

Supplementary materials

***Staphylococcus aureus* in intensive pig production in South Africa: antibiotic resistance, virulence determinants, and clonality**

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Table S1: Multidrug resistance profiles of *S. aureus* isolates.

MDR PATTERN	Frequency
LZD-FOX-RIF-ERY-AMK-GENT-TIG-CLI-AMP-PEN-SXT-CIP-MXF-LVX-TET-DOX-NIT-CHL-TEC	1
LZD-FOX-RIF-ERY-CLI-GENT-AMP-PENG-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	2
LZD-FOX-RIF-ERY-CLI-GENT-AMP-PEN-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	1
LZD-FOX-RIF-ERY-CLI-AMP-PEN-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	6
LZD-FOX-RIF-ERY-CLI-AMP-PEN-SXT-CIP-MXF-TET-DOX-NIT-CHL-VAN-TEC	1
LZD-RIF-ERY-CLI-GENT-TIG-AMP-PEN-MFX-DOX-TET-SXT-CHL-NIT-VAN-TEC	1
LZD-FOX-RIF-ERY-CLI-GENT-TIG-AMP-PEN-DOX-TET-SXT-CHL-NIT-VAN-TEC	1
LZD-RIF-ERY-GENT-CLI-AMP-PEN-DOX-TET-SXT-CIP-MXF-LVX-NIT-CHL-VAN-TEC	1
LZD-FOX-RIF-ERY-TIG-CLI-AMP-PEN-DOX-TET-CHL-SXT-NIT-VAN-TEC	1
FOX-RIF-ERY-AMK-GENT-CLI-PEN-DOX-TET-SXT-CIP-MXF-LVX-CHL-VAN	1
LZD-RIF-ERY-CLI-AMP-PEN-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	2
LZD-RIF-ERY-CLI-AMP-PEN-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	8
LZD-FOX-RIF-ERY-CLI-TIG-TET-DOX-AMP-PEN-SXT-MXF-CHL-VAN-TEC	1
LZD-RIF-ERY-CLI-AMP-PEN-SXT-MXF-TET-DOX-NIT-CHL-VAN-TEC	1
LZD-RIF-ERY-GENT-CLI-AMP-PEN-DOX-TET-CHL-SXT-NIT-VAN-TEC	1
LZD-FOX-RIF-ERY-CLI-AMP-PEN-DOX-TET-SXT-NIT-CHL-TEC	1
LZD-FOX-RIF-ERY-CLI-TIG-AMP-PEN-SXT-TET-DOX-NIT-CHL-TEC	1
LZD-RIF-ERY-CLI-TIG-AMP-PEN-DOX-TET-SXT-MXF-CHL-NIT-VAN-TEC	1
LZD-RIF-ERY-CLI-PEN-SXT-TET-DOX-NIT-CHL-TEC	1
LZD-FOX-RIF-ERY-CLI-TIG-AMP-PEN-SXT-TET-DOX-NIT-VAN-TEC	1
LZD-RIF-ERY-CLI-AMP-PEN-SXT-TET-DOX-NIT-CHL-VAN-TEC	7
LZD-RIF-ERY-CLI-AMP-PEN-SXT-TET-DOX-NIT-CHL-TEC	1
LZD-FOX-RIF-ERY-CLI-GENT-AMP-PEN-SXT-MXF-CIP-LVX-CHL-VAN-TEC	1
LZD-RIF-ERY-CLI-TIG-AMP-PEN-SXT-TET-DOX-NIT-CHL-VAN-TEC	1
LZD-RIF-ERY-CLI-AMP-PEN-SXT-MXF-TET-DOX-VAN-TEC	1
RIF-ERY-CLI-AMP-PEN-SXT-TET-DOX-CHL-TEC	1
LZD-FOX-RIF-ERY-CLI-PEN-MXF-DOX-VAN-TEC	1
LZD-RIF-ERY-CLI-AMP-PEN-TET-DOX-NIT-CHL-VAN-TEC	2
LZD-RIF-ERY-CLI-AMP-PEN-TET-DOX-NIT-CHL-TEC	1
LZD-RIF-ERY-CLI-PEN-SXT-TET-DOX-VAN-TEC	1
LZD-FOX-RIF-ERY-CLI-PEN-NIT-VAN-TEC	1
RIF-ERY-CLI-PEN-DOX-TET-CHL-VAN	1
ERY-CLI-PEN-TET-LVX-VAN	1
ERY-CLI-PEN-SXT-TET-DOX-VAN	1
RIF-ERY-CLI-PEN-TET-DOX-VAN	2
ERY-CLI-AMP-PEN-TET-DOX-CHL-VAN	1
ERY-CLI-AMP-PEN-SXT-TET-DOX-CHL	1
ERY-CLI-AMP-PEN-SXT-TET-DOX-TEC	1
ERY-CLI-PEN-SXT-TET-DOX-VAN	1
ERY-CLI-AMP-SXT-TET-DOX	1
ERY-CLI-PEN-TET-DOX-VAN	2
ERY-CLI-AMP-PEN-SXT-TET-DOX	1

LZD-ERY-CLI-TET-VAN	1
RIF-ERY-PEN-TET-DOX	1
ERY-CLI-DOX-TET-SXT-NIT	1
ERY-CLI-AMP-PEN-SXT-TET-DOX-VAN	1
ERY-CLI-DOX-TET-SXT	1
ERY-CLI-TET-VAN	1
ERY-CLI-DOX-TET-SXT	1
ERY-CLI-AMP-PEN-DOX-TET	1
CLI-PEN-TET-DOX	1
ERY-CLI-TET-VAN	1
ERY-CLI-DOX-TET-VAN	2
AMP-PEN-SXT-VAN	1
ERY-CLI-PEN-SXT	1
ERY-CLI-TET-DOX-VAN	1

Table S2: List of primers used to detect antibiotic resistance and virulence gene.

Gene	Primer/sequence	PCR conditions	PCR size (bp)	Reference
Resistance				
<i>mecA</i>	F-AACAGGTGAATTATTAGCACTTGTAAG R-ATTGCTGTTAATATTTTTGAGTTGAA	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	174	(Kuntova et al., 2012)
<i>blaZ</i>	F-ACTTCAACACCTGCTGCTTT R-TGACCACTTTTATCAGCAAC	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	173	(Kuntova et al., 2012)
<i>ermC</i>	F-CTTGTTGATCAGGATAATTTCC R-ATCTTTTAGCAAACCCGTATTC	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	190	(Kuntova et al., 2012)
<i>aac(6')-aph(2'')</i>	F-TAATCCAAGAGCAATAAGGGC R-GCCACACTATCATAACCACTA	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	227	(Kuntova et al., 2012)
<i>msrA</i>	F-TCCAATCATAGCACAAAATC R-AATTAATATATTTGGTCGT	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	163	(Kuntova et al., 2012)
<i>tetK</i>	F-TCGATAGGAACAGCAGTA R-CAGCAGATCCTACTCCTT	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	169	(Kuntova et al., 2012)
<i>tetM</i>	F-AGTGGAGCGATTACAGAA R-CATATGTCCTGGCGTGTCTA	30 s 94 °C, 30 s 55 °C, 1 min 72	158	(Kuntova et al., 2012)
Virulence				
<i>Hla</i>	F-CTGATTACTATCCAAGAAATTCGATTG R-CTTTCCAGCCTACTTTTTATCAGT	30 s 95 °C, 45 s 58 °C, 1 min 72 °C	209	(Hoseini Alfatemi et al., 2014)
<i>Hld</i>	FAAGAATTTTTATCTTAATTAAGGAAGGAGTG R-TTAGTGAATTTGTTCACTGTGTCGA	30 s 95 °C, 45 s 58 °C, 1 min 72 °C	111	(Hoseini Alfatemi et al., 2014)
<i>Eta</i>	F-GCAGGTGTTGATTTAGCATT R-AGATGTCCTATTTTTGCTG	30 s 95 °C, 45 s 54 °C, 1 min 72 °C	93	(Hoseini Alfatemi et al., 2014)
<i>Etb</i>	F-ACAAGCAAAAGAATACAGCG R-GTTTTTGGCTGCTTCTCTTG	30 s 95 °C, 45 s 54 °C, 1 min 72 °C	226	(Hoseini Alfatemi et al., 2014)

<i>Sea</i>	F-GGTTATCAATGTGCGGGTGG R-CGGCACTTTTTTCTCTTCGG	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	102	(Hoseini Alfatemi et al., 2014)
<i>Seb</i>	F-GTATGGTGGTGTAACTGAGC R-CCAAATAGTGACGAGTTAGG	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	164	(Hoseini Alfatemi et al., 2014)
<i>Sed</i>	F-CCAATAATAGGAGAAAATAAAAG R-ATTGGTATTTTTTTCGTTC	30 s 94 °C, 30 s 55 °C, 1 min 72 °C	278	(Hoseini Alfatemi et al., 2014)
<i>Tst</i>	F-ACCCCTGTTCCCTTATCATC R-TTTTCAGTATTGTAAACGCC	30 s 94 °C, 30 s 60 °C, 1 min 72 °C	326	(Hoseini Alfatemi et al., 2014)
<i>LukS/F-PV</i>	F-ATCATTAGGTA AAAATGTCTGGACATGATCCA R-GCATCAAGTGATTGGATAGCAA AAGC	30 s 95 °C, 45 s 60 °C, 1 min 72 °C	443	(Hoseini Alfatemi et al., 2014)