

Supplementary

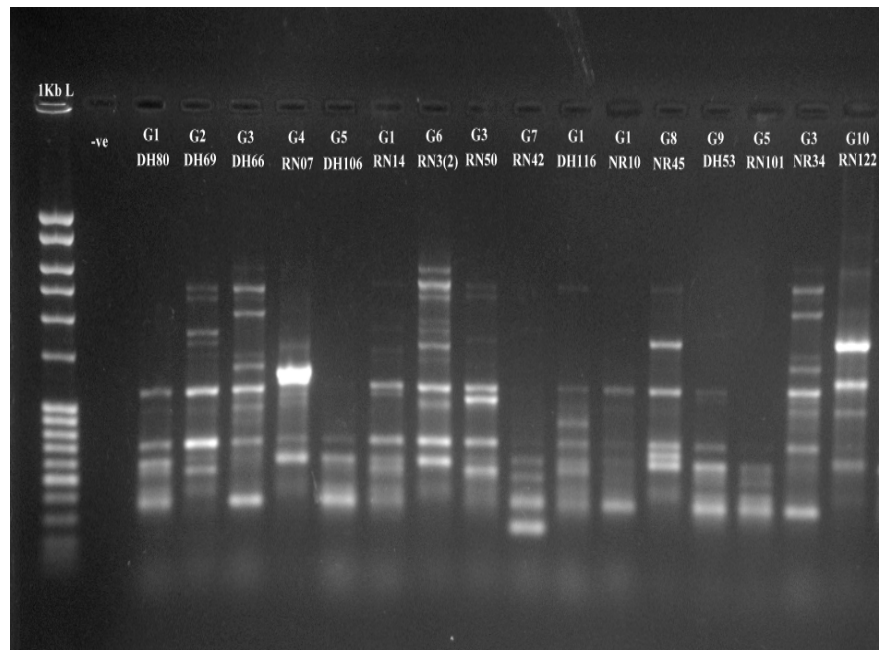


Figure S1. RAPD patterns of bacterial isolate using primer 1283. Lane 2 is negative blank control and lanes1 is molecular ladders. Lanes 3–18 are samples DH80, DH69, DH66, RN07, DH106, RN14, RN3 (2), RN50, RN42, DH116, NR10, NR45, DH53, RN101, NR34, RN122 respectively representing group 1-10.

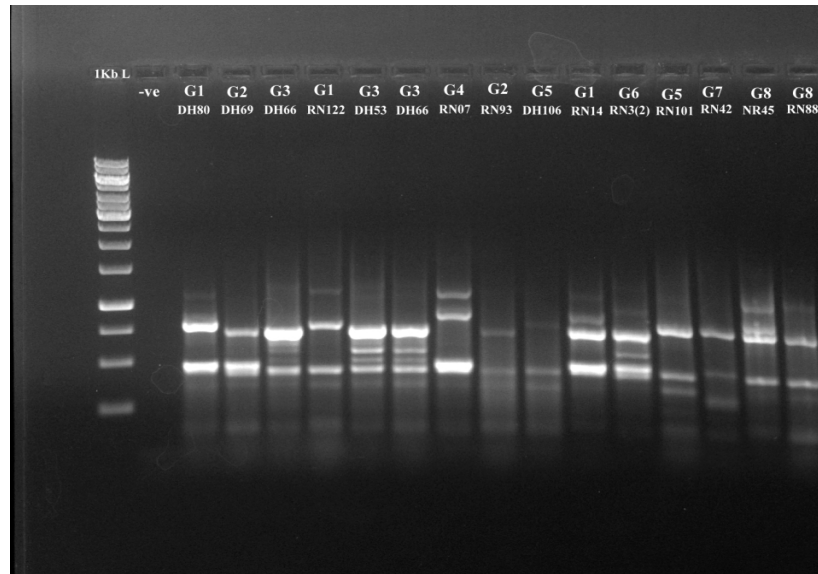


Figure S2. ERIC-PCR patterns of bacterial isolate using primer ERIC1 and ERIC2. Lane 2 is negative blank control and lanes 1 is molecular ladders. Lanes 3–17 are samples DH80, DH69, DH66, RN122, DH53, DH66, RN07, RN93, DH106, RN14, RN3 (2), RN101, RN42, NR45, RN88 respectively representing group 1-8.

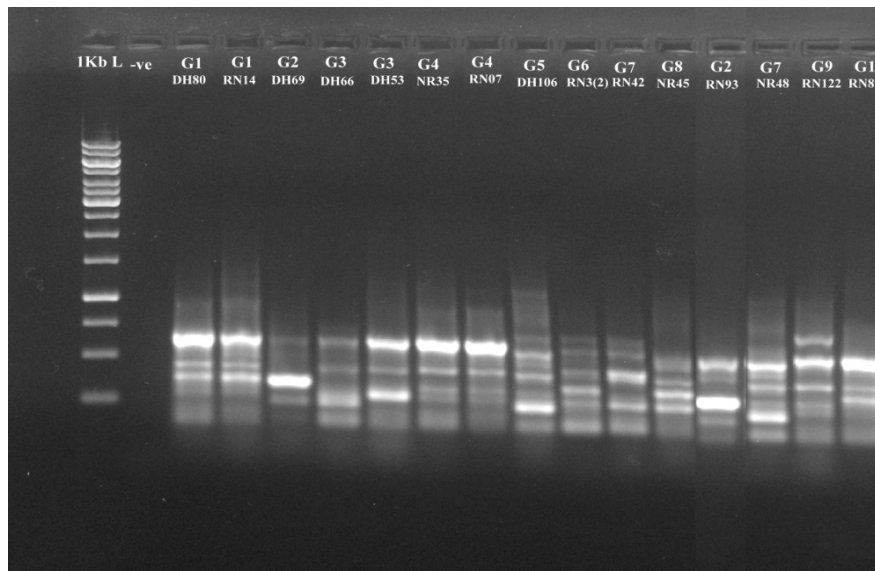


Figure S3. BOX-PCR patterns of bacterial isolate using primer BOXA1R. Lane 2 is negative blank control and lanes 1 is molecular ladders. Lanes 3–17 are samples DH80, RN14, DH69, DH66, DH3, NR35, RN07, DH106, RN3 (2), RN42, NR45, RN93, NR48, RN122, RN89 respectively representing group 1-9.

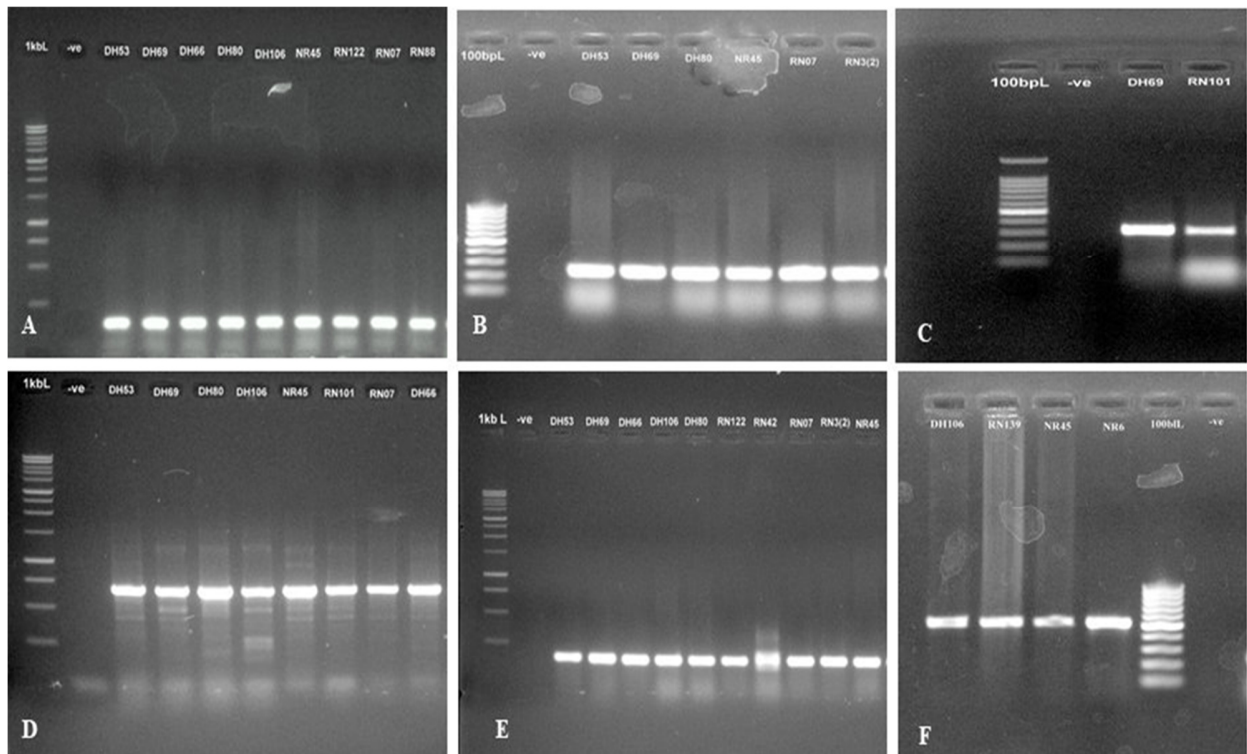


Figure S4. PCR results for the detection of *E. coli* VG among the colibacillosis cases of Bangladeshi poultry samples. A) (*uidA*: 147bp) Lane 2 is negative blank control and lanes 1 is molecular ladders (1kb). Lanes 3-11 are strain DH53, DH69, DH66, DH80, DH106, NR45, RN122, RN07, RN88. B) (*crl*: 250bp) Lane 2 is negative blank control and lanes 1 is molecular ladders (100bp). Lanes 3-10 are strain DH53, DH69, DH80, NR45, RN07, RN3 (2). C) (*papC*: 328bp) Lane 2 is negative blank control and lanes 1 is molecular ladders (100bp). Lanes 3-4 are strain DH69, RN101. D) (*ial*: 650bp) Lane 2 is negative blank control and lanes 1 is molecular ladders (1kb). Lanes 3-10 are strain DH53, DH69, DH80, DH106, NR45, RN101, RN07, DH66. E) (*fimH*: 164bp) Lane 2 is negative blank control and lanes 1 is molecular ladders (1kb). Lanes 3-12 are strain DH53, DH69, DH66, DH106, DH80, RN122, RN42, RN07, RN3 (2), NR45. F) (*cjrC*: 518bp) Lane 6 is negative blank control and lanes 5 is molecular ladders (100bp). Lanes 1-4 are strain DH106, RN83, NR45, NR6.

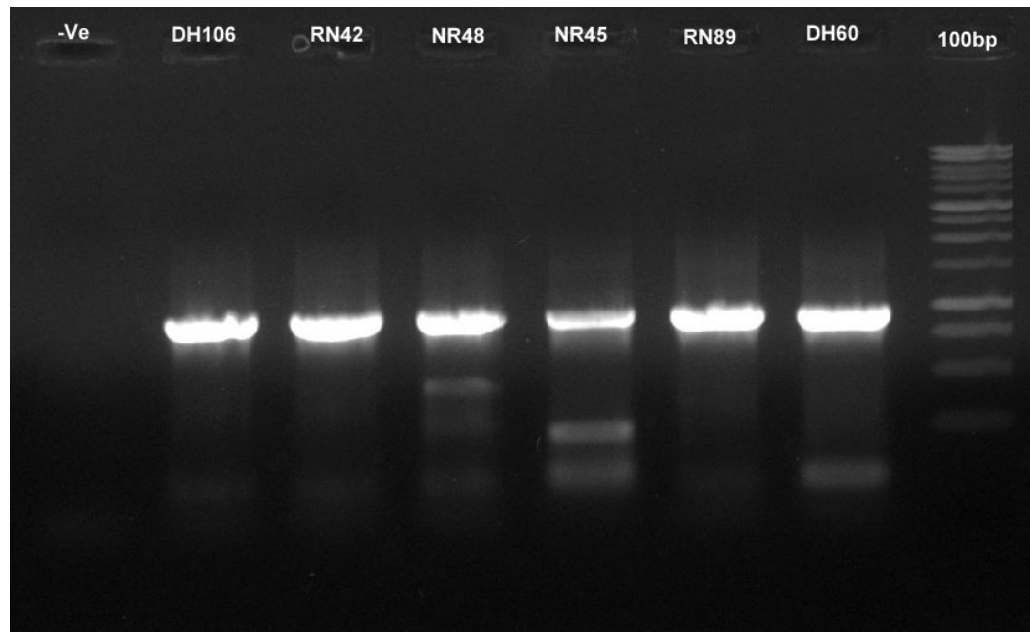


Figure S5. Representative PCR results for the detection of *Escherichia coli* phylotypes among the colibacillosis cases of Bangladeshi poultry samples. (*arpA*: 400bp), Here, Lane 8 is molecular ladders (100bp), Lane 1 is negative blank control and Lanes 2–7 are the strains DH106, RN42, NR48, NR45, RN89, DH60, respectively.

Table S1. Sequence of oligonucleotide primers of different target genes used in this study to detect pathogenic *Escherichia coli* strains.

Target gene	DNA sequence (5'→3')	Amplified product (bp)	References
<i>ial</i>	GGTATGATGATGATGAGTCCA GGAGGCCAACAATTATTTCC	650	[29]
<i>bfpA</i>	AATGGTGCTTGCGCTTGCTGC GCCGCTTTATCCAACCTGGTA	334	
<i>Stx1</i>	CTGGATTTAATGTTCGCATAGTG AGAACGCCCACTGAGATCATC	150	
<i>Stx2</i>	GGCACTGTCTGAAACTGCTCC TCGCCAGTTATCTGACATTCTG	255	
<i>eaeA</i>	GACCCGGCACAAGCATAAGC CCACCTGCAGCAACAAGAGG	384	
<i>lt</i>	GGC GAC AGA TTA TAC CGT GC CGG TCT CTA TAT TCC CTG TT	450	[56]
<i>aggR</i>	GTATACACAAAAGAAGGAAGC ACAGAATCGTCAGCATCAGC	254	[57]
<i>uidA</i>	AAAACGGCAAGAAAAAG CAG ACGCGTGGTTACAGTCTT GCG	147	[32]
<i>cjrC</i>	AAACCTCAGCGCAAAATCGT AGGCTTCAGGAATGGGTTC	518	[32]
<i>fimH</i>	GTGCCAATTCCTCTTACCGTT TGGAATAATCGTACCGTTGCG	164	[29, 32]

<i>crl</i>	TTTCGATTGTCTGGCTGTAT CTTCAGATTCAGCGTCGTC	250	[29, 32]
<i>papC</i>	GACGGCTGTACTGCAGGGTGTGGCG ATATCCTTTCTGCAGGGATGCAATA	328	[29, 72, 75]
<i>hlyA</i>	GCATCATCAAGCGTACGTTCC AATGAGCCAAGCTGGTTAAGCT	534	[29]
<i>ChuA</i>	GACGAACCAACGGTCAGGAT TGCCGCCAGTACCAAAGACA	279	[9]
<i>Yja A</i>	TGAAGTGTCTCAGGAGACGCTG ATGGAGAATGCGTTCCTCAAC	211	
<i>TspE4C2</i>	GAGTAATGTCGGGGCATTCA CGCGCCAACAAAGTATTACG	152	
<i>arpA</i>	AACGCTATTCGCCAGCTTGC TCTCCCCATACCGTACGCTA	400	
<i>arpA</i>	GATTCCATCTTGTCAAAATATGCC GAAAAGAAAAAGAATTCCCAAGAG	301	
<i>trpA</i>	AGTTTTATGCCAGTGCGAG TCTGCGCCGGTCACGCCC	219	

**arpA* for phylotype E and *trpA* for phylotype C

Table S2. Relative comparison among isolated Pathogenic *E.coli* from different poultry farms of three sampling locations

Farm	Sources	Isolates ID	H or D Sample	Phylotype	CRA	Pathogenic genes Number	BF	Antibiotics pattern
Farm 1	DR	DH21	H	A1	++	ND	2	ND
		DH22	H	A1	++	ND	0	ND
		DH25	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapCcjrC</i>	1	DoTeFCIPNAGNCS
		DH26	D	D2	+	<i>udiAcrlfimHialpapC</i>	0	ND
		DH27	D	A1	+++	ND	0	ND
		DH28	D	D2	++	<i>udiAcrlfimHialpapCcjrC</i>	0	ND
		DH52	D	B2(B2 ₃)	++	ND	0	AMPDoTeFCIPGNCS
		DH53*	D	B1	+++	<i>udiAcrlfimHial</i>	4	AMPDoTeCIPNACSA TM
		DH55	D	B2(B2 ₃)	++	ND	3	AMPDoFCIPNAIMPC
		DH57	D	D2	++	<i>udiAcrlfimHialpapCcjrC</i>	0	DoTeFNAFoxGNCS
		DH59*	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	2	DoTeFCIPNAFoxIMPS
		DH60	D	B1	+++	<i>udiAcrlfimH</i>	0	ND
	CS	DH10	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	3	AMPTeFNAGNNA
		DH23	D	A1	+++	<i>udiAcrlial</i>	4	ND
		DH24	H	A1	++	<i>udiAcrlial</i>	0	DoTeFNACS
		DH31	D	B2(B2 ₃)	++	ND	0	DoTeFNASATM
		DH32	H	A1	+	ND	0	AMPTeFNAFoxS
		DH33	D	A1	++	<i>udiAcrlial</i>	0	AMPDoTeFoxSATM
		DH34	D	A1	+++	<i>udiAcrlfimHial</i>	0	ND
		DH35	H	A1	++	ND	0	AMPDoFCIPFoxC
		DH42	H	B1	++	ND	2	AMPDoTeCIPFoxCAT M

		DH49	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	3	AMPTeFCIPNAFoxIMPC
		DH67	D	B2(B2 ₃)	+	ND	0	DoTeFNAS
		DH69*	D	A1	+++	<i>udiAcrlfimHialpapC</i>	3	AMPDoPBCIPNAFoxIMP
	F	DH1	D	A1	++	<i>udiAfimHialpapC</i>	4	DoTeFC
		DH8*	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	3	AMPDoTeFoxIMPCATM
		DH48	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	1	ND
		DH66*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHial</i>	1	AMPDoTeFCATM
	W	DH29	D	A1	++	<i>udiAcrlfimHial</i>	2	FCIPNAFoxGNATM
		DH43	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	2	ND
		DH44	H	A1	++	<i>udiAcrlfimHial</i>	0	AMPDoNAFoxIMPCATM
		DH50	D	B2(B2 ₃)	++	ND	2	TeFNACSATM
		DH51	H	D2	+	<i>udiAcrlfimHial</i>	3	AMPDoTeFNAIMPC
	H	DH20#	H	A1	++	ND	1	DoTeFNAS
Farm 2	DR	DH86*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	3	AMPDoTeFCIPNAFoxS
		DH87	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	0	TeFFoxCSATM
		DH89	D	D2	+++	<i>udiAcrlfimHial</i>	1	AMPDoTeFPBNAFoxIMP
		DH90	D	B1	+++	<i>udiAcrlial</i>	0	ND
		DH93#	D	A1	+++	<i>udiAcrlfimHialpapC</i>	0	AMPTePBNAFoxGNC S
		DH95	H	A1	++	ND	0	ND
		DH96	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	1	AMPDoFFoxCATM
		DH97	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	3	DoTeFoxSATM

	CS	DH73#	D	B1	+++	<i>udiAcrlfimH</i>	0	AMPTeFCIPNAGNCA TM
		DH74	D	B1	+++	<i>udiAcrlfimH</i>	0	ND
		DH75#	D	B1	+++	<i>udiAcrlfimHial</i>	0	AMPDoTeFCIPNAGN S
	F	DH72	D	B2(B2 ₃)	++	ND	0	DoTeFFoxCSATM
	W	DH71	D	D2	+	ND	0	AMPDoTeCIPNAFoxS
		DH91	H	B2(B2 ₃)	+	<i>udiAcrlfimHial</i>	0	ND
		DH94	H	A1	+	ND	4	ND
		DH100*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	1	AMPDoTeFGNS
	H	DH82	D	D2	++	<i>udiAcrlfimHialcjrC</i>	3	ND
		DH83*	D	A1	+++	<i>udiAcrlfimH</i>	0	AMPDoTeFCIPNAFoxI MPGNS
		DH85	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	0	ND
	IO(L)	DH76	H	B1	++	ND	0	AMPDoTeFCIPNAFox
		DH80*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHialpapC</i>	0	AMPDoPBNAFoxCAT M
		DH103	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	0	ND
		DH106*	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	1	AMPDoTeCIPNAGNC S
		DH108	H	B1	++	<i>udiAcrlfimHial</i>	4	AMPDoTeNAIMPGN
		DH109	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	0	ND
Farm 3	DR	DH152	D	B2(B2 ₃)	++	ND	0	AMPDoTeNAGNATM
		DH162	D	A1	+++	<i>udiApapCcjrC</i>	0	ND
		DH185	H	B1	+	ND	0	ND
		DH170	H	A1	+	ND	2	AMPDoFNAGNS
		DH116*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHial</i>	3	AMPDoTeFCIPNAIMP FoxGNCSATM

	W	DH141*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHialpapC</i>	0	AMPDoTeCIPNAIMPC
	H	DH168	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	2	AMPDoTeFNAFoxAT M
		DH179	H	A1	++	<i>udiAcrl papC</i>	4	ND
	ES	DH166	D	B1	+++	<i>udiAcrlfimHial</i>	3	ND
		DH187	H	A1	+	ND	0	AMPDoFCIPNAFoxC
	IO(L)	DH144	H	B2(B2 ₃)	+	ND	0	NS
		DH145	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	3	AMPDoTeFCIPNAIMP C
		DH149	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	4	ND
		DH173	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	1	ND
		DH175	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	4	AMPDoTeFCIPNAGN SATM
		DH191	D	B2(B2 ₂)	+++	ND	0	AMPTeFNAGNIMPCA TM
		DH196*	H	A1	++	ND	0	AMPTeFNAS
Farm 4	DR	RN3(2)*	D	B1	+++	<i>udiAcrlfimHial</i>	1	AMPDoTeCIPGNCSAT M
		RN07#	D	A1	+++	<i>udiAcrlfimHial</i>	2	AMPDoTeFNA
		RN08	H	A1	+	ND	0	ND
		RN09	H	A1	++	<i>udiAfmHial</i>	0	ND
		RN10*	D	A1	+++	<i>udiAcrlfimHialpapC</i>	1	AMPTeNAGNS
		RN14*	D	B2(B2 ₂)	++	<i>udiAcrlfimHial</i>	1	AMPDoTeFCIPIMPC
		RN22	D	B2(B2 ₂)	+++	ND	0	AMPDoTeCIPIMPC
		RN33	H	B1	+++	ND	2	ND
		RN34	D	A1	+++	<i>udiAfmHialcjrC</i>	4	AMPFNAGNCS
		RN35#	D	B2(B2 ₂)	++	ND	3	AMPDoTeFNASCATM
		RN62	D	D2	+	<i>udiAcrlfimHial</i>	0	DoFIMP
		RN63	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	1	ND

		RN64	D	A1	+++	<i>udiAcrlfimHial</i>	0	AMPDoteF
		RN65	D	A1	+++	<i>udiAcrlfimHial</i>	0	ND
	CS	RN36	H	B2(B2 ₃)	++	<i>udiAcrlfimHialcjrC</i>	4	ND
		RN38	H	B2(B2 ₃)	+	ND	1	AMPDoteCIPNAC
		RN39	D	B2(B2 ₃)	++	ND	0	AMPDoteFFoxGN
		RN41#	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	3	DoTeCS
		RN66#	D	A1	+++	ND	0	AMPDoteCIPNAC
		RN68	H	A1	++	ND	4	ND
	F	RN42*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHialcjrC</i>	0	AMPDoteNA
		RN43	H	A1	++	<i>udiAcrlfimHial</i>	0	ND
	W	RN32	D	D2	+	<i>udiAcrlfimHialpapCcjrC</i>	1	AMPDoteCIPNAFoxS
	H	RN16	D	A1	+++	<i>udiAcrlfimH</i>	0	AMPDoteFCIPFoxATM
		RN18	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	4	AMPDoteFFoxCS
		RN19	D	B2(B2 ₂)	++	<i>udiAcrlfimHial</i>	4	TeFCIPIMPCATM
		RN29	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	0	AMPDoteNAFoxIMP
		RN30	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	2	TeFCIPFoxS
		RN31	H	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	0	DoTeNAFoxGN
	IO(L))	RN20	H	B2(B2 ₃)	+	ND	0	ND
		RN46	H	B2(B2 ₃)	+	ND	4	AMPDoteFCATM
		RN47	H	A1	++	<i>udiAcrlfimHial</i>	0	ND
		RN48	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	0	AMPTeFPBNAGNAT M
		RN50*	D	B2(B2 ₂)	+++	<i>udiAcrlfimHialcjrC</i>	0	AMPDoteFCIP
		RN51*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	0	DoTeCIPNAFoxCATM
		RN52	H	B2(B2 ₃)	++	ND	2	ND
		RN53	H	A1	+	ND	0	ND
		RN54	D	A1	+++	<i>udiAialpapC</i>	2	AMPFPB

		RN55	D	A1	+++	<i>udiAialpapC</i>	0	AMPTeCIPFoxIMPS
		RN58	D	B2(B2 ₃)	++	ND	0	AMPDoTeFCIP
		RN59*	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	2	DoTeFCIPGNCS
		RN60	D	A1	++	ND	0	ND
Farm 5	DR	RN93*	H	B1	+++	<i>udiAcrlfimHial</i>	4	AMPDoTeFNAFoxS
		RN105	D	B2(B2 ₂)	++	<i>udiAcrlfimHialpapC</i>	0	ND
		RN106	H	B2(B2 ₃)	++	ND	3	DoTeCIPNAC
		RN110	D	A1	+++	<i>udiAcrlfimHial</i>	0	DoTeCIPNAS
		RN111	H	A1	++	<i>udiAcrlfimHial</i>	0	AMPDoTeNAFoxGNC
		RN112	H	A1	++	<i>udiAcrlfimHial</i>	0	AMPTeFNAFoxGN
		RN113	D	B2(B2 ₂)	+++	<i>udiAcrlfimHialcjrC</i>	0	ND
		RN114	H	B2(B2 ₂)	+	ND	1	ND
		RN117*	D	B2(B2 ₃)	++	<i>udiAcrlfimHialcjrC</i>	2	AMPDoTeFNASATM
		RN118#	D	A1	+++	<i>udiAcrlfimHialcjrC</i>	0	AMPDoTeCIPNAIMPC
		RN122*	H	A1	+++	<i>udiAcrlfimH</i>	1	DoTeFC
		RN133	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	0	AMPDoTePBCIPGNC
		RN135	H	B2(B2 ₃)	++	ND	0	ND
		RN138	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	0	AMPDoTeCIPFoxCAT M
		RN139	D	B2(B2 ₃)	++	<i>udiAcrlfimHialcjrC</i>	0	DoTeFGN
	CS	RN99	H	B2(B2 ₃)	+	ND	3	ND
		RN100	D	B2(B2 ₂)	++	<i>udiAcrlfimHialpapC</i>	0	ND
		RN101*	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	1	ND
		RN102	D	D2	++	<i>udiAcrlfimHial</i>	0	ND
		RN119	H	A1	++	ND	0	AMPTeFS
	W	RN123	H	A1	++	<i>udiAcrlfimHial</i>	0	ND
		RN128	D	A1	+++	<i>udiAcrlfimHial</i>	0	ND
		RN131	D	A1	+++	<i>udiAcrlfimHial</i>	0	ND

		RN132	D	A1	++	ND	0	AMPDoFIMPS
	ES	RN83*	D	B2(B2 ₃)	++	<i>udiAcrlfimHial</i>	0	AMPDoTeFCIPFox
		RN84	D	A1	+++	<i>udiAcrlfimHial</i>	0	AMPDoFCSATM
		RN85	D	A1	+++	<i>udiAialpapC</i>	0	AMPDoTeFNAATM
		RN86	D	A1	++	ND	0	AMPDoTePBCIPFoxG N
		RN87	D	B2(B2 ₃)*	+++	<i>udiAcrlfimHial</i>	0	AMPTeC
		RN88	D	B2(B2 ₃)	+++	<i>udiAcrlfimHial</i>	1	ND
	H	RN70	D	D2	++	<i>udiAcrlfimHialpapCcjrC</i>	1	ND
		RN71*	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	2	AMPDoTeFCIPGNS
		RN89#	D	A1	+++	<i>udiAcrlfimHial</i>	0	DoTeFCIP
		RN90	D	B2(B2 ₃)	++	<i>udiAcrlfimHialpapCcjrC</i>	0	AMPFCIPFoxIMPCAT M
		RN95	D	B2(B2 ₃)	++	ND	3	ND
		RN96*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapCcjrC</i>	1	AMPTeCIPCS
	IO(L)	RN97*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	3	AMPDoTeCIPFox
		RN126	D	D2	++	<i>udiAcrlfimHialpapC</i>	0	ND
		RN98	D	B2(B2 ₃)	++	<i>udiAcrlfimHialpapC</i>	2	AMPDoTeFC
Farm 6	DR	NR1*	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialcjrC</i>	1	AMPDoTeFNAC
		NR3	D	B2(B2 ₃)	+++	ND	0	ND
		NR4	D	B2(B2 ₃)	++	ND	0	ND
		NR6	D	D2	+++	<i>udiAcrlfimHialpapCcjrC</i>	0	ND
		NR9	D	B2(B2 ₃)	++	ND	1	AMPDoTeNAFoxS
		NR10#	D	B2(B2 ₃)	+++	<i>udiAcrlfimHialpapC</i>	2	AMPDoTeFPBCIPNAI MPCATM
	CS	NR13	D	B2(B2 ₃)	+	ND	0	AMPDoTeNACS
		NR14	D	A1	+++	<i>udiAcrlfimHial</i>	2	AMPDoTeFCIPNACS
		NR15	D	A1	+	ND	3	ND

		NR20	D	A1	++	<i>udiAcrIfimHial</i>	3	ND
	F	NR28	D	B2(B2 ₃)	+++	<i>udiAcrIfimHial</i>	0	ND
		NR34#	D	A1	+++	<i>udiAcrIfimHialcjrC</i>	0	TeFNAFoxCS
	IO(L)	NR35	D	B2(B2 ₃)	+++	<i>udiAcrIfimHial</i>	2	AMPDoTeFNAFoxIMP CS
		NR45*	D	A1	+++	<i>udiAcrIfimHialcjrC</i>	1	AMPTeNAFoxSATM
		NR46*	D	B2(B2 ₂)	++	<i>udiAcrIfimHialcjrC</i>	2	AMPDoTeNAFoxIMP GNATM
		NR47	D	A1	++	<i>udiAcrIfimHial</i>	2	FCIPNACSATM
		NR48*	D	D2	+++	<i>udiAcrIfimHialpapCcjrC</i>	1	DoTeFNACS

DH- Dhamrai, RN- Rupganj, NR- Norshingdi, DR-Dropping, CS-Cloacal Samples, F- Feed, W-Feeding Water; H = Handler Swab; ES = Egg Surface Swab; IO(L) = Internal Organ(Liver); H-healthy, D-Diseases, BF-Biofilm Formation, CRA-Congo Red Assay, ND- Not Done; AMP = ampicillin; Te = Tetracycline; Do = doxycycline; F = nitrofurantoin; Pb = polymyxin CIP=ciprofloxacin; NA=nalidixic acid; Fox=cefoxitin; IMP = imipenem;GN=gentamycin; C = chloramphenicol S3 = Sulfonamide; AZM = azithromycin; + = Positive; 0 = Not Done; 4=Not Biofilm Producer; 3 = Weak biofilm producer ; 2 = Moderate biofilm producer; 1 =Strong biofilm producer.*-Plasmid Positive; # Plasmid Negative.

