Supplementary Table 2. Geographical distribution, species, clones, and resistance mechanisms of antibiotic-resistant Gram-positive bacteria isolated from animals in Africa from 2007–2019.

Country (n)[1]	Year	Organism/ Species (n)[2]	Specimen Sources (n)[3]	Sample size (Resistant isolates)	Clones (n)[4]	Resistance genes/ mechanisms (n)[5]	Antibiotic resistance phenotype (n)[6]	MGEs (n)[7]	Reference
Angola(1)	2015	*E. faecium* (3)	Pig feces(1), Chicken feces(2)	3	ST971, ST245(2)	*tet(*L)(1), *tet*(M)(2), *erm*(B)(2)	CIP(1),TET(3),ERY(2),STR(2),NIT(2),Q/D(2)	ND	1
Egypt (15)	2019	*E.faecium(53), E.avium(14), E.raffinosus(14), E.gallinarum(6), E.durans(8), E.faecalis(11)*	Chicken (30), ducks(35), pigs(41)	(106)	ND	*CatA(20), CatB(20), fexA(15),fexB(11), van A(20),vanB(27),vanC(35)*	AMP(77),CLI(106),ERY(105),TET(104),GEN(105),CIP(105),CHL(81), van(101)	ND	2
	2017	*S. aureus*(3),*S. hycus*(6), *S. intermedius*(3) *S. epidermis*(1) *S. hemolyticus*(1), *S. hominis*(1), *S.l ugdunensis*(3), *S. simulans*(1),*S. scuri*(4)	imported beef meat (23)	23(16)	ND	*mecA*(5), *gyrA*(12), *grlA*(10),*gyrB*(6),	AMP(6),CHL(1),CIP(8),CLI(15), ERY(6),GEN(14),MET(8),OXA(13) ,PEN(22), TET(6)	SCC*mec*(5)	3
	2017	*S. aureus* (84)	Milk(84)	84(80)	ND	*mecA*(42),*blaZ*(67)	AMX(54), SXT(66),GEN(20),CIP(12),CHL(58),PEN(70),RIF(32),AMK(14), VAN(64),STR(50),TET(44),ERY(40), AMP(80),OXA(42)	SCC*mec*(42)	4

[1] Total number of studies per country
[2] Total number of bacteria isolated
[3] Total number of Specimen source
[4] Total number of resistant clones
[5] Total number of resistant genes
[6] Number of different antibiotics any one isolate is resistant to
[7] Total number of mobile genetic elements: plasmids, transposons, integrons

	2016	*S. aureus* (73)	Animal (73)	73(NS)	ST113(1), ST80(1)	*mecA*(14), *erm(*C)(14)	CLI(NS),CIP(NS),GEN(NS),SXT(NS),OXA(NS),ERY(NS)	SCC*mec*(14)	5
	2016	*S. aureus* (30)	raw chicken breast fillet (40), sliced luncheon meat (20), and chicken nuggets (20), Human (18)	40 (21)	ND	*mecA* (10)	DOX(31), AMX(29), OFX(10), CFP(23), CLI(21), GEN(20), APR(16), ERY(21), SXT(23), LUX(18), NAL(20), OFX(10), CIP(16).	SCC*mec*(10)	6
	2016	*S. aureus* (70)	Bovine(70)	70(41)	ND	*mecA*(2)	CRO(41),ERY(35),OXA(41),SXT(14),GEN(14), CIP(11),CLI(8),VAN(1)	SCC*mec*(2)	7
	2016	*S. aureus* (40)	Milk(30), meat(10)	40(22)	ND	*erm*(A)(18),*mrs*(A)(4),*mph*C(6),*erm(*B)(3)	ERY(22),CLI(4),TET(24),CIP(4),CHL(5),AMX(26),FOX(22),SXT(1),RIF(5),GEN(4),CRO(14)	ND	8
	2016	*S. aureus* (200)	Raw milk (40), Damietta Cheese (40), Kareish cheese (40), ice cream (40), and yogurt (40)	200 (106)	ND	*mecA*(106)	TET(270), NEL(78), AMX(230), CLX(314),STR(186),SXT(58), GEN(114), PEN(364), RIF(152), CHL(128), AMK(146), VAN(36)	SCC*mec*(106)	9
	2016	*E. faecalis(6), E.gallinarum (2)*	Fish (8)	(8)	ND	*VanC(3),vanA(3)*	PEN(1),VAN(1),AP(2),ERY(6),TET(8),CIP(1),AMP(2)CHL(3),RIF(4)GEN(1)	ND	10
	2015	*S. aureus* (133)	cow milk samples (61), various origins (14), minced meat (6), sausage (4) and burger (7), pus (22), sputum (17), urine (1), cerebrospinal fluid (1)	133 (96)	ND	*mecA* (30)	CRO(96), TET(90), OXA(70), FOX(65), ERY(81),VAN(4),IPM(7),CRO(96),CHL(12) , GEN(36),CLI(29), CIP(31),RIF (18)	SCCmec (30)	11

	2015	S.aureus *(50), Staphylococcus (168)*	Cattle (200), buffalo (18	218	ND	*mecA(1), blaZ(48),erm(C),tet(K),(43),tet(M)(1)*	TET(43), PEN(48),CLI, SXT	SCCmec(1)	12
	2015	E. faecium (37), E. faecalis (13), Enterococcus spp.	Raw milk cheese	120(14)	ND	*tet(M)(6), tet(K)(1),tetL(4), erm(B)(2), aph(3')(2)*	CLI(14),CIP(4),KAN(11),STR(11),VAN(6),	Tn916 (7)	13
	2015	*S. aureus* (288)	Chicken(288)	288(256)	ND	*mecA*(76)	PEN(269),AMP(256),CLX(240),AMX(224),ERY(212), TET(197),STR(150),RIF(113),AMK(99),CHL(91),GEN(70),CIP(39),NEL(48),SXT(39),VAN(17)	SCC*mec*(76)	14
	2015	*S. aureus (50), CONs(110)*	Cattle (146), buffalo milk (14)	160(12)	ND	*mecA(12),blaZ(10),tetK(90,tetM(6),ermC(1),kata(6),blaZ(5),ermB(2),ermC(1),tetK(3),tetM(1)*	ERY,TET, PEN	SCCmec(12)	12
	2012	*S. aureus* (4)	dogs swab (70), cats swab (48), human nasal and oral swabs (50).	(4)	ND	*mecA* (4)	OXA(4), FOX(4), AMP(3),FOX(4),RIF(3),GEN(2),CLI(2),RIF(2),CIP(2),TET(1)	SCCmec(4)	15
Kenya (1)	2013	*S. agalactiae* (92)	Camel(92)	92 (37)	ST617 (8), ST-612 (1),ST-616 (22)	*tet(*M) (37)	TET(37)	Tn916 (37)	16
Nigeria (5)	2018	*Staphylococcus (24)*	Beet (17), pork (3),chicken (3), Goat meat (1)	24(17)	ND	*mecA(6), tetK(6),mphC(3),ermt(2),ermC(1)*	FUS(19),FOX(6),OXA(6),TET(6),ERY(5),VAN(3),SXT(2),GEN(1),STR(1),KAN(1)	SCCmec(6)	17
	2017	*S. aureus* (30), *S. epidermidis*(16), *S. saprophyticus*(2), *S. sciuri*(1), *S. xylosus*(1)	Pork(26),beef(14),chicken(10)	50(48)	ND	*mecA*(49)	PEN(48),CLI(48),CHL(46),SXT(46),KAN(46),AMX(460	SCC*mec*(49)	18
	2017	*E. faecium (108), E. gallinarum, (30), E. faecalis (5), E. hirae. (5) E. mundtii (12)*	Cattle (130), chickens (130),manure (130)	167 (102)	ND	*tet(*K) (NS), *tet*(L) (NS), *tet(*M) (NS), *tet*(O) (NS) *and erm(*B) (NS)	TET (102), ERY (102), CHL (13), GEN(55), STR(47),AMP(75)	ND	19

	2016	*E. faecium (33), E.casseliflavus (21), E.gallinarium(6)*	Chicken faeces (60)	(60)	ND	*tetM(14)*	ERY(60),TET(49),OFL(41),VAN(39),GEN(12)	IS256(4)	20
	2014	*Coagulase negative staphylococcus* (16)	Groin swab of dogs(16)	(16)	ND	*mecA*(16),*blaZ*(1),*tet*K(12),*tet*(M)(8),*erm*(B)(3),*aacA-aph*D(11)	PEN(16),OXA(16),FOX(16),TET(13),ERY(9),CLI(9),GEN(5),KAN(12),TOB(1),SXT(10),CHL(7)	SCC*mec*(16)	21
South Africa (8)	2019	*S.aureus (120)*	Poultry (120)	120(11)	ST612(11), ST36	*mecA(12),blaZ(12),aac(6')-aph(2")(9),erm(C)(3),tetM(10),gyrA(100,parC(580y), mrs(A)(3)*	PEN(12),AMP(12),FOX(12),AMK(2),GEN(11),CIP(11),MXF(11),LEC(11),TET(11),ERY(9)	SCCmec(12)	22
		S.aureus (134)	Raw milk (134)	134	ND	*mecA(1), tetK(26),tetM(29)*	PEN(87),OXA(82),TET(48),ERY(59),AMK(24), GEN(15),CIP(7),CLI(68),CHL(4),SXT(28)	SCCmec(1)	23
	2016	*E. faecium* (180), *E. durans*(80), *E. hirae*(29), *E. casseliflavus*(20)	Cattle (340)	100	ND	*vanB*(67),*vanC1*(85),*vanC*2/3(137),*erm*(B)(137)	ERY(338),CLI(330),VAN(340),PEN(310),CET(300),STR(320),CLX(100),AMK(252),CIP(41)	ND	24
	2017	*S. aureus* (104)	Chicken(104)	(104)	ND	*mecA*(45),*blaZ*(12), *tet(*K)(32)	AMP(46),GEN(29),ERY(64),FOX(71),KAN(52),STR(57),TET(82),VAN(43)	SCC*mec*(45)	25
	2015	*S. aureus* (211)	Milk (211)	211 (124)	ND	*mecA* (19)	PEN (124), AMP(99), OXA (93), VAN(47), TEC(116), TET(56),ERY(56),STR(89),KAN(55),GEN(47),SXT (37)	SCCmec(19)	26
	2015	*E. faecalis* (40), *E. hirae* (100), *E. durans* (60), *E. faecium* (120)	Pigs (320)	(320)	ND	*vanB*,(320), *vanC*1 (320), *vanC*2/3 (320), *erm(*B)(300)	VAN(320), STR(320) and CLX(320),STR(320),CET(286),PEN(292),CIP(248),AMO(64), AMK(272),CLI(316),ERY (280),IPM (52),	ND	27
	2014	*Staphylococcus spp* (120)	Pigs (30), Cattle (30), Cows (30), Goats (30)	120(53)	ND	*mecA*(12)	VAN(12),CRO(12),CFZ(37),CTX(19),SAM(13), PEN(53),MER(4)	SCC*mec*(12)	28

	2014	*S. xylosus* (18), *S. aureus* (28), *S. haemolyticus* (42), *S. capitis* (18), *and other Staphylococcus spp.* (14)	Animals (120)	(120)	ND	*mecA* (45), *mphC(*NS)	PEN (90), MER(3), VAN(14), CTX(14), CFZ(48), OXA(46), MIC(19), TET(100), ERY(14), CLI(19), NAL(120), CIP(5), OFX(6), LUX(2)	*SCCmec (*45)	29
Sudan	2007	*S. intermedius(15)*	Dogs(15)	15	ND	*baZ(17), mec A(14)*	PEN(17),MET(14)	*SCCmec(14)*	30
Senegal (1)	2012	*S. aureus* (57)	Swabs from pigs (300) and farmers	57(35)	ST5 (5),ST88(1)	*mecA*(6)	PEN(57), SXT(35), TET(20)	*SCCmec (6)*	31
Tanzania (1)	2018	*S.aureus (46), CONs(42)*	Bovine milk(88)	88	ND	*mecA(3)*	CLI(21),VAN(2),SXT(27),TET(36),PEN(63),OXA(6),FUS(4)	*SCCmec(3)*	32
	2018	*E.faecium(77), E.faecalis(95), E.gallinarum(6), E. avium(6)*	Cattle and cattle waste (	184(129)	ND	*vanA(3),vanB(3)*	AMP(4),CHL(9),GEN(117),ERY(48),RIF(129), SXT(43),TET(74), VAN(9)	*ND*	33
	2015	*E. faecium* (95) *E. faecalis*(9) *E. gallinarum* (7) *E. Hirae* (9)	Fecal samples of buffalo (35), wildebeest (40), zebra (40) and cattle (20)	120 (42)	ND	*tet*(W) (NS), *sulII* (NS)	VAN(10),AMP(10),TET(40),SXT(32),RIF(53),ERY(42),GEN(35)	*ND*	34
Tunisia (10)	2018	*E.faecalis(53), E.faecium(19), E.casseliflavus(7)*	Wild birds(79)	79(37)	E.faecalis ST16(1),ST848(1), ST9(1)	tetM(33),tetL(12), ermB(22),ermC(5), cat(6),aac(6')-le-aph(2")-la(3)	KAN(10),CHL(7),TET(37),ERY(270,CIP(170,SXT(15),PRI(3), VAN(5),STR(2),GEN(30	*ND*	35
	2018	*S.aureus(27)*	Diary cows(27)	27(16)	ST97(1)	mecA(1),blaZ(13),tetM(2), tetK(1),fusc(1)	PEN(16),ERY(6),FUS(14),CLI(7),TET(7),FOX(1)	*SCCmec(1)*	36
	2017	*E. faecium* (31), *E. f aecalis* (14), *E. durans*(6), *E. casseliflavus* (2), *E .gallinarum* (2)	Faecal sample of cats(20), dogs(50)	58(31)	ND	*erm(*B)(22), *tet*(M)(5), *tet*(M), *tet*(L)(16), *tet*(L)(4), *ant(6')-la*(11)	AMP(1),ERY(26),CIP(30), PRI(9), STR(12), KAN(12) ,GEN(9),TET(21),CHL(7)	*ND*	37

						,aac(6')-le-aph(2'')-la(16), *aph(3')-llla*(11), *catA*(1)			
	2015	*S. aureus* (43)	Chicken(19), Veal(9), sheep(14), horse(1)	43(13)	ST30(1), ST398(1)	*tet*(M)(2), *erm*(C)(4), *erm*(A)(2), *erm*(T)(1), *tet(*K)(6), *tet*(L)(3), *tet*(*M)(2), aph(3')-llla*(4), *ant(4)-la*(1), *mrs*A(4)	PEN(41),OXA(2),FOX(2),KAN(4),TOB(1)	*SCCmec(2)*	38
	2015	*S. aureus* (17)	Goat, Cats, dogs(17)	17(7)	ST45(1),ST15(1),ST6(1),ST2121(1),ST188(1)	*blaZ*(7),*tet*(M)(1),*erm*(A)(1),*ant(6)-la*(1)	PEN(6),TET(1),ERY(1),STR(1),CIP(1)	*ND*	39
	2013	*E. faecalis* (49), *E. faecium* (30), *E. gallinarum* (12), *E. hirae*(12), *E. casseliflavus* (2), *E. durans* (2)	Meat (199)	(119)	ST260(1),ST454(1), ST452(1),ST22(1),ST300(1),ST455(1),ST453(1),ST456(1)	*tet*(M) (36), *tet*(L) (32), *erm(*B) (33), *aac(6')-aph(2")* (1), *ant*(6) (7)	TET(57), ERY(43), STR(17), CHLl(4),GEN (1)	*ND*	40
	2013	*E. mundtii,* (23) *E. casseliflavus* (20), *E. hirae* (19), *E. faecalis* (10), *E. faecium* (10), *E. durans* (7), *E. gallinarum* (7), *E. dispar* (2)	Cattle (92)	92 (72)	ND	*erm*(B) (7), *tet*(M) (4), *tet*(L)(4)	ERY(10), TET(4) and SXT(72)	*ND*	41
	2012	*S. aureus* (73)	nasal swab from sheep (73)	73 (5)	ST153(5)	*mecA* (5), *bla*Z (28), *ant(6)-la* (5), *erm*(C) (5), *tet(*K) (30)	PEN(5), STR(5), KAN(5), ERY(5), TET (5), FUS(5)	SCC*mec*(5)	42
	2012	*S. aureus* (50)	Nasal swab of donkey(50)	50(30)	ST133(15), ST1738(4), ST1(2), ST6(4), ST2057(4), ST2110(1), ST2181(1),	*bla*Z(12), *erm*(A)(8), *erm*(C)(2), *tet*(M)(1), *fus*C(1)	PEN(12),ERY(8),TET(1),Fusic acid(12),	*ND*	43

					ST1660(1)				
Uganda (1)	*2017*	*S. aureus* (41)	milk(30),sour milk sample(11)	41(30)	ST97(1),ST1(2)	*mecA*(23)	TET(30),RIF(1),SXT(2),ERY(1), GEN((1),CLI(1)	*SCCmec(23)*	44
Zambia	*2014*	*S.aureus (31), S. pseudinterendius (31)*	Skin(9),Ear(19), wound (2),	31(28)	ND	*BlaZ(20),tetK(10), tetM(10),ermB(4), tetl(1)*	CIP(2),ERY(5),OXA(1),PEN(28),SXT(8), TET(9)	ND	45

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