

Supplementary materials

1. Supplementary figure

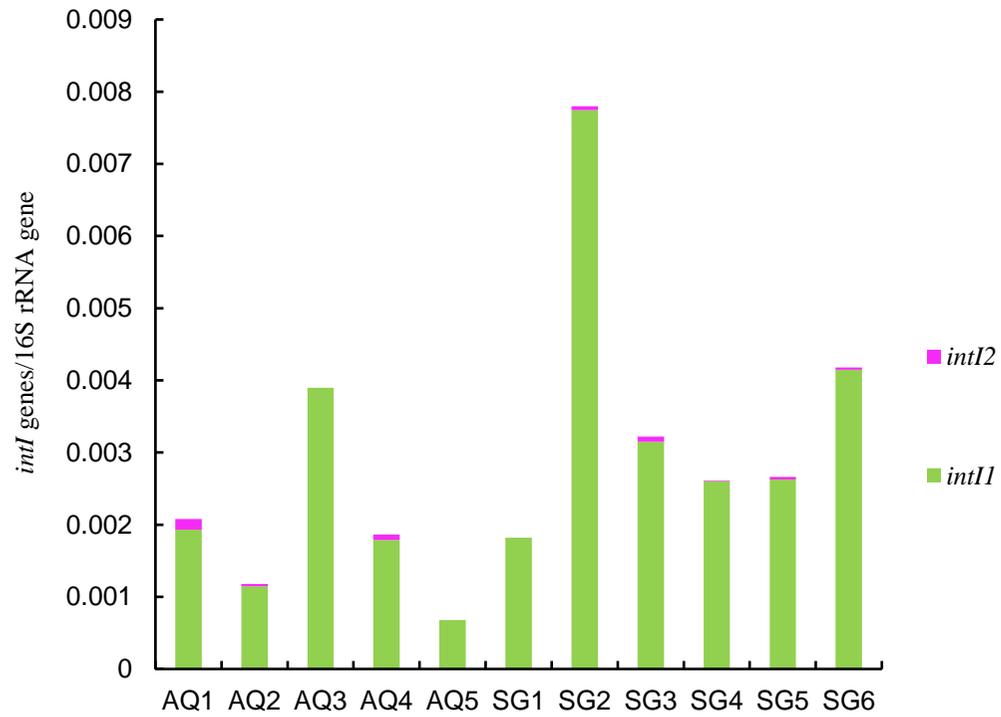


Figure S1 Relative abundances of *intI* genes in greenhouse soil

2. Supplementary tables

Table S1 Primers employed for qPCR

Genes	Forward oligonucleotide sequence (5' to 3')	Reverse oligonucleotide sequence (5' to 3')	Amplicon size (bp)	Annealing temperature (°C)	Reference
Integron-integrase genes					
<i>int11</i>	GCCTTGATGTTACCCGAGAG	GATCGGTCGAATGCGTGT	196	60	[1]
<i>int12</i>	TGCTTTTCCCACCCCTTACC	GACGGCTACCCCTCTGTTATCTC	195	60	[1]
β-lactam ARGs					
<i>bla_{TEM}</i>	GCKGCCAACTTACTTCTGACAAC G	CTTTATCCGCCTCCATCCAGTCT A	247	55	[1]
Chloramphenicol ARGs					
<i>cmlA</i>	GCCAGCAGTGCCGTTTAT	GGCCACCTCCCAGTAGAA	158	55	[2]
Aminoglycoside ARGs					
<i>aadA</i>	GTGGATGGCGGCTGAAGCC	AATGCCCAGTCGGCAGCG	528	54	[3]
<i>aadA2</i>	CGGTGACCATCGAAATTTTCG	CTATAGCGCGGAGCGTCTCGC	250	54	[3]
<i>strA</i>	CCTGGTGATAACGGCAATTC	CCAATCGCAGATAGAAGGC	548	54	[3]
<i>strB</i>	ATCGTCAAGGGATTGAAACC	GGATCGTAGAACATATTGGC	509	54	[3]
Sulfonamide ARGs					
<i>sul1</i>	CACCGGAAACATCGCTGCA	AAGTTCCGCCGCAAGGCT	158	60	[1]
<i>sul2</i>	TCCGGTGGAGGCCGGTATATGG	CGGGAATGCCATCTGCCTTGAG	191	60.8	[1]
Tetracycline ARGs					
<i>tetA</i>	GCTACATCCTGCTTGCCCTTC	CATAGATCGCCGTGAAGAGG	210	54	[3]
<i>tetC</i>	GCGGGATATCGTCCATTCCG	GCGTAGAGGATCCACAGGACG	207	68	[1]
<i>tetG</i>	GCTCGGTGGTATCTCTGCTC	AGCAACAGAATCGGGAACAC	468	55	[1]
<i>tetB(P)</i>	AAAACCTTATTATATTATAGTG	TGGAGTATCAATAATATTCAC	169	46	[1]

<i>tetL</i>	GGTTTTGAAYGTYTCATTACCTGA T	GATAGCTTTCCATATASAGCTGT TCC	126	60	[1]
<i>tetM</i>	ACAGAAAGCTTATTATATAAC	TGGCGTGTCTATGATGTTTAC	171	55	[1]
<i>tetO</i>	TACGGARAGTTTATTGTATAACC	TGGCGTATCTATAATGTTGAC	171	60	[1]
16S-rRNA	CAGCMGCCGCGGTAATWC	CCGTCAATTCMTTTRAGTTT	390	55	[1]

Table S2 The microbial α diversity index in vegetable greenhouse soil

Soil	ACE	Chao1	Simpson	Shannon
AQ1	1540±8	1567±12	0.024±0.003	5.77±0.06
AQ2	1473±18	1497±15	0.007±0.000	5.95±0.04
AQ3	1365±37	1388±47	0.009±0.001	5.79±0.04
AQ4	1500±17	1536±15	0.012±0.001	5.74±0.01
AQ5	1489±10	1518±25	0.008±0.000	5.88±0.02
SG1	1436±21	1454±18	0.016±0.002	5.65±0.04
SG2	1309±26	1325±42	0.009±0.000	5.63±0.01
SG3	1554±19	1579±31	0.009±0.000	5.93±0.01
SG4	1499±16	1537±22	0.009±0.001	5.79±0.02
SG5	1503±17	1546±34	0.011±0.000	5.75±0.02
SG6	1499±14	1511±19	0.013±0.002	5.62±0.07

Table S3 Physicochemical property and heavy metal concentration in vegetable greenhouse soil

Soil	As mg·kg ⁻¹	Cu mg·kg ⁻¹	Zn mg·kg ⁻¹	Pb mg·kg ⁻¹	Cd mg·kg ⁻¹	Cr mg·kg ⁻¹	Hg mg·kg ⁻¹	Ni mg·kg ⁻¹	Organic matter %	pH
AQ1	6.50±0.11	34.22±1.26	35.83±1.11	23.74±1.29	0.13±0.01	85.90±3.33	0.048±0.002	40.38±2.35	4.73±0.16	6.14±0.14
AQ2	5.90±0.17	39.05±2.17	52.10±2.42	25.57±2.06	0.23±0.01	96.60±4.70	0.049±0.003	46.89±1.68	4.44±0.21	6.08±0.11
AQ3	6.88±0.22	42.68±2.36	44.83±2.25	25.88±2.16	0.17±0.01	101.00±6.85	0.057±0.003	41.46±2.78	3.27±0.18	6.20±0.17
AQ4	7.28±0.10	41.04±2.73	120.63±5.02	25.63±1.69	0.19±0.01	102.80±5.95	0.104±0.010	48.67±1.85	4.98±0.24	6.89±0.17
AQ5	5.76±0.09	19.05±0.90	66.13±2.61	24.58±1.98	0.30±0.01	108.00±5.24	0.070±0.003	45.08±1.65	4.18±0.17	6.86±0.23
SG1	6.87±0.16	17.57±1.14	34.13±2.22	20.65±2.29	0.11±0.01	63.50±1.61	0.062±0.001	25.80±0.92	2.44±0.25	7.37±0.15
SG2	6.40±0.25	12.99±1.64	42.57±2.98	22.17±1.05	0.12±0.01	64.95±2.35	0.066±0.003	28.09±1.29	2.93±0.19	6.88±0.29
SG3	6.53±0.23	16.12±1.08	48.33±1.86	22.33±1.36	0.12±0.01	65.37±2.78	0.072±0.003	27.84±1.02	2.33±0.18	7.19±0.16
SG4	5.69±0.29	27.33±1.50	141.30±4.91	22.36±1.76	0.24±0.02	86.24±3.38	0.043±0.003	25.81±2.30	5.24±0.20	6.13±0.22
SG5	4.63±0.21	27.55±1.65	119.23±6.66	23.29±2.06	0.24±0.02	67.70±1.77	0.083±0.004	28.19±2.14	4.60±0.18	6.43±0.16
SG6	3.73±0.26	46.40±1.13	170.87±7.40	21.91±2.26	0.25±0.02	58.50±3.09	0.044±0.002	25.74±1.83	5.81±0.15	6.46±0.16

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3. Pornsukarom, S.; Thakur, S., Horizontal dissemination of antimicrobial resistance determinants in multiple *Salmonella* serotypes following isolation from the environment of commercial swine operations after manure application. **2017**, AEM.01503-17. <https://doi.org/https://doi.org/10.1128/AEM.01503-17>