



Chromosomal and plasmid DNA mediated antibiotic resistance among *Staphylococcus aureus* obtained from mastitic milk of cattle in Jaipur, Rajasthan

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Supplementary Table 1. Antibiotic sensitivity pattern of *Staphylococcus aureus* isolates

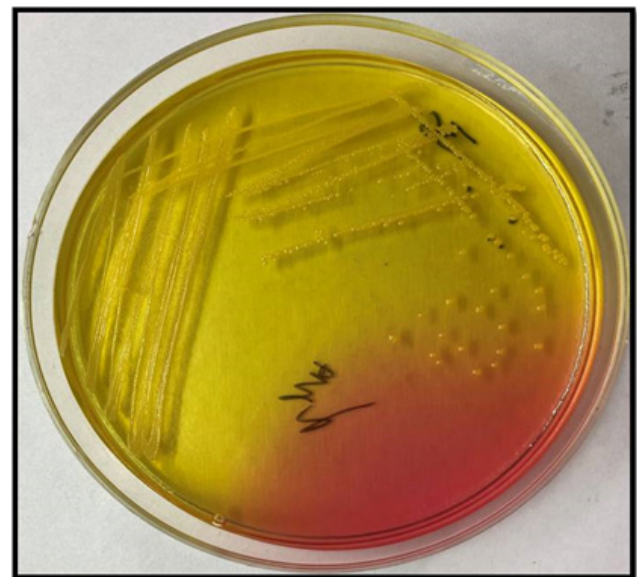
Antibiotic (Symbol ^{Concentration})	Overall pattern as per number of isolate (Percentage)		
	Sensitive	Intermediate	Resistant
Azithromycin/ AZM ¹⁵	05 (25.0)	06 (30.0)	09(45.0)
Cefoxitin/CX ³⁰	09 (58.3)	0 (0.0)	11 (55.0)
Chloramphenicol/C ³⁰	10 (50.0)	07 (35.0)	03 (15.0)
Ciprofloxacin/CIP ⁵	02 (10.0)	07 (35.0)	11 (55.0)
Clarithromycin/ CLR ¹⁵	09 (45.0)	05 (25.0)	06 (30.0)
Clindamycin/CD ²	05 (25.0)	13 (65.0)	02 (10.0)
Doxycycline Hydrochloride/ DO ³⁰	13 (65.0)	03 (15.0)	04 (20.0)
Erythromycin/E ¹⁵	01 (5.0)	13 (65.0)	06 (30.0)
Gentamicin/ GEN ¹⁰	17 (85.0)	03 (15.0)	0 (0.0)
Levofloxacin/LE ⁵	04 (20.0)	04 (20.0)	12 (60.0)
Linezolid/ LZ ³⁰	08 (40.0)	0 (0.0)	12 (60.0)
Minocycline/MI ³⁰	10 (50.0)	5 (25.0)	05 (25.0)
Penicillin –G/ P ^{10U}	04 (20.0)	0 (0.0)	16 (80.0)
Tetracycline/ TE ³⁰	12 (60.0)	05 (25.0)	03 (15.0)

Supplementary Table 2. Detection of Antibiotic resistant *blaZ* gene in *S. aureus* isolates

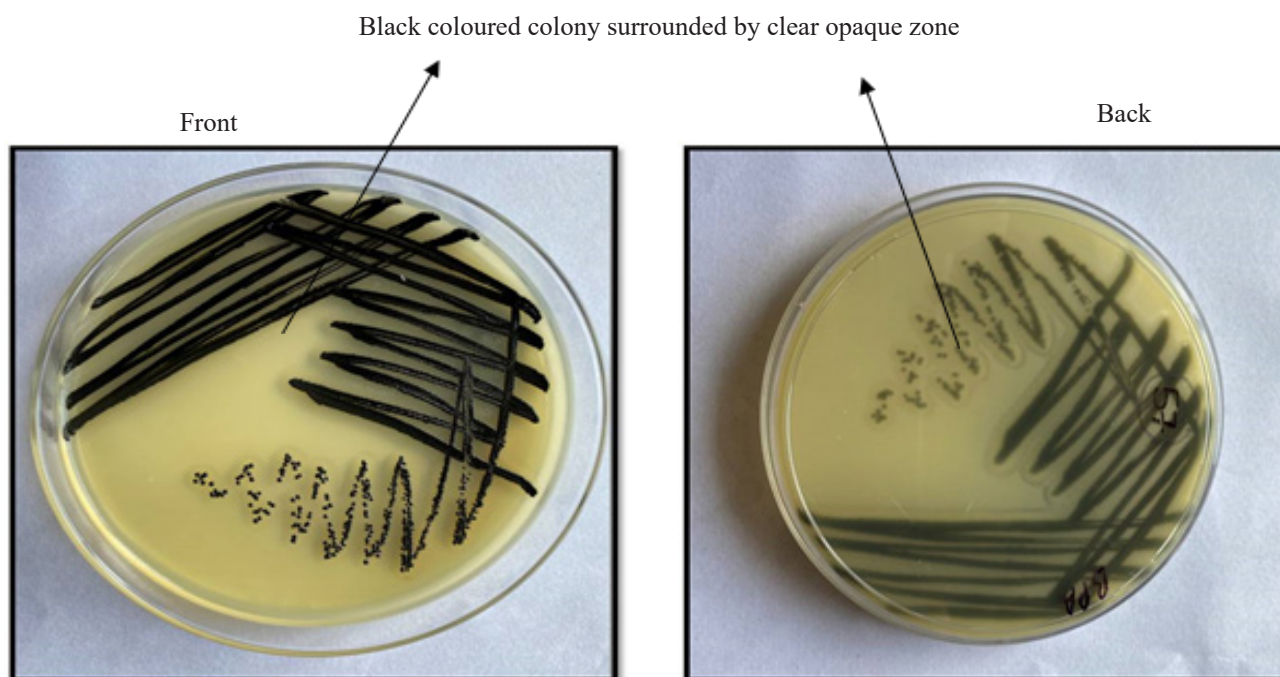
S. No.	Chromosomal DNA		Plasmid	
	Positive (No.)	Negative (No.)	Positive (No.)	Negative (No.)
1.	C4, C18, C27, C34, C47, C48, C50, C53, C54, C57, C58, C61, C68, C69, C73, C74, C80, C93	C29, C36	C47, C48, C53, C54, C57, C61, C68, C69, C73, C74, C80, C93	C4, C18, C27, C29, C34, C36, C50, C58
Total	18 (90%)	02 (10%)	12(60%)	08 (40%)

Supplementary Table 3. Detection of Antibiotic resistant *mecA* gene in *S. aureus* isolates

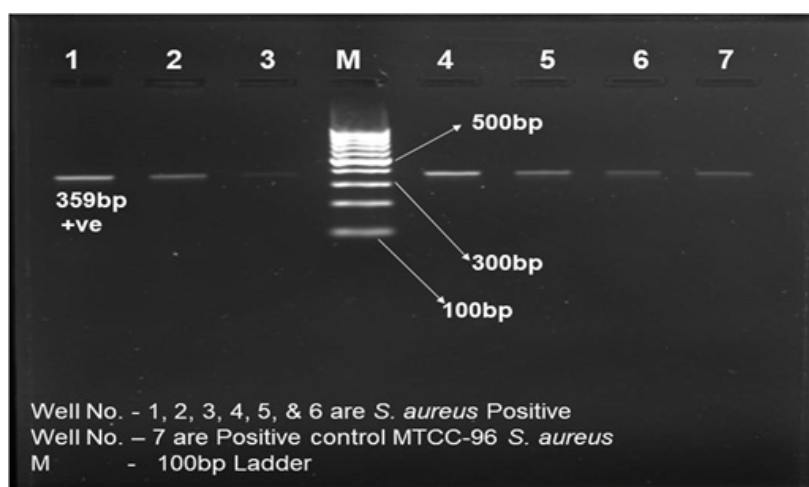
S. No.	Chromosomal DNA		Plasmid	
	Positive (No.)	Negative (No.)	Positive (No.)	Negative (No.)
1.	C69	C4, C18, C27, C29, C34, C36, C47, C48, C50, C53, C54, C57, C58, C61, C68, C73, C74, C80, C93	C69	C4, C18, C27, C29, C34, C36, C47, C48, C50, C53, C54, C57, C58, C61, C68, C73, C74, C80, C93
Total	01 (5%)	19 (95%)	01 (5%)	19 (95%)



Supplementary Figure 1(a). Growth of *Staphylococcus aureus* isolates on Mannitol Salt Agar: *Staphylococcus aureus* isolates show golden yellow colour colony on Mannitol Salt Agar



Supplementary Figure 1(b). Growth of *Staphylococcus aureus* isolates on Baird Parker Agar: *Staphylococcus aureus* isolates show Black coloured colony surrounded by clear opaque zone



Supplementary Figure 2. Genotypic confirmation of *Staphylococcus aureus* isolates based on *nuc* gene PCR (amplicon size 359bp), Well No. 1,2,3,4,5 & 6 are *S. aureus* positive, Well No.7 are positive control MTCC-96 *S. aureus*, M: 100bp Ladder