

Supplementary Tables

Table S1: List of Primers encoding *beta* lactamases and Carbapenem Resistance Genes

Genes Encoding Beta lactamases and Carbapenem resistance				
Genes	Primers	Sequences (5'-3')	Product Size	Ref.
<i>bla</i> _{CTX-M-15}	F R	GCGATGGGCAGTACCAGTAA TTACCCAGCGTCAGATTCCG	392	(Hamza et al., 2020)
<i>bla</i> _{SHV}	F R	TCAGCGAAAAACACCTTG TCCCGCAGATAAATCACCA	472	
<i>bla</i> _{TEM}	F R	ATGAGTATTCAACATTTCCG TTACCAATGCTTAATCAGTGAG	861	
<i>bla</i> _{PER-1}	F R	ATGAATGTCATTATAAAAGC TTAATTTGGGCTTAGGG	926	
<i>bla</i> _{OXA-1}	F R	TTTTCTGTTGTTTGGGTTTT TTTCTTGGCTTTTATGCTTG	427	
<i>bla</i> _{KPC}	F R	ATGTCACTGTATCGCCGTCT TTTTCAGAGCCTTACTGCCC	882	
<i>bla</i> _{OXA-48}	F R	TTGGTG GCATCGATTATCGG GAGCACTTCTTTTGTGATGGC	743	
<i>bla</i> _{NDM}	F R	GGTTTGGCGATCTGGTTTTTC CGGAATGGCTCATCACGATC	621	

Table S2: List of Primers for global molecular epidemiology analysis of carbapenem non-susceptible *Acinetobacter baumannii*

Organism	Multiplex-1			Reference
	Gene	(5'-3') Primer Sequences	Size (bp)	
<i>Acinetobacter baumannii</i>	Group1ompAF306	5'-GATGGCGTAAATCGTGGTA-3'	355	(Karah et al., 2012)
	Group1and2ompAR660	5'-CAACTTTAGCGATTTCTGG-3'		
	Group1csuEF	5'-CTTTAGCAAACATGACCTACC-3'	702	
	Group1csuER	5'-TACACCCGGGTTAATCGT-3'		
	Gp1OXA66F89	5'-GCGCTTCAAAATCTGATGTA-3'	559	
	Gp1OXA66R647	5'-GCGTATATTTTGTTC CATTC-3'		
	Multiplex-2			
	Group2ompAF378	5'-GACCTTTCTTATCACAACGA-3'	343	
	Group1and2ompAR660	5'-CAACTTTAGCGATTTCTGG-3'		
	Group2csuEF &	5'-GGCGAACATGACCTATTT-3'	580	
	Group2csuER	5'-CTTCATGGCTCGTTGGTT-3'		
	Gp2OXA69F169 &	5'-CATCAAGGTCAAAC TCAA-3'	162	
Gp2OXA69R330	5'-TAGCCTTTTTTCCCCATC-3'			

1. Hamza, D., Dorgham, S., Ismael, E., El-Moez, S. I. A., Elhariri, M., Elhelw, R., & Hamza, E. (2020). Emergence of β -lactamase-and carbapenemase-producing *Enterobacteriaceae* at integrated fish farms. *Antimicrobial Resistance & Infection Control*, 9(1), 67.
2. Karah, N., Sundsfjord, A., Towner, K., & Samuelsen, Ø. (2012). Insights into the global molecular epidemiology of carbapenem non-susceptible clones of *Acinetobacter baumannii*. *Drug Resistance Updates*, 15(4), 237–247.