

1 Characterization of bacterial community changes and antibiotic resistance
2 genes in lamb manure of different incidence

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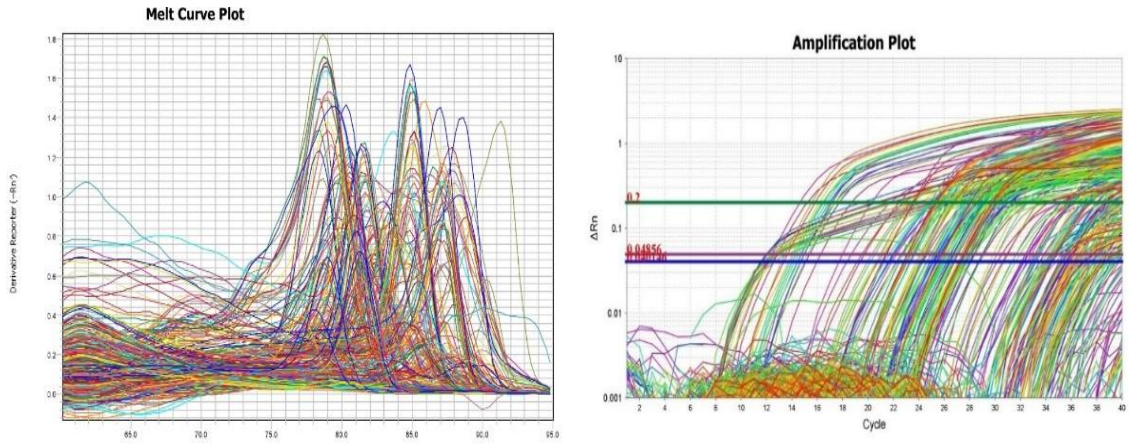


Fig.S1 Amplificationcurve and Meltcurve ofresistance gene

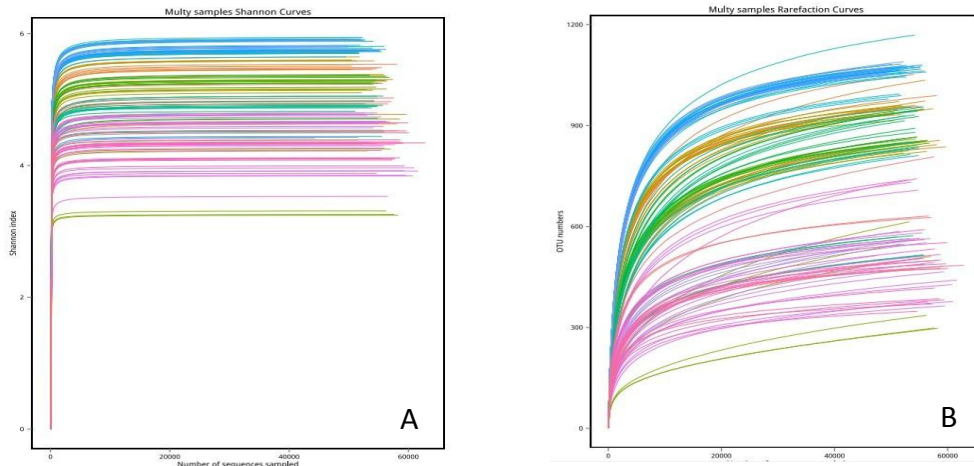


Fig. S2 A: Shannon Indexcurve ; B: Dilution curve

Table S1 Primer sequence of resistance gene

Gene classification	Genes	Sequence (5'—3')	
Aminoglycosid e	aacC(6')I 1	GACCGGATTAAGGCCGATG	CTTGCCTTGATATTCAGTTTTTATAAC CA
	aacC2	ACGGCATTCTCGATTGCTTT	CCGAGCTTCACGTAAGCATTT
	aacC4	CGGCGTGGGACACGAT	AGGGAACCTTTGCCATCACT
	strA	CCGGTGGCATTGAGAAAAA	GTGGCTCAACCTGCGAAAAG
	strB	GCTCGGTCGTGAGAACAATCT	CAATTCGGTCGCTGGTAGT
Beta Lactamase	blaSHV	CTTCCCATGATGAGCACCTTT	TCCTGCTGGCGATAGTGGAT
	blaCTX- M	GGAGGCGTGACGGCTTTT	TTCAGTGCATCCAGACGAA
	blaTEM	AGCATCTTACGGATGGCATGA	TCCTCCGATCGTTGTCAGAAGT
	tetB	AGTGCGCTTTGGATGCTGTA	AGCCCCAGTAGCTCCTGTGA
	tetC	ACTGGTAAGGTAAACGCCATTGTC	ATGCATAAACCCAGCCATTGAGTAAG
Tetracycline	tetE	TTGGCGCTGTATGCAATGAT	CGACGACCTATGCGATCTGA
	tetO	ATGTGGATACTACAACGCATGAGATT	TGCCTCCACATGATATTTTTCT
	tetQ	CGCCTCAGAAGTAAGTTCATACACTA AG	TCGTTTCATGCGGATATTATCAGAAT
	ermA	TTGAGAAGGGATTGCGAAAAG	ATATCCATCTCCACCATTAATAGTAAACC
	ermB	TAAAGGGCATTAAACGACGAAACT	TTTATACCTCTGTTTGTAGGGAATTGAA
MLSB	ermC	TTTGAAATCGGCTCAGAAAAA	ATGGTCTATTTCAATGGCAGTTACG
	mphA	CTGACGCGCTCCGTGTT	GGTGGTGCATGGCGATCT
	mphB	CGCAGCGCTTGATCTTGTAG	TTACTGCATCCATACGCTGCTT
Sulfonamide	sul1	CAGCGCTATGCGCTCAAG	ATCCCCTGCGCTGAGT
	sul2	TCATCTGCCAAACTCGTCGTTA	GTCAAAGAACGCCGCAATGT
Quinolone	qnrA	AGGATTCTCAGCCAGGATT	CCGCTTTCAATGAAACTGCAA
	qnrS	GTGAGTAATCGTATGTACTTTTGC	AAACACCTCGACTTAAGTCT
	intI1	CGAACGAGTGGCGGAGGGTG	TACCCGAGAGCTTGGCACCCA
Others	MCR-1	CGGTCAGTCCGTTTGTTC	CTTGGTCGGTCTGTA GGG
	NDM-1	ATT AGC CGC TGC ATT GAT	CAT GTC GAG ATAGGA AGT G
	16S rRNA	GGGTTGCGCTCGTTGC	ATGGYTGTCGTCAGCTCGTG

Table S2 The abundance of each drug resistance gene in each group

Types	Different farms				
	BC	CC	CL	YJ	GZL
Aminoglycosides	2.1×10^{-3}	2.9×10^{-5}	1.5×10^{-3}	5.1×10^{-4}	2.4×10^{-4}
β-lactam	5.8×10^{-5}	7.3×10^{-3}	1.6×10^{-4}	1.2×10^{-3}	3.5×10^{-5}
MLSb	2.5×10^{-3}	1.2×10^{-3}	5.5×10^{-3}	9.1×10^{-3}	2.3×10^{-4}
Sulfonamides	1.6×10^{-3}	7.7×10^{-6}	2.8×10^{-4}	5.2×10^{-4}	7.1×10^{-5}
Tetracyclines	9.7×10^{-3}	6.0×10^{-2}	2.8×10^{-1}	2.2×10^{-1}	1.7×10^{-1}
int1	8.4×10^{-4}	4.1×10^{-3}	2.1×10^{-3}	1.4×10^{-4}	1.9×10^{-4}
MCR-1	1.1×10^{-7}	4.0×10^{-7}	1.4×10^{-6}	2.7×10^{-7}	1.5×10^{-6}
NDM-1	9.0×10^{-9}	4.6×10^{-8}	5.3×10^{-7}	1.1×10^{-7}	4.1×10^{-8}
qnrA	8.2×10^{-9}	0	0	1.9×10^{-7}	2.0×10^{-8}
qnrS	2.1×10^{-6}	2.2×10^{-7}	1.1×10^{-6}	9.8×10^{-7}	2.3×10^{-7}