

Table S2. Results of antibiograms enterobacterales strains

Bird species	Bacteria species	PRL	AMP	AMC	IMI	CRO	CAZ	CPD	AZM	C	CN	AK	TE	CIP	SXT	ESBL
<i>Himantopus himantopus</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Turdus merula</i>	<i>E. coli</i>	S	S	S	R	S	S	R	S	S	S	S	S	S	S	-
<i>Turdus merula</i>	<i>C. freundii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Turdus merula</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	R	S	S	-
<i>Turdus merula</i>	<i>C. freundii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Turdus merula</i>	<i>E. coli</i>	I	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i> *	R	R	R	S	R	R	R	R	S	I	S	R	R	R	-
<i>Buteo buteo</i>	<i>P. mirabilis</i> *	S	R	S	I	R	S	S	R	S	S	S	R	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i> *	R	R	R	S	S	I	R	I	S	R	S	R	R	R	+
<i>Buteo buteo</i>	<i>S. enterica subsp. enterica</i>	I	S	S	I	R	R	R	S	S	S	S	S	I	S	-
<i>Buteo buteo</i>	<i>E. coli</i>	S	S	S	S	S	S	I	I	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i> *	R	R	R	S	S	R	R	S	I	S	S	R	S	R	+
<i>Buteo buteo</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i> *	I	R	R	S	R	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. aerogenes</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>K. pneumoniae</i> *	R	R	R	S	R	R	R	R	S	S	S	R	I	R	+
<i>Buteo buteo</i>	<i>K. pneumoniae</i> *	R	R	R	S	R	S	R	R	S	S	I	R	I	R	+
<i>Buteo buteo</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>C. freundii</i>	R	R	R	S	S	R	R	S	S	R	R	R	R	R	+
<i>Buteo buteo</i>	<i>E. coli</i> *	R	S	S	S	S	R	R	S	S	R	R	R	R	R	+
<i>Buteo buteo</i>	<i>K. pneumoniae</i> *	R	R	R	S	R	R	R	S	S	S	R	R	R	R	+
<i>Buteo buteo</i>	<i>C. freundii</i> *	R	R	R	S	R	R	R	S	S	I	R	R	R	R	-
<i>Buteo buteo</i>	<i>S. marcescens</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Buteo buteo</i>	<i>E. coli</i> *	R	S	R	S	R	R	R	S	S	S	R	R	R	R	-
<i>Buteo buteo</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>C. freundii</i> *	R	R	R	S	R	R	R	R	R	S	S	R	S	R	-
<i>Falco tinnunculus</i>	<i>K. pneumoniae</i> *	R	R	S	S	R	I	R	R	S	S	S	R	S	R	+
<i>Falco tinnunculus</i>	<i>E. coli</i> *	R	R	S	S	R	I	R	R	R	S	S	R	R	R	-
<i>Falco tinnunculus</i>	<i>E. aerogenes</i> *	R	R	R	S	S	R	R	I	S	S	S	R	S	R	+

<i>Falco tinnunculus</i>	<i>E. coli</i> *	I	R	S	I	I	S	S	I	S	S	S	R	S	R	-
<i>Falco tinnunculus</i>	<i>C. freundii</i> *	I	R	R	R	I	S	I	R	S	S	S	R	S	R	-
<i>Falco tinnunculus</i>	<i>E. coli</i> *	R	R	S	S	S	S	S	S	S	S	S	R	R	R	-
<i>Falco tinnunculus</i>	<i>P. vulgaris</i>	S	R	R	S	S	S	I	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i>	R	R	S	S	S	S	S	S	S	S	R	S	S	I	-
<i>Falco tinnunculus</i>	<i>S. marcescens</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>C. koseri</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i>	I	S	S	I	R	S	I	R	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i>	S	S	S	S	R	S	I	S	S	S	S	S	S	S	-
<i>Falco tinnunculus</i>	<i>E. coli</i> *	R	R	S	S	S	S	S	S	S	S	S	R	R	R	-
<i>Falco tinnunculus</i>	<i>P. vulgaris</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	R	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>S. enterica subsp. arizonae</i>	I	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>C. freundii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i> *	S	R	S	S	S	S	S	S	S	R	S	R	S	R	-
<i>Columba livia</i>	<i>E. coli</i>	R	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>C. braakii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>E. coli</i>	R	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Columba livia</i>	<i>C. freundii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Apus apus</i>	<i>P. vulgaris</i>	S	R	S	S	S	S	S	S	S	S	S	R	S	S	-
<i>Apus apus</i>	<i>E. aerogenes</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Apus apus</i>	<i>E. coli</i>	S	S	S	I	S	S	S	S	S	S	S	R	S	S	-
<i>Apus apus</i>	<i>S. liquefaciens</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Streptopelia decaocto</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Streptopelia decaocto</i>	<i>E. aerogenes</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Streptopelia decaocto</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Streptopelia decaocto</i>	<i>C. braakii</i>	S	R	S	S	R	S	I	S	S	S	S	S	I	S	-

<i>Fulica atra</i>	<i>E. coli</i> *	S	R	S	S	S	R	S	R	S	S	S	S	S	S	-
<i>Bubo bubo</i>	<i>E. coli</i>	I	S	S	S	I	S	I	I	S	S	S	S	S	S	-
<i>Upupa epops</i>	<i>E. coli</i>	S	S	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Garrulus glandarius</i>	<i>C. koseri</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Garrulus glandarius</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Garrulus glandarius</i>	<i>E. coli</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Garrulus glandarius</i>	<i>E. aerogenes</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Pica pica</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Pica pica</i>	<i>E. coli</i>	S	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Accipiter nisus</i>	<i>E. cloacae</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Accipiter nisus</i>	<i>E. coli</i>	S	R	S	S	S	S	S	I	S	S	S	S	S	S	-
<i>Scolopax rusticola</i>	<i>E. aerogenes</i>	S	R	R	S	S	S	S	I	S	S	S	S	S	S	-
<i>Scolopax rusticola</i>	<i>E. coli</i>	R	R	R	I	R	R	R	R	R	R	R	R	R	R	-
<i>Scolopax rusticola</i>	<i>E. coli</i>	R	R	R	I	R	R	R	S	S	S	S	S	S	R	-
<i>Scolopax rusticola</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Scolopax rusticola</i>	<i>S. marcescens</i>	I	R	R	S	S	S	S	S	S	S	S	R	I	S	-
<i>Scolopax rusticola</i>	<i>C. freundii</i>	S	R	R	S	S	S	S	S	S	S	S	S	S	S	-
<i>Carduelis carduelis</i>	<i>E. aerogenes</i>	I	R	R	S	S	S	S	I	S	S	S	S	S	S	-
<i>Carduelis carduelis</i>	<i>E. coli</i> *	R	R	S	I	R	R	R	R	S	S	S	R	S	S	+
<i>Carduelis carduelis</i>	<i>S. liquefaciens</i>	R	S	S	S	R	I	I	I	S	S	S	S	S	S	-
<i>Carduelis carduelis</i>	<i>E. coli</i>	I	R	S	S	R	I	R	S	S	S	S	S	S	S	-
<i>Carduelis carduelis</i>	<i>C. braakii</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Coccothraustes coccothraustes</i>	<i>C. koseri</i>	I	R	S	I	S	S	I	S	S	I	S	S	S	S	-
<i>Coccothraustes coccothraustes</i>	<i>E. coli</i>	S	S	S	S	S	S	I	S	S	S	S	S	S	S	-
<i>Anas platyrhynchos</i>	<i>E. coli</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Anas platyrhynchos</i>	<i>C. koseri</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Anas platyrhynchos</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Anas platyrhynchos</i>	<i>C. braakii</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Cygnus olor</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Anas clypeata</i>	<i>S. odorifera</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Falco peregrinus</i>	<i>E. coli</i> *	I	R	S	S	S	I	S	R	S	I	S	R	S	R	-
<i>Falco peregrinus</i>	<i>S. odorifera</i>	R	R	S	S	S	S	S	R	S	S	S	S	S	S	-
<i>Falco peregrinus</i>	<i>E. coli</i> *	R	R	R	R	R	R	R	R	S	R	S	R	R	R	-

<i>Sylvia melanocephala</i>	<i>C. freundii</i>	R	R	R	S	R	S	I	S	S	S	S	S	S	S	-
<i>Circaetus gallicus</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Turdus philomelos</i>	<i>E. coli</i>	I	S	S	I	R	R	R	S	S	S	S	S	I	S	-
<i>Tyto alba</i>	<i>E. coli</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Tyto alba</i>	<i>S. odorifera</i>	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-
<i>Tyto alba</i>	<i>S. odorifera</i>	S	R	S	S	S	S	S	S	S	S	S	S	S	S	-
	* multidrugs strains	PRL	AMP	AMC	IMI	CRO	CAZ	CPD	AZM	C	CN	AK	TE	CIP	SXT	ESBL

PRL = piperacillin 100 µg, AMP = ampicillin, 10 µg; AMC = amoxycillin/clavulanic acid 30 µg; IMI= Imipenem 10 µg; CRO= ceftriaxone 30 µg; CAZ = ceftazidime, 30 µg; CPD= Cefpodoxime 10 µg; AZM= azithromycin 15 µg; C = chloramphenicol, 30 µg; CN = gentamicin, 10 µg; AK= amikacin 30 µg; TE = tetracycline, 30 µg; CIP = ciprofloxacin, 5 µg; SXT = sulphamethoxazole–trimethoprim, 1.25 + 23.75 µg; ESBL = Extended Spectrum Beta-Lactamase production

Table S3. Results of antibiograms *S. aureus* strains

Bird species	FOX	CN	E	TE	DO	CIP	DA	SXT
<i>Accipiter nisus</i>	R	S	S	S	S	S	R	S
<i>Anas platyrhynchos</i>	R	S	R	R	R	S	R	R
<i>Buteo buteo</i>	R	S	S	S	S	S	R	S
<i>Carduelis carduelis</i>	R	S	R	R	R	S	R	R
<i>Carduelis carduelis</i>	R	S	R	R	R	S	R	R
<i>Carduelis carduelis</i>	R	S	R	R	R	S	R	R

FOX= cefoxitin 30 µg; CN = gentamicin, 10 µg; E= erythromycin 15 µg; TE = tetracycline, 30 µg; DO = doxycycline, 30 µg; CIP = ciprofloxacin, 5 µg; DA= clindamycin 2 µg; SXT = sulphamethoxazole–trimethoprim, 1.25 + 23.75 µg;

Table S4. Results of antibiograms *Enterococcus* spp. strains

Bird species	P	E	DO	TE	CIP	RD	C
<i>Athene noctua</i>	I	S	S	S	S	I	S
<i>Buteo buteo</i>	R	R	R	R	S	R	S
<i>Buteo buteo</i>	R	R	R	R	S	R	S
<i>Carduelis carduelis</i>	R	S	S	S	S	I	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Columba livia</i> “domestica”	I	S	S	S	S	S	S
<i>Falco tinnunculus</i>	R	R	R	R	S	R	S
<i>Falco tinnunculus</i>	R	R	R	R	S	R	S
<i>Falco peregrinus</i>	I	S	S	S	S	S	S

P= penicillin 10 units; E= erythromycin 15 µg; DO = doxycycline, 30 µg; TE = tetracycline, 30 µg; CIP = ciprofloxacin, 5 µg; RD= rifampin 5 µg; C = chloramphenicol, 30 µg.

Table S5. Results of antibiograms *P. aeruginosa* strains

Bird species	PRL	CAZ	IMP	CT	CN	AK	CIP
<i>Buteo buteo</i>	S	S	S	S	S	S	S
<i>Buteo buteo</i>	S	S	S	S	S	S	S
<i>Buteo buteo</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	I	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S
<i>Carduelis carduelis</i>	S	S	S	S	S	S	S

PRL = piperacillin 100 µg; CAZ = ceftazidime, 30 µg; IMP = Imipenem, 10 µg; CN = gentamicin, 10 µg; CIP = ciprofloxacin, 5 µg; CT = colistin sulphate, 10 µg;