

Supplementary Table 2: Multiple antimicrobial resistance (MAR) index values of *Escherichia coli*, *Klebsiella pneumoniae* and *Salmonella* spp. of studies (n=51) in Africa

Article number	Reference	Publicati on Year	Country	Samples analysed			Species	Total number of isolates in the same type of sample	Total number of antibiotics tested	Total antibiotic resistance numbers of all isolates	MAR = x/(y*z)
				Water	Fresh Produce	Soil					
1	Doughari et al. 2011	2010	South Africa				<i>Escherichia coli</i>	7	14	not specified	0,07 - 0,2
4	Chouchani et al. 2013	2013	Tunisia				<i>Escherichia coli</i>	26	16	90	0,216346154
5	Njage et al. 2014	2014	South Africa				<i>Escherichia coli</i>	46	4	not specified	
7	Chigor et al. 2010	2015	Nigeria				<i>Escherichia coli</i>	96	10	407	0,423958333
8	Du Plessis et al. 2015	2014	South Africa				<i>Escherichia coli</i>	38	14	51	0,095864662
8	Du Plessis et al. 2015	2014	South Africa				<i>Escherichia coli</i>	5	14	12	0,171428571
9	Mousse et al., 2015	2015	West Africa				<i>Escherichia coli</i>	13	13	not specified	
9	Mousse et al., 2015	2015	West Africa				<i>Escherichia coli</i>	52	13	not specified	
10	Odigie et al. 2015	2015	Nigeria				<i>Escherichia coli</i>	12	7	not specified	
11	Said et al., 2015	2015	Tunisia				<i>Escherichia coli</i>	1	16	6	0,375
11	Said et al., 2015	2015	Tunisia				<i>Escherichia coli</i>	4	16	19	0,296875
11	Said et al., 2015	2015	Tunisia				<i>Escherichia coli</i>	3	16	29	0,604166667
12	Titilawo et al. 2015	2015	Nigeria				<i>Escherichia coli</i>	300	20	1410	0,235
13	Jongman et al. 2016	2016	South Africa				<i>Escherichia coli</i>	60	12	39	0,054166667
13	Jongman et al. 2016	2016	South Africa				<i>Escherichia coli</i>	70	12	61	0,072619048
15	Said et al. 2016	2016	Tunisia				<i>Escherichia coli</i>	1	16	5	0,3125
17	Tafoukt et al., 2017	2017	Algeria				<i>Escherichia coli</i>	12	16	87	0,453125
18	Nayme et al., 2017	2017	Morocco				<i>Escherichia coli</i>	70	19	not specified	
19	Nayme et al., 2017	2017	Morocco				<i>Escherichia coli</i>	144	23	1117	0,337258454
22	Bello et al. 2019	2019	Nigeria				<i>Escherichia coli</i>	10	2	15	0,75
24	Maina et al. 2019	2019	Kenya				<i>Escherichia coli</i>	61	15	not specified	
25	Richter et al., 2019	2019	South Africa				<i>Escherichia coli</i>	22	14	183	0,594155844
26	Hassen et al., 2019	2019	Tunisia				<i>Escherichia coli</i>	2	7	5	0,357142857
27	Adelowo et al. 2020	2020	Nigeria				<i>Escherichia coli</i>	7	5	not specified	
28	Badi et al. 2022	2022	Tunisia				<i>Escherichia coli</i>	42	12	459	0,910714286
29	Baloyi et al. 2020	2020	South Africa				<i>Escherichia coli</i>	56	12	337	0,501488095
31	Fadare et al. 2020	2020	South Africa				<i>Escherichia coli</i>	13	18	137	0,585470085
32	Hassen et al. 2020	2020	Tunisia				<i>Escherichia coli</i>	33	13	104	0,242424242
34	Mpaka et al., 2020	2020	South Africa				<i>Escherichia coli</i>	47	not specified	not specified	
35	Nzima et al. 2020	2020	South Africa				<i>Escherichia coli</i>	not specified	not specified	not specified	
36	Raseala et al., 2020	2020	South Africa				<i>Escherichia coli</i> O1:	10	not tested	N/A	N/A
36	Raseala et al., 2020	2020	South Africa				<i>Escherichia coli</i> O1:	10	not tested	N/A	N/A
38	Richter et al., 2020	2020	South Africa				<i>Escherichia coli</i>	7	14	65	0,663265306
38	Richter et al., 2020	2020	South Africa				<i>Escherichia coli</i>	3	14	21	0,5
40	Banu et al. 2021	2021	Ghana				<i>Escherichia coli</i>	not specified	2	not specified	
41	Bolukaoto et al. 2021	2021	South Africa				<i>Escherichia coli</i>	100	19	936	0,492631579
42	Iwu et al. 2021	2021	South Africa				<i>Escherichia coli</i>	18	16	104	0,361111111
42	Iwu et al. 2021	2021	South Africa				<i>Escherichia coli</i>	27	16	123	0,284722222
43	Kimera et al. 2021	2021	Tanzania				<i>Escherichia coli</i>	8	9	not specified	
43	Kimera et al. 2021	2021	Tanzania				<i>Escherichia coli</i>	1	9	not specified	
44	Richter et al. 2021	2021	South Africa				<i>Escherichia coli</i>	42	11	154	0,333333333
44	Richter et al. 2021	2021	South Africa				<i>Escherichia coli</i>	30	11	93	0,281818182
44	Richter et al. 2021	2021	South Africa				<i>Escherichia coli</i>	1	11	0	0
44	Richter et al., 2021	2021	South Africa				<i>Escherichia coli</i>	67	11	173	0,234735414
45	Ratshilingano et al. 20	2022	South Africa				<i>Escherichia coli</i>	27	13	116	0,33048433
45	Ratshilingano et al. 20	2022	South Africa				<i>Escherichia coli</i>	23	13	86	0,287625418
45	Ratshilingano et al. 20	2022	South Africa				<i>Escherichia coli</i>	1	13	6	0,461538462
46	Richter et al. 2022	2021	South Africa				<i>Escherichia coli</i>	3	not tested	N/A	N/A
48	Altayb et al., 2022	2022	Sudan				<i>Escherichia coli</i>	4	8	8	0,25
48	Altayb et al., 2022	2022	Sudan				<i>Escherichia coli</i>	1	8	2	0,25
49	Quarcoo et al., 2022	2022	Ghana				<i>Escherichia coli</i>	125	9	1428	1,269333333
51	Akinola et al., 2022	2022	Nigeria				<i>Escherichia coli</i>	31	10	143	0,461290323
3	De Boeck et al. 2012	2012	DRC				<i>Klebsiella pneumom</i>	6	8	32	0,666666667
4	Chouchani et al. 2013	2013	Tunisia				<i>Klebsiella pneumom</i>	43	15	304	0,471317829
10	Odigie et al. 2015	2015	Nigeria				<i>Klebsiella spp.</i>	16	7	not specified	
11	Said et al., 2015	2015	Tunisia				<i>Klebsiella pneumom</i>	1	16	10	0,625
14	Mousse et al., 2016	2016	West Africa				<i>Klebsiella pneumom</i>	11	10	60	0,545454545
15	Said et al. 2016	2016	Tunisia				<i>Klebsiella pneumom</i> N/A		16	N/A	
16	Zekar et al., 2017	2017	Algeria				<i>Klebsiella pneumom</i>	13	30	219	0,561538462
17	Tafoukt et al., 2017	2017	Algeria				<i>Klebsiella pneumom</i>	3	16	18	0,375
20	Djenadi et al. 2018	2018	Alegria				<i>Klebsiella oxytoca</i>	2	6	not specified	
20	Djenadi et al. 2018	2018	Alegria				<i>Klebsiella pneumom</i>	3	6	not specified	
22	Bello et al. 2019	2019	Nigeria				<i>Klebsiella pneumom</i>	10	2	13	0,65
23	Le Terrier et al. 2019	2019	Nigeria				<i>Klebsiella pneumom</i>	2	6	10	0,833333333
24	Maina et al. 2019	2019	Kenya				<i>Klebsiella spp.</i>	52	15		
25	Richter et al., 2019	2019	South Africa				<i>Klebsiella oxytoca</i>	2	14	11	0,392857143
25	Richter et al., 2019	2019	South Africa				<i>Klebsiella pneumom</i>	4	14	31	0,553571429
31	Fadare et al. 2020	2020	South Africa				<i>Klebsiella spp.</i>	7	18	59	0,468253968
32	Hassen et al. 2020	2020	Tunisia				<i>Klebsiella pneumom</i>	4	13	20	0,384615385
33	Iwu et al., 2020	2020	South Africa				<i>Klebsiella pneumom</i>	18	16	126	0,4375
33	Iwu et al., 2020	2020	South Africa				<i>Klebsiella oxytoca</i>	10	16	89	0,55625
33	Iwu et al., 2020	2020	South Africa				<i>Klebsiella pneumom</i>	7	16	26	0,232142857
33	Iwu et al., 2020	2020	South Africa				<i>Klebsiella oxytoca</i>	2	16	11	0,34375
34	Mpaka et al., 2020	2020	South Africa				<i>Klebsiella spp.</i>	12	18	not specified	
38	Richter et al., 2020	2020	South Africa				<i>Klebsiella pneumom</i>	3	14	29	0,69047619
38	Richter et al., 2020	2020	South Africa				<i>Klebsiella pneumom</i>	6	14	50	0,595238095
39	Zekar et al., 2020	2020	Algeria				<i>Klebsiella pneumom</i>	13	24	220	0,705128205
43	Kimera et al. 2021	2021	Tanzania				<i>Klebsiella pneumom</i>	8	9	not specified	
43	Kimera et al. 2021	2021	Tanzania				<i>Klebsiella pneumom</i>	3	9	not specified	
44	Richter et al. 2021	2021	South Africa				<i>Klebsiella pneumom</i>	2	not tested	N/A	N/A
44	Richter et al. 2021	2021	South Africa				<i>Klebsiella pneumom</i>	3	not tested	N/A	N/A
48	Altayb et al., 2022	2022	Sudan				<i>Klebsiella pneumom</i>	2	8	2	0,125
48	Altayb et al., 2022	2022	Sudan				<i>Klebsiella pneumom</i>	1	8	1	0,125
51	Akinola et al., 2022	2022	Nigeria				<i>Klebsiella pneumom</i>	32	10	144	0,45
2	Akinyemi et al. 2011	2011	Nigeria				<i>Salmonella spp.</i>	37	13	125	0,25987526
6	Abakpa et al 2015	2015	Nigeria				<i>Salmonella spp</i>	15	8	46	0,383333333
6	Abakpa et al 2015	2015	Nigeria				<i>Salmonella spp</i>	35	8	80	0,285714286
6	Abakpa et al 2015	2015	Nigeria				<i>Salmonella spp</i>	11	8	49	0,556818182
10	Odigie et al. 2015	2015	Nigeria				<i>Salmonella spp.</i>	3	7	not specified	
33	Iwu et al., 2020	2020	South Africa				<i>Salmonella spp.</i>	4	16	22	0,34375
33	Iwu et al., 2020	2020	South Africa				<i>Salmonella spp.</i>	3	16	6	0,125
37	Raseala et al., 2020	2020	South Africa				<i>Salmonella spp.</i>	45	not tested	N/A	N/A
37	Raseala et al., 2020	2020	South Africa				<i>Salmonella spp.</i>	45	not tested	N/A	N/A
38	Richter et al., 2020	2020	South Africa				<i>Salmonella spp.</i>	2	14	13	0,464285714
44	Richter et al. 2021	2021	South Africa				<i>Salmonella spp.</i>	1	not tested	N/A	N/A
51	Akinola et al., 2022	2022	Nigeria				<i>Salmonella spp.</i>	29	10	120	0,413793103