Supporting Information

Role of bioavailability in compost maturity during chicken-manure aerobic composting

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Table S1 The physicochemical properties of chicken manure

Index	Moisture (%)	pH	EC (ms/cm)	OM (%)	TN (g/kg)	C/N
Value	67.13± 1.36	7.51 ± 0.23	4.2 ± 0.21	68.72 ± 2.56	35.72± 1.03	7.46 ± 0.12

OM: Organic matter; TN: Total nitrogen; C/N: Total carbon to total nitrogen ratio.

Table S2 Design of experimental treatment

No.	Treatments	Ratio of bulking agent-to-feedstock	Abbreviation	Group
1	M:J=1:3	M:J=1:3	MJ13	The material ratio is 1:3
2	S:J=1:3	S:J=1:3	SJ13	
3	Y:J=1:3	Y:J=1:3	YJ13	
4	M:J=1:1	M:J=1:1	MJ11	The material ratio is 1:1
5	S:J=1:1	S:J=1:1	SJ11	
6	Y:J=1:1	Y:J=1:1	YJ11	
7	M:J=3:1	M:J=3:1	MJ31	The material ratio is 3:1

Notes:

1. Chicken manure: J;

2. Sawdust: M;

3. Cornstalk: S;

4. Cornmeal: Y.

Table S3 Different carbon and nitrogen components in raw material

	LCP1 (g/kg)	LCP2 (g/kg)	RCP (g/kg)	LNP1 (g/kg)	LNP2 (g/kg)	RNP (g/kg)
Sawdust	68.44	176.09	226.82	0.50	0.70	1.07
Cornstalk	130.03	154.45	106.46	4.60	2.87	0.00
Cornmeal	337.05	30.99	55.41	6.74	5.24	0.00
Chicken manure	80.41	80.42	64.54	12.42	8.67	0.00

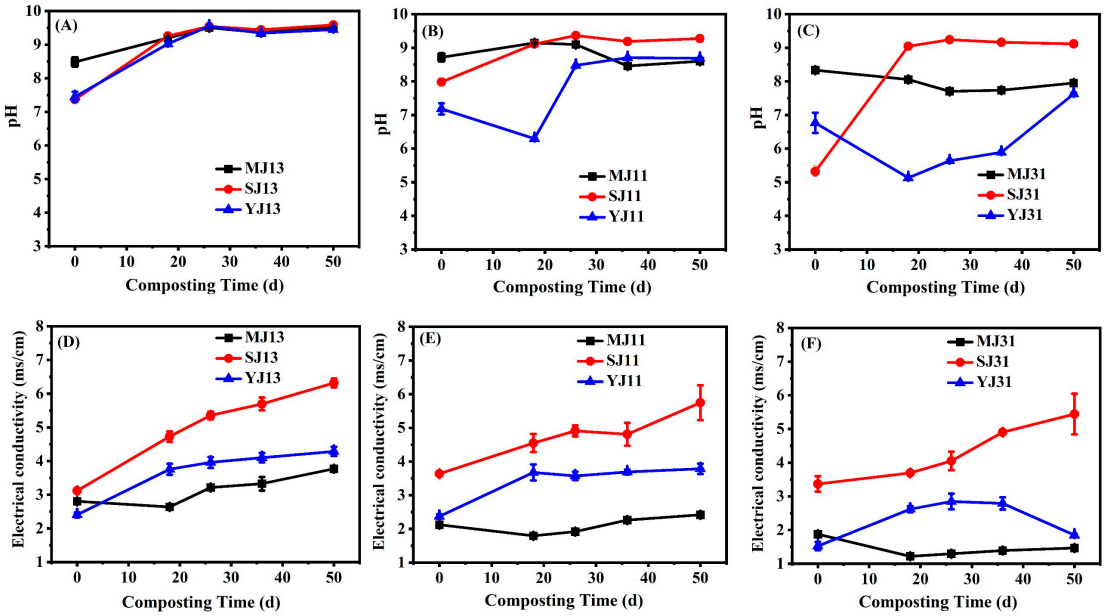


Figure S1. Dynamic changes of physicochemical indexes during the composting (A-C) pH; (D-F) EC.

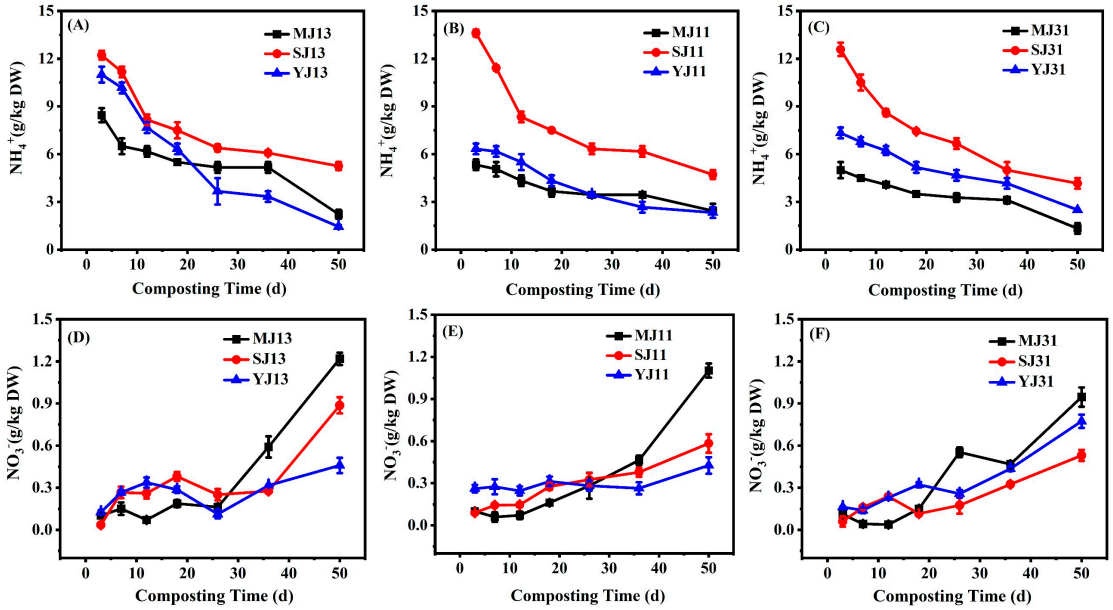


Figure S2. Dynamic changes of physicochemical indexes during the composting (A-C) NH_4^+; (D-F) NO_3^-.

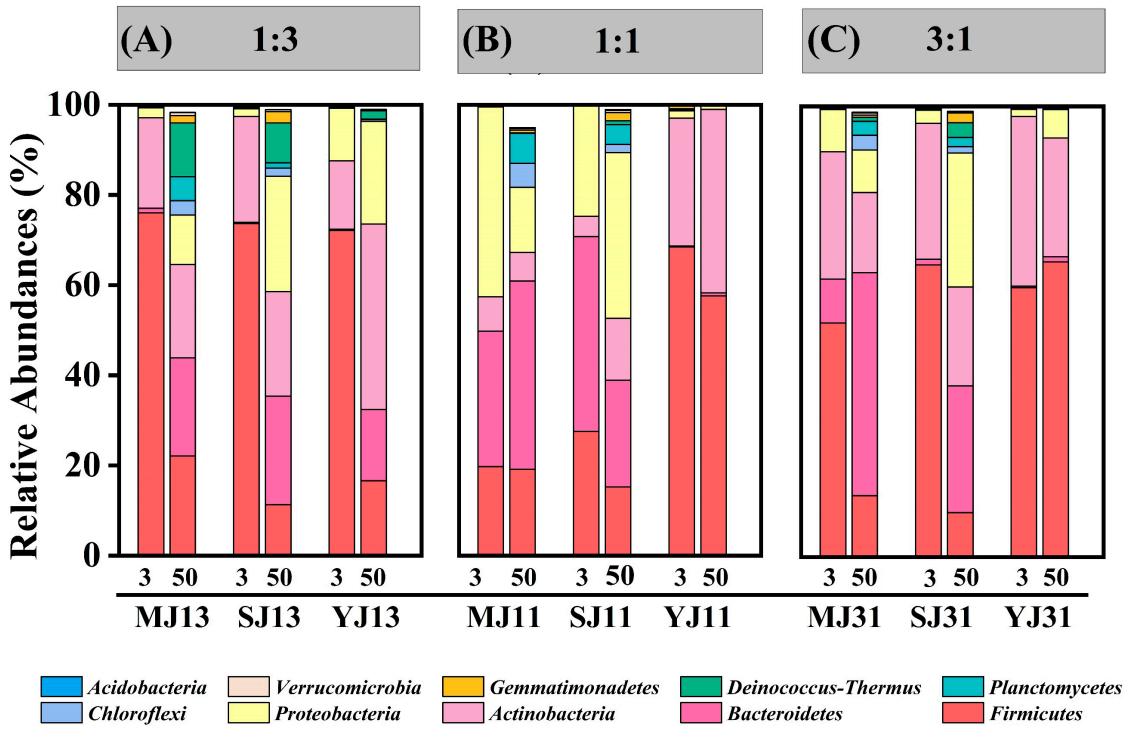


Figure S3. Changes in the relative abundance of the top 20 bacterial communities at the genus level.

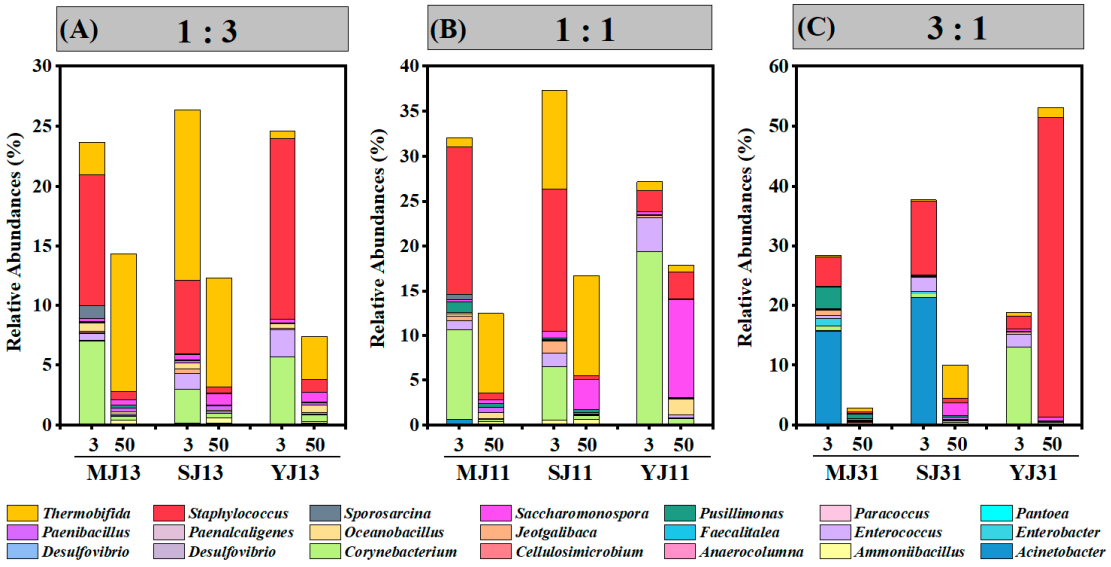


Figure S4. Changes in the relative abundance of the top 20 bacterial communities related to nitrogen source metabolism at the genus level.