24.5
20	29	26	23
21	29	26	23
22	28.5	25.5	22.5
23	28	25	22
24	28	25	22
25	27.5	24.5	21.5
26	27.5	24.5	21.5
27	27	24	21
28	27	24	21
29	26.5	23.5	20.5

30	26	23	20
31	26	23	20
32	25.5	22.5	19.5
33	25	22	19
34	25	22	19
35	24.5	21.5	18.5
36	24	21	18
37	24	21	18
38	23.5	20.5	17.5
39	23	20	17
40	23	20	17
41	22.5	19.5	16.5
42	22	19	16

When the temperature is 0.5 degree lower than the expected temperature, the heater is turned on and the fan is closed. When the heater is 0.5 degree higher, the heater is closed and the ventilator opens.

Table SII

Ingredient and nutrient composition (% , as feed) of the experimental diets.

Ingredient (%)	Starter diet (%) 1 to 21d	Finisher diet (%) 22 to 42d
Corn, first	60.00	66.40
Soybean meal 43	27.40	20.00
Corn protein flour	6.00	8.00
Imported fish meal	1.00	0.00
Soybean oil	1.90	1.60
Stone powder	1.10	1.20
Calcium hydrogen phosphate	1.10	1.14
Salt	0.35	0.35
Methionine	0.07	0.06
Lysine	0.08	0.25
1% broiler premix	1.00	1.00
Calculated nutrients level, %		
ME, Mcal/kg	2,950	3,000
Crude protein	21.00	19.00
Calcium	0.81	0.80
Phosphorus	0.50	0.50
Lysine	1.10	1.00
Methionine	0.50	0.38
Methionine + Cystine	0.90	0.72
Threonine	0.80	0.74
Tryptophan	0.20	0.18

ME – Metabolizable energy, CP – Crude protein, Lys – lysine, Met – Methionine, Cys – Cystine, Ca – Calcium, P – Phosphorus, Thr – Threonine, Try– Tryptophan.

Table SIII

Description of the assembly results of the cecal microbiota from avian broiler.

Sample name	Clean reads	Mapped reads	Mapping rate (%)	Bases (bp)	Q20 (%)	GC (%)	Average length (bp)	OTUs
HC-1	62,200	55,995	90.0241	25,992,533	95.13	51.79	417	309
HC-2	57,308	52,296	91.2542	23,829,524	95.24	50.43	415	315
HC-3	63,237	57,521	90.9609	26,149,494	95.81	51.85	413	319
HC-4	56,772	50,275	88.5559	23,575,478	95.57	51.30	415	344
HC-5	55,694	49,371	88.6468	23,040,570	95.64	52.14	413	314
HC-6	58,876	52,177	88.6218	24,561,638	95.10	51.63	417	313
HC-7	57,653	47,699	82.7346	23,941,978	95.40	50.85	415	316
HC-8	59,085	55,256	93.5195	24,365,271	95.45	51.46	412	351
HC-9	62,410	52,361	83.8984	25,882,088	95.68	50.43	414	312
HC-10	57,743	52,127	90.2741	23,992,159	95.24	51.15	415	307
HC-11	58,005	51,912	89.4957	24,026,730	95.45	51.45	414	261
HC-12	55,206	47,236	85.5631	22,796,376	95.84	51.80	412	305
MC-1	56,586	51,411	90.8546	23,616,313	95.39	51.38	417	322
MC-2	64,452	59,519	92.3462	26,783,315	95.31	51.67	415	353
MC-3	58,027	54,411	93.7684	24,133,155	95.47	52.86	415	359
MC-4	61,721	57,159	92.6086	25,759,115	95.64	52.28	417	309
MC-5	55,802	50,451	90.4107	23,249,831	95.35	51.62	416	354
MC-6	62,926	55,837	88.7343	25,964,894	94.78	52.42	412	367
MC-7	52,667	49,404	93.8044	21,784,335	95.63	51.40	413	298
MC-8	63,691	56,754	89.1083	26,528,067	95.37	51.76	416	336
MC-9	59,648	54,777	91.8337	24,953,755	95.01	49.92	418	213
MC-10	61,361	56,356	91.8433	25,242,337	95.79	51.81	411	375
MC-11	62,006	55,831	90.0412	25,836,552	95.29	51.80	416	298
MC-12	58,734	53,637	91.3218	24,532,870	95.11	51.66	417	338
LC-1	64,086	58,968	92.0138	26,390,102	95.22	51.22	411	299
LC-2	64,133	61,846	96.4339	26,634,571	95.17	52.27	415	388
LC-3	62,116	56,338	90.6980	25,744,574	95.09	51.90	414	319
LC-4	59,952	56,309	93.9234	24,582,942	95.13	51.59	410	333
LC-5	56,034	50,925	90.8823	22,989,563	95.50	52.70	410	306
LC-6	64,809	59,218	91.3731	26,803,083	94.99	52.17	413	323
LC-7	60,823	54,563	89.7078	25,106,567	95.17	51.46	412	256
LC-8	64,557	59,162	91.6430	26,978,537	94.67	50.98	417	276
LC-9	62,848	57,992	92.2734	26,078,317	94.84	50.16	414	257
LC-10	60,243	57,908	96.1240	25,333,945	94.49	48.32	420	176
LC-11	64,187	57,596	89.7315	26,474,297	95.15	51.14	412	327
LC-12	58,668	53,438	91.0854	24,239,288	95.10	52.29	413	310

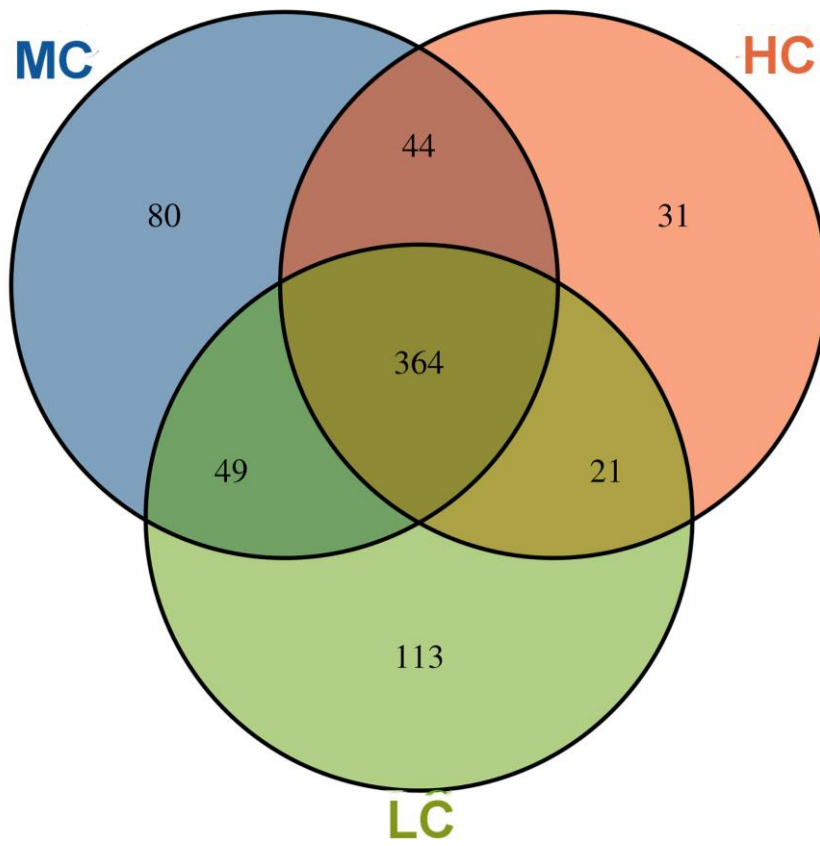


Fig. S1. Venn diagram of microbiota across different groups.

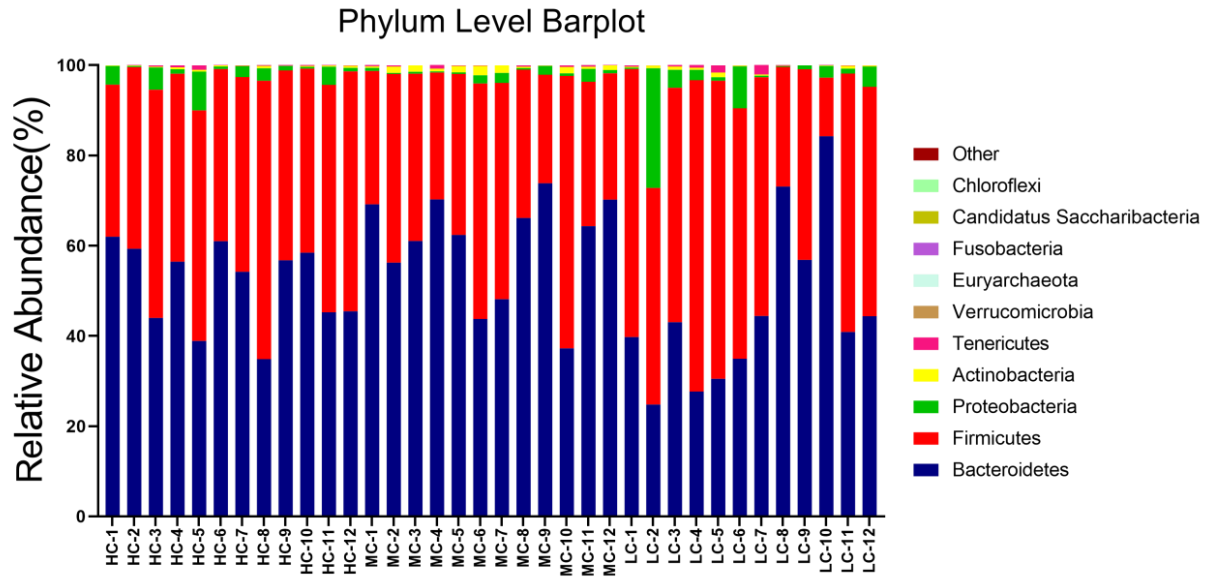


Fig. S2. Taxonomy profile of microbiota composition at the phylum level.

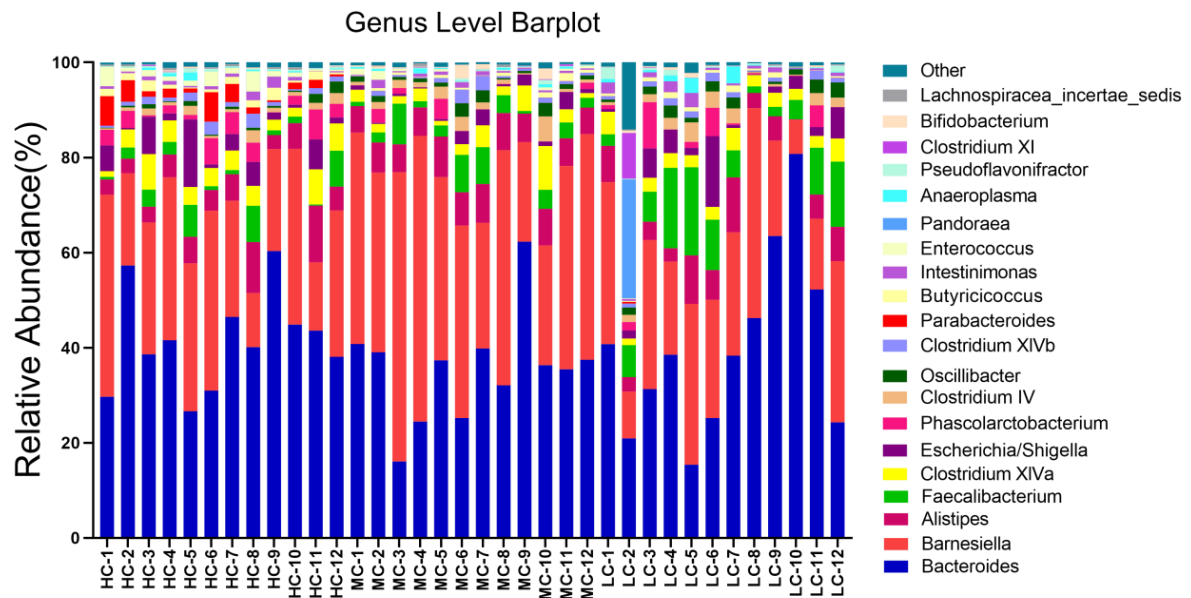


Fig. S3. Taxonomy profile of microbiota composition at the genus level.