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2 **Appendix Table A1.** Non-synonymous single nucleotide polymorphisms (SNPs) detected on
 3 genes coding for PB1, PB1-F2, PA, NP, NA, M1, M2, NS1 and NEP. For each library,
 4 corresponding to duck feces (A), early samples in turkeys (B) and late samples in tukeys (C),
 5 reads were aligned against consensus sequence before SNPs calling. % of reads sharing the
 6 SNP was determined with a threshold of 5%.

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PB1	DNA level		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
G	156	T	K	52	N	0	100	100
G	161	A	R	54	K	0	100	100
G	166	A	A	56	T	0	100	100
C	293	T	S	98	F	0	0	7
G	585	A	M	195	I	0	100	100
T	962	A	M	321	K	0	0	8
A	1015	G	I	339	V	0	0	7
A	1363	G	N	463	D	0	21	0
T	1483	C	F	495	L	0	0	5
C	1648	A	L	550	I	0	100	100
GGT	1690	GTG	G	564	V	0	0	14
CGT	1750	CAC	R	584	H	0	100	100
A	2081	G	N	694	S	0	100	100

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PB1-F2	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
A	11	G	E	4	G	0	100	100
G	62	T	R	21	M	0	100	100
G	65	A	G	22	E	0	100	100
G	67	A	G	23	S	0	100	100
A	77	G	Q	26	R	0	100	100
T	89	C	L	30	P	0	100	100
T	128	G	L	43	R	0	0	6
C	137	T	T	46	M	0	100	100

A	143	G	Q	48	R	0	100	100
C	146	T	A	49	V	0	100	100
A	158	G	K	53	R	0	100	100
A	161	G	Q	54	R	0	100	100
G	170	A	C	57	Y	0	0	6
A	194	G	K	65	R	0	100	100
C	199	T	P	67	S	0	0	7
A	236	G	Q	79	R	0	100	98
C	245	T	S	82	L	0	100	100

PA	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
C	209	T	A	70	V	0	100	100
A	398	G	E	133	G	0	0	13
A	1613	G	E	538	G	0	100	100
TTC	1684	TCG	F	562	S	0	11	0
C	1687	G	L	563	V	0	11	0

NP	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)

NA	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
A	175	C	N	59	H	8	0	0
G	1180	A	V	394	I	0	0	38

M1	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
C	503	T	T	168	I	<5	0	20

M2	Nucleotide		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)

NS1	DNA level		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
CAA	73	CGG	Q	25	R	0	11	0
A	79	C	M	27	L	5	0	17

A	79	G	M	27	V	0	10	0
AAA	121	AGG	K	41	R	0	9	0
T	124	G	S	42	A	<5	0	16
A	130	G	R	44	G	0	9	0
GCG	178	ATG	A	60	M	5	0	17
A	381	C	K	127	N	10	0	20
A	382	T	I	128	F	6	0	6
G	538	A	V	180	I	5	0	0
A	571	T	T	191	S	5	0	0
G	574	A	V	192	I	5	0	0
GTC	580	GCG	V	194	A	5	0	0
A	610	G	R	204	G	5	0	0
G	614	T	S	205	I	5	0	0
A	619	G	N	207	D	5	0	0
G	625	A	D	209	N	6	0	0
AAA	661	TAC	K	221	T	5	0	0
ACA	673	CGA	T	225	R	5	0	0
A	676	G	I	226	V	5	0	0

NEP	DNA level		Protein Level			A	B	C
	Base Substitution		Amino Acid Substitution			Population ratio (%)	Population ratio (%)	Population ratio (%)
GGG	64	GAA	G	22	E	5	0	0
A	77	T	E	26	V	5	0	0
G	86	A	S	29	N	14	0	23
A	105	C	L	35	F	14	0	22
TCT	109	CGT	S	37	R	5	0	<5
G	116	A	R	39	K	13	0	22
GCA	142	TCC	A	48	S	5	0	<5
GGA	187	GCT	G	63	A	5	0	<5
A	191	C	K	64	T	5	0	<5
A	201	C	E	67	D	5	0	<5
CAA	202	GAG	Q	68	E	5	0	<5
G	257	A	R	86	K	8	0	18

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