

Phylogenetic trees of all eight AIV gene segments

HPAI H5Nx 2020/2021 – colored as follows:

H5N8 sequences (one genotype) – red

H5N1 sequence (single event) – red ▲

H5N5 sequence (single event) – red ●

HPAI H5Nx 2021/2022 – colored as follows:

H5N1 genotypes:

G1 – pink

G2 – dark blue

G3 – salmon

G4 – orange

G5 – light blue

G6 – dark yellow

G7 – purple

LPAIVs from active surveillance + MB152/22 - green

Wild bird-poultry connections – marked as follows:

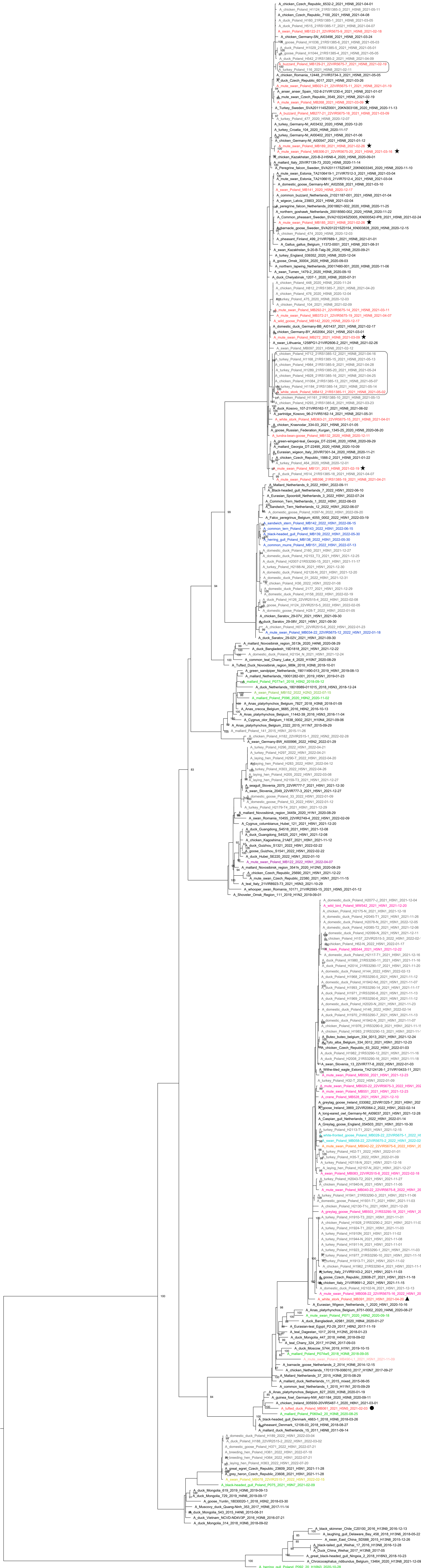


H5N8 introductions - marked as follows:



PB2

Best-fit model: GTR+F+G4



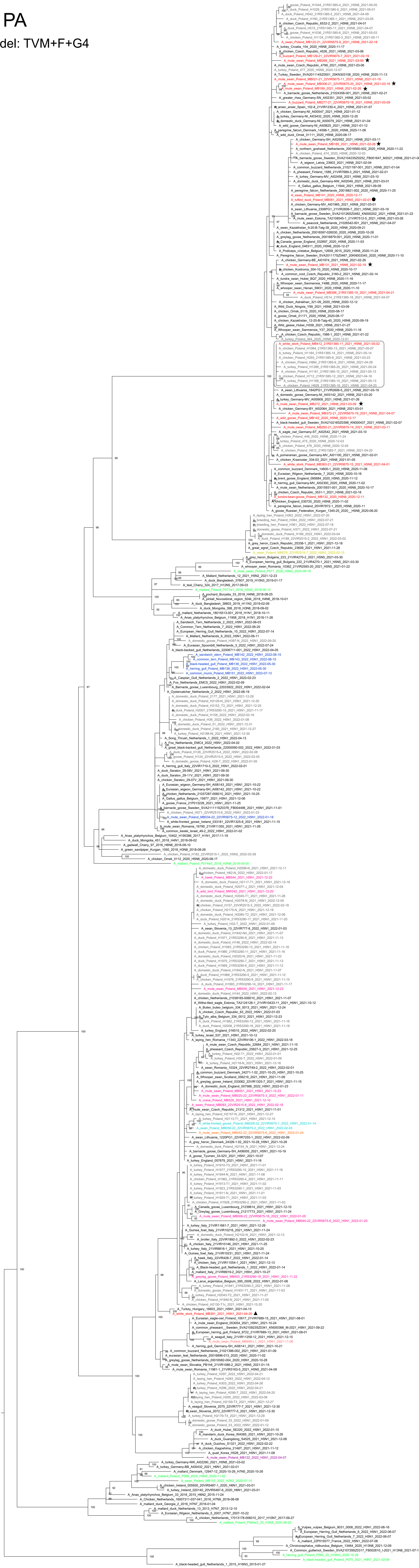
PB1

Best-fit model: GTR+F+G4



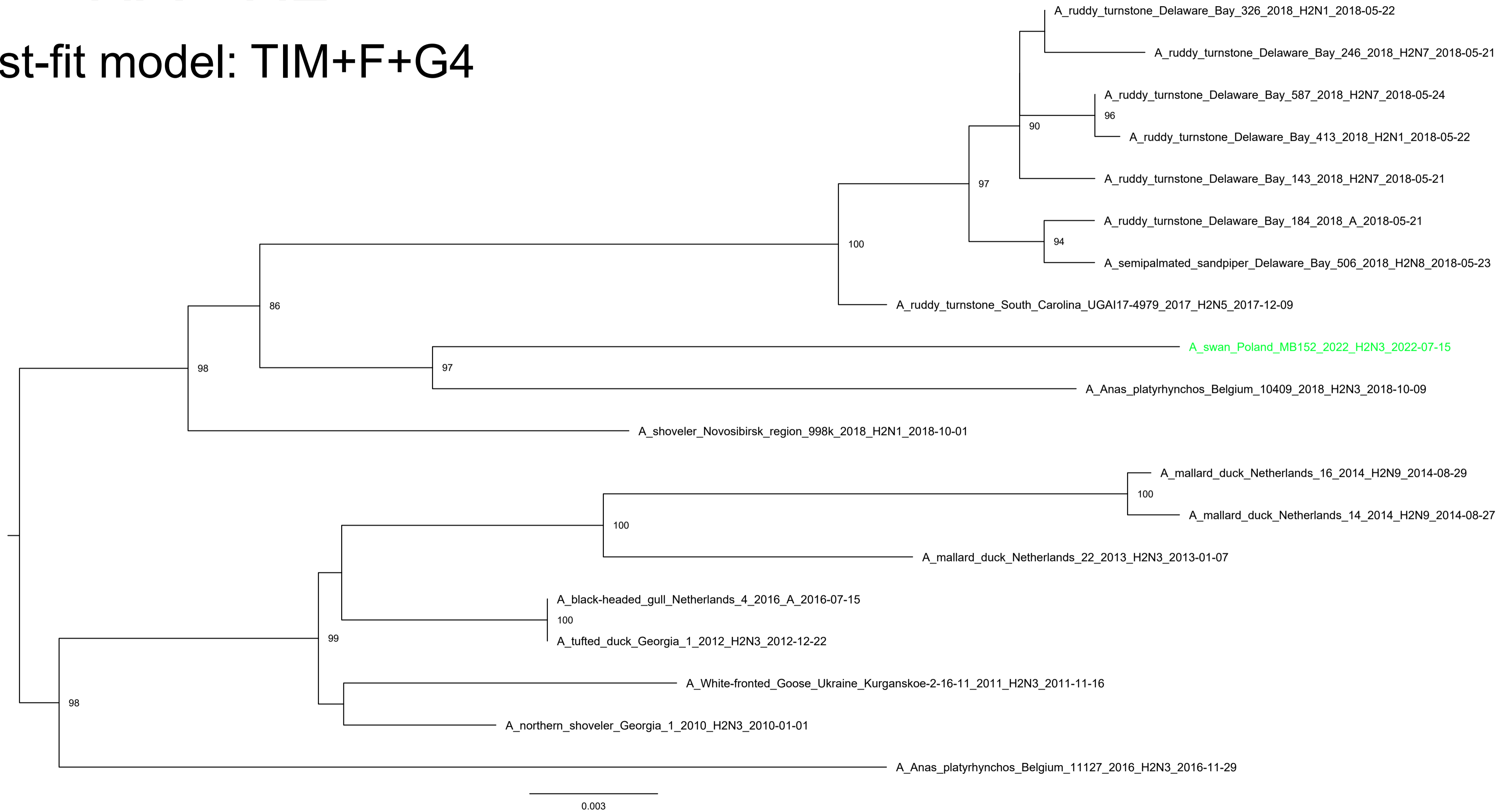
PA

Best-fit model: TVM+F+G4



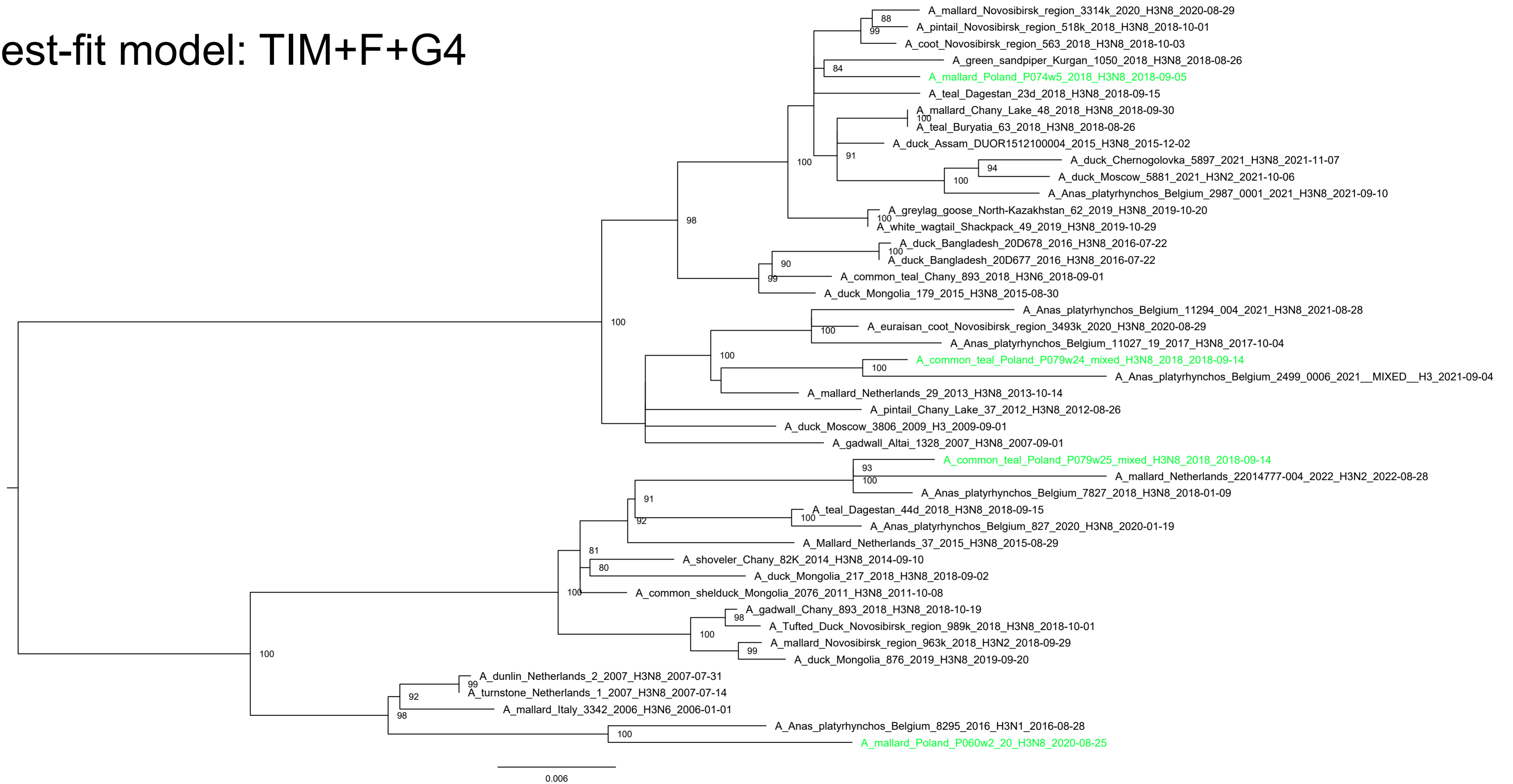
HA - H2

Best-fit model: TIM+F+G4



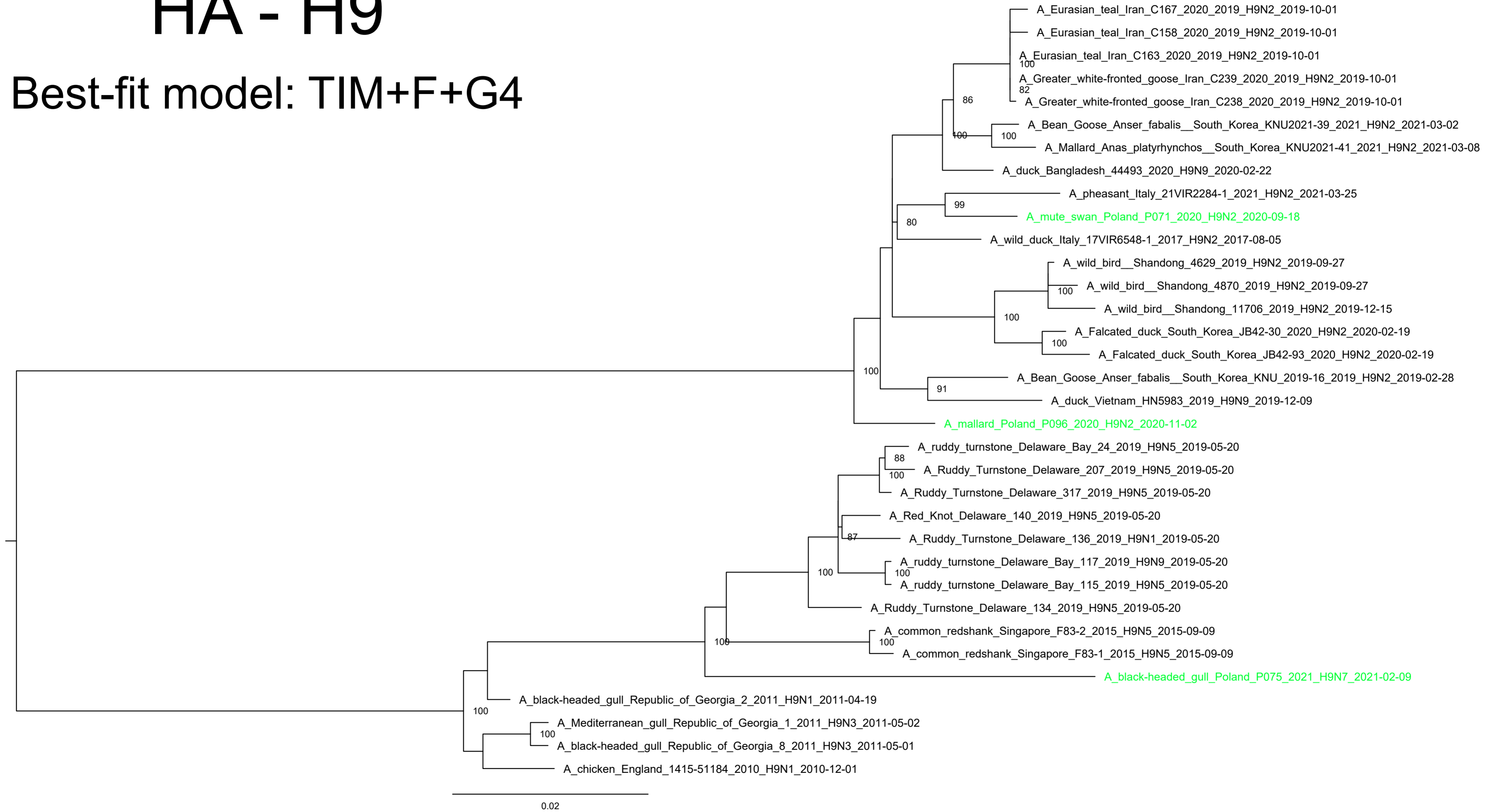
HA - H3

Best-fit model: TIM+F+G4



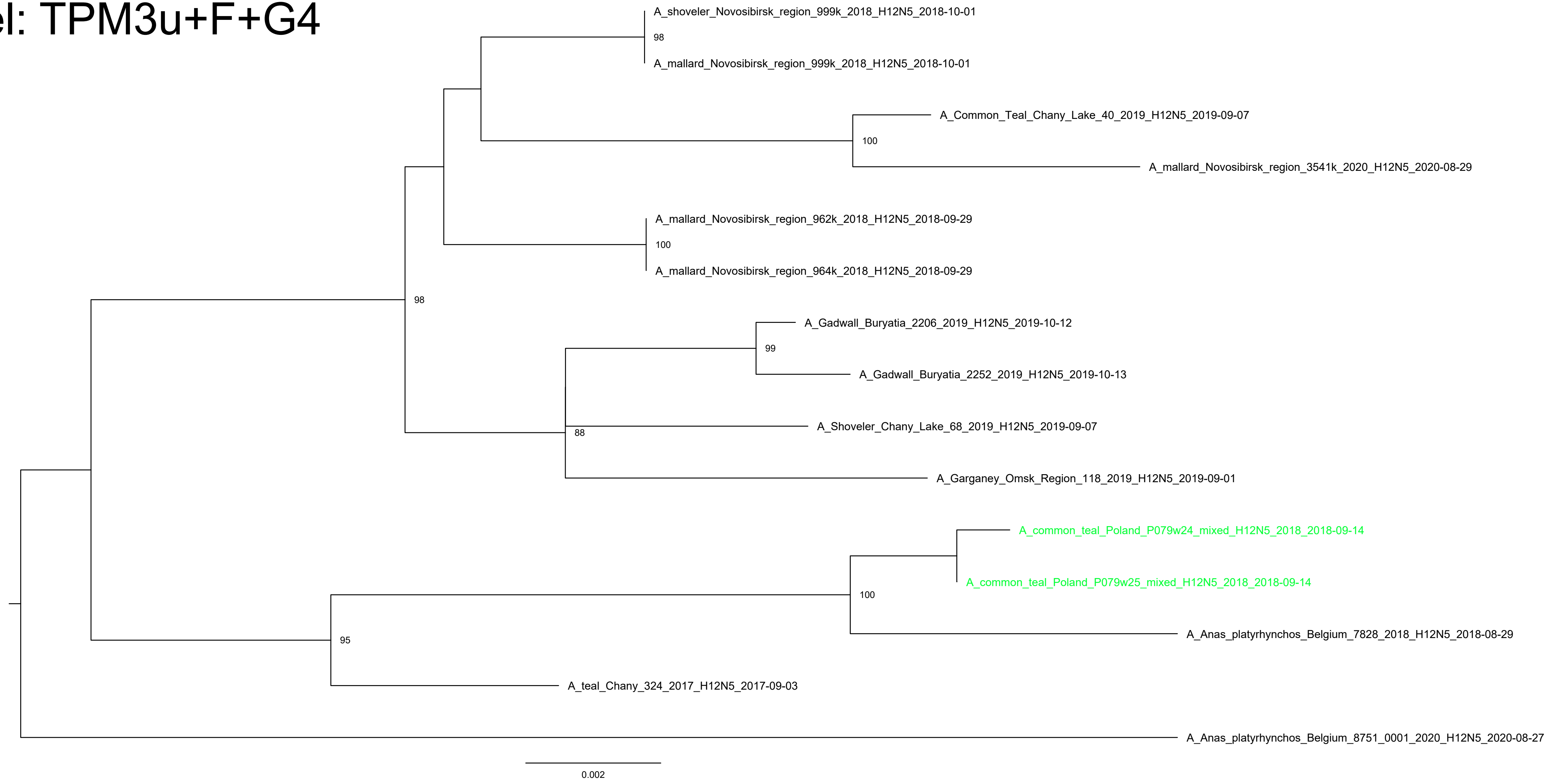
HA - H9

Best-fit model: TIM+F+G4



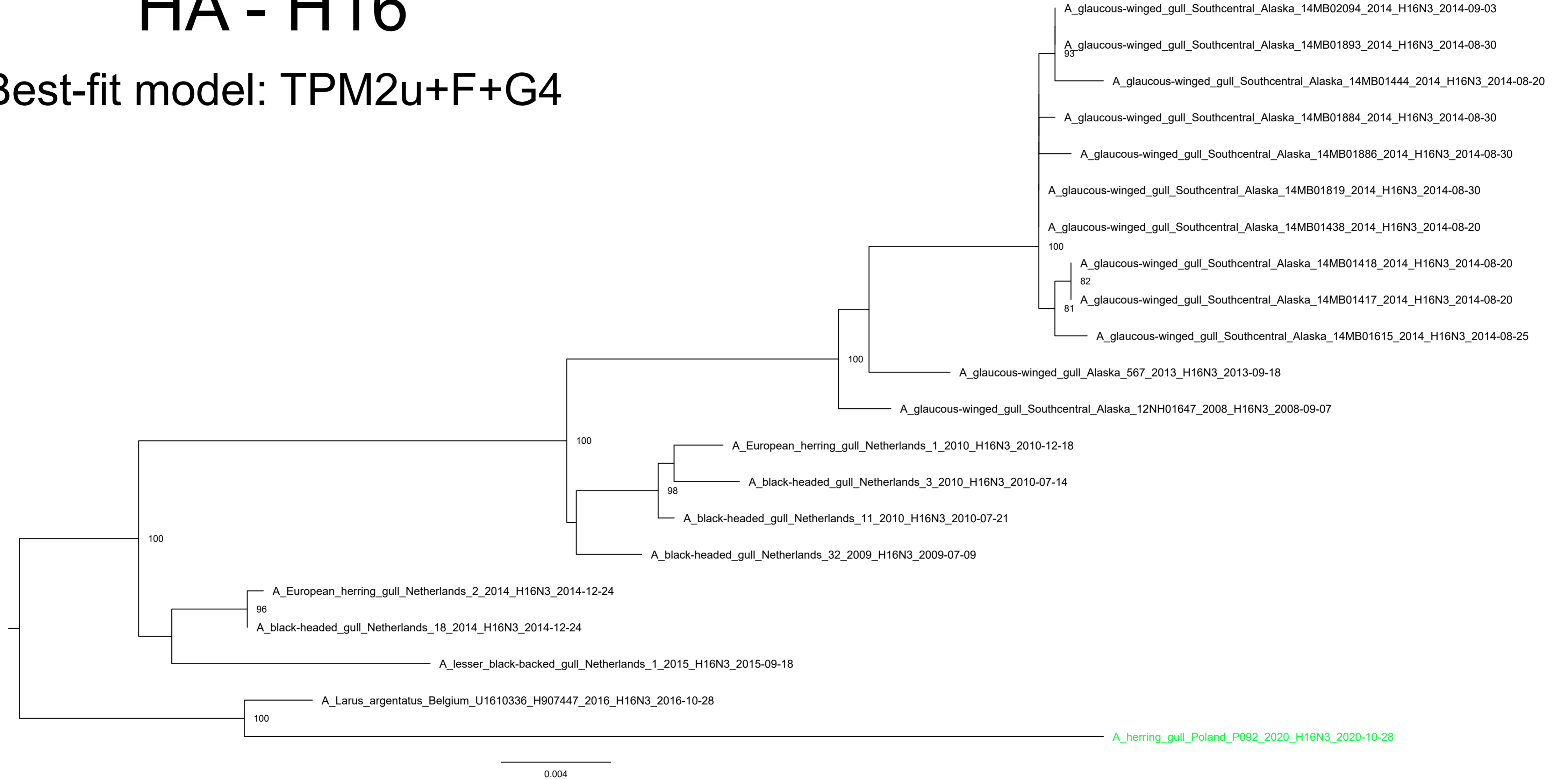
HA - H12

Best-fit model: TPM3u+F+G4



HA - H16

Best-fit model: TPM2u+F+G4



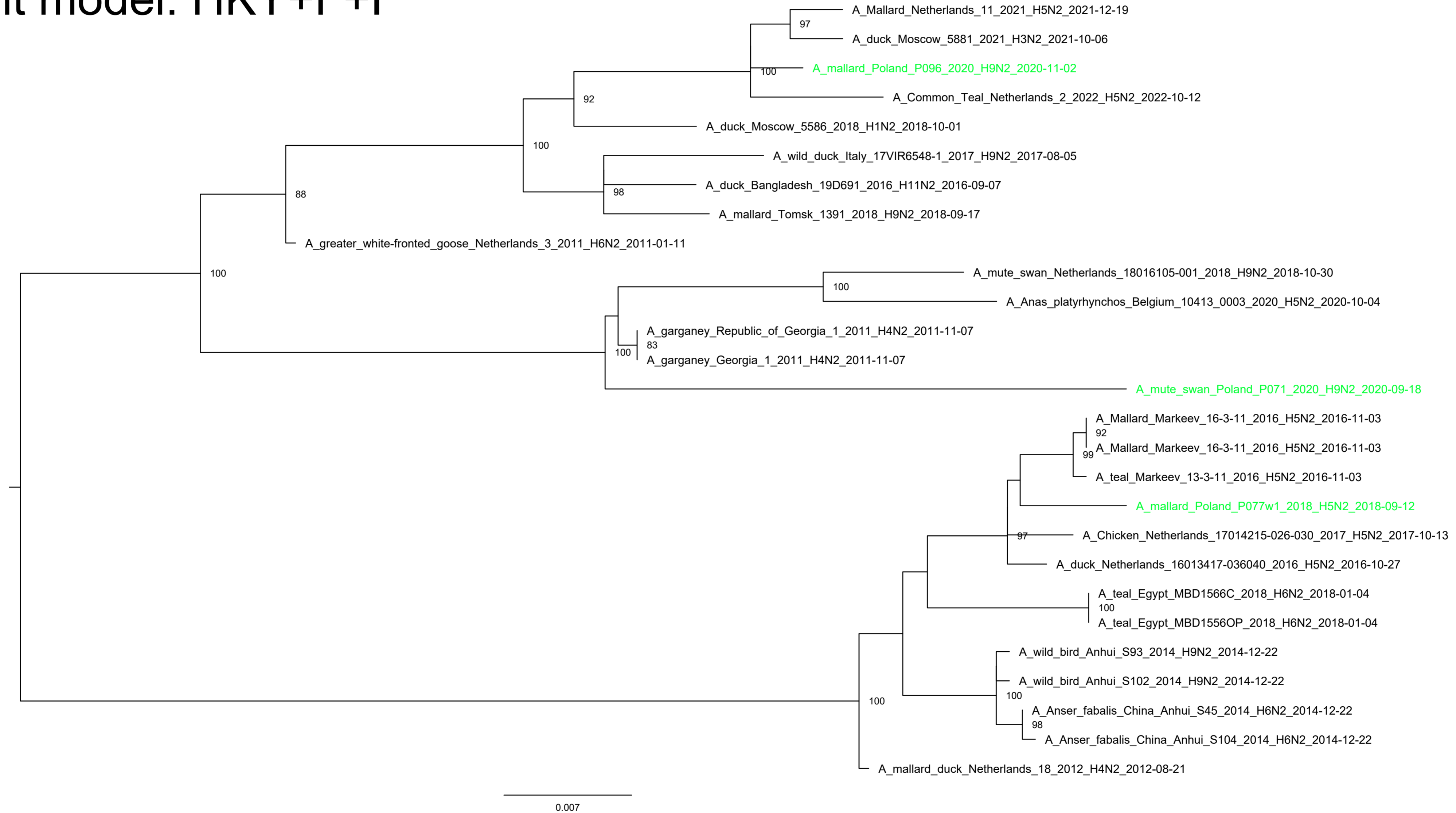
NP

Best-fit model: TVM+F+I+G4



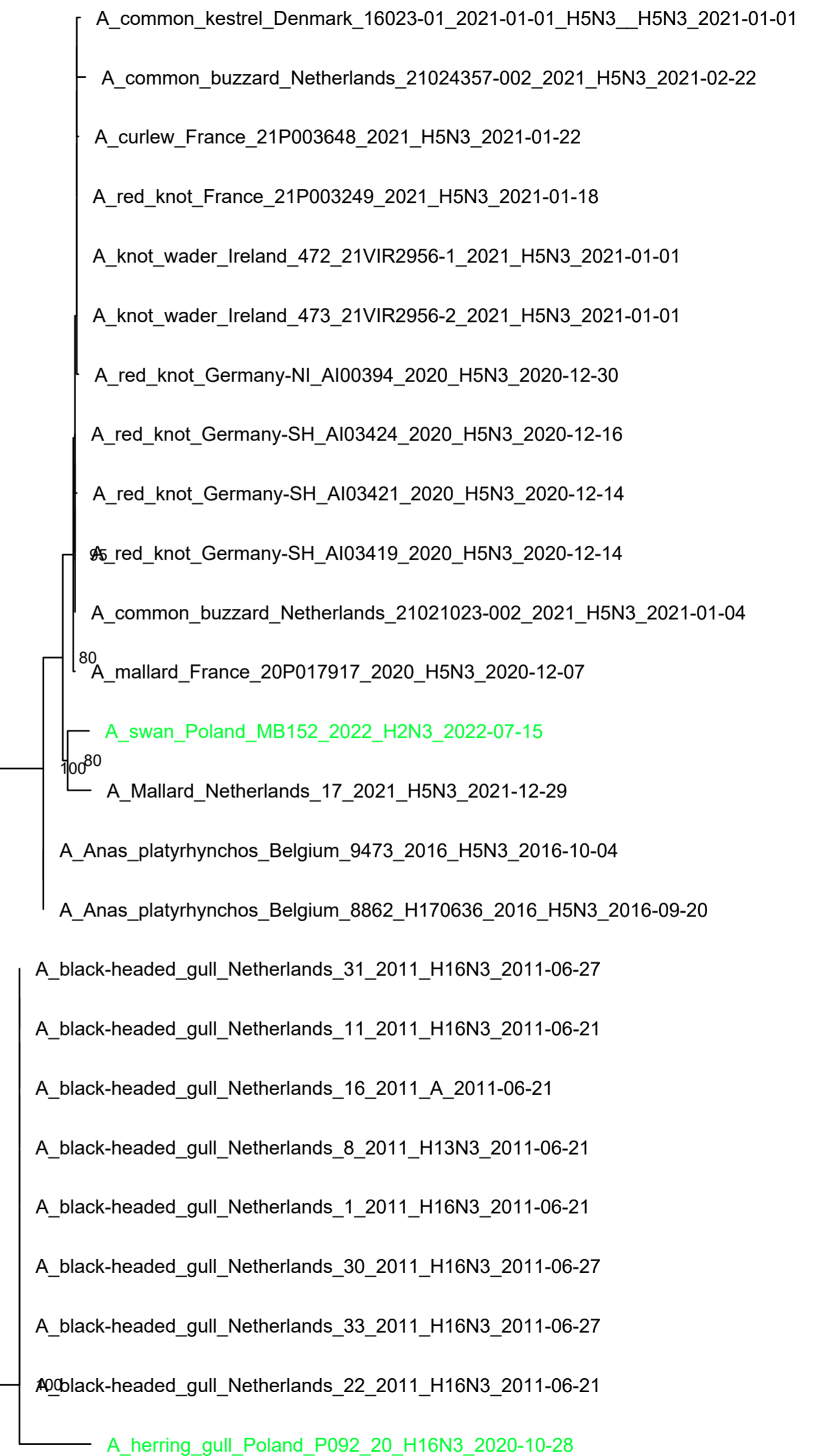
NA - N2

Best-fit model: HKY+F+I



NA - N3

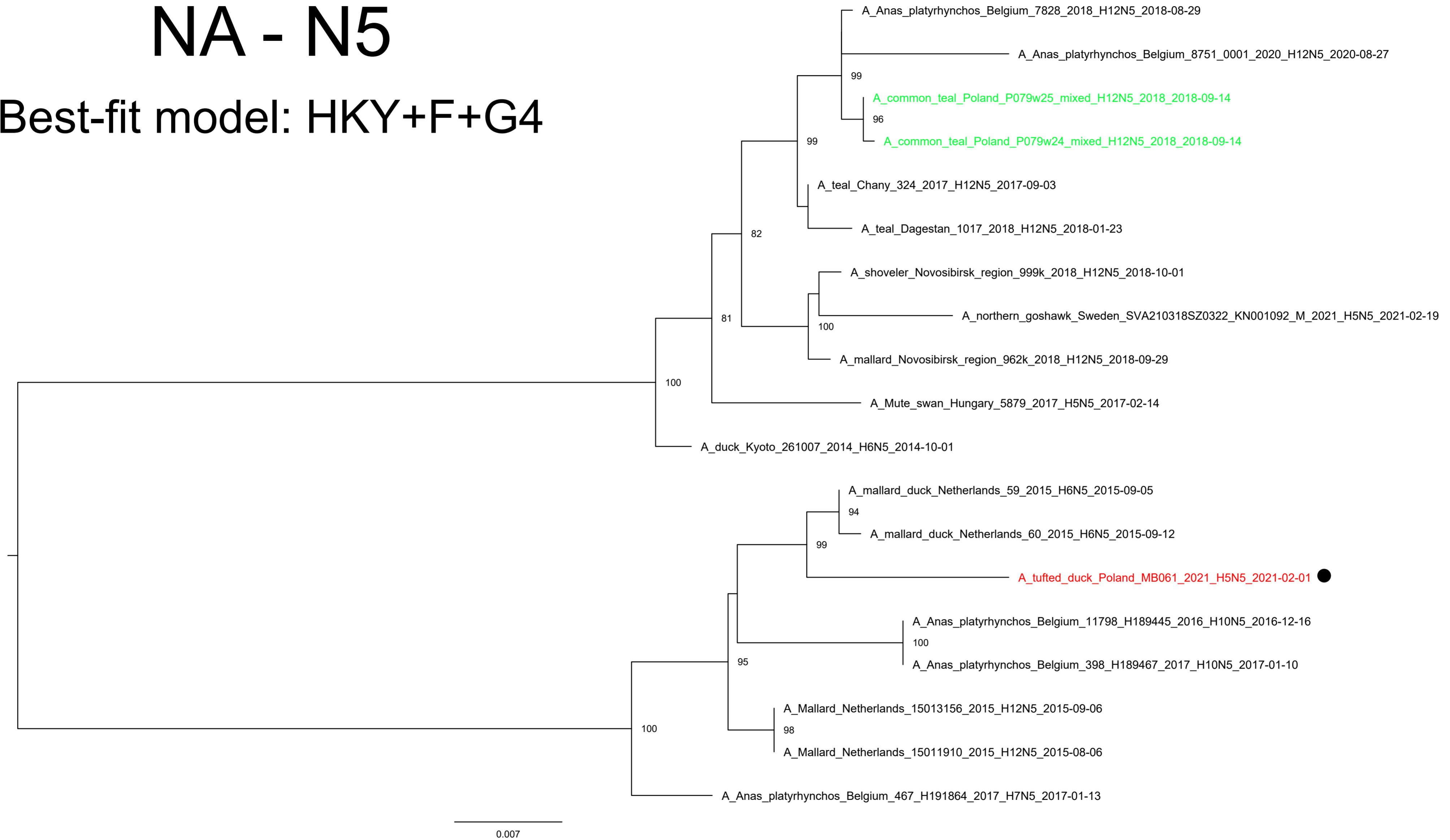
Best-fit model: HKY+F+I



0.08

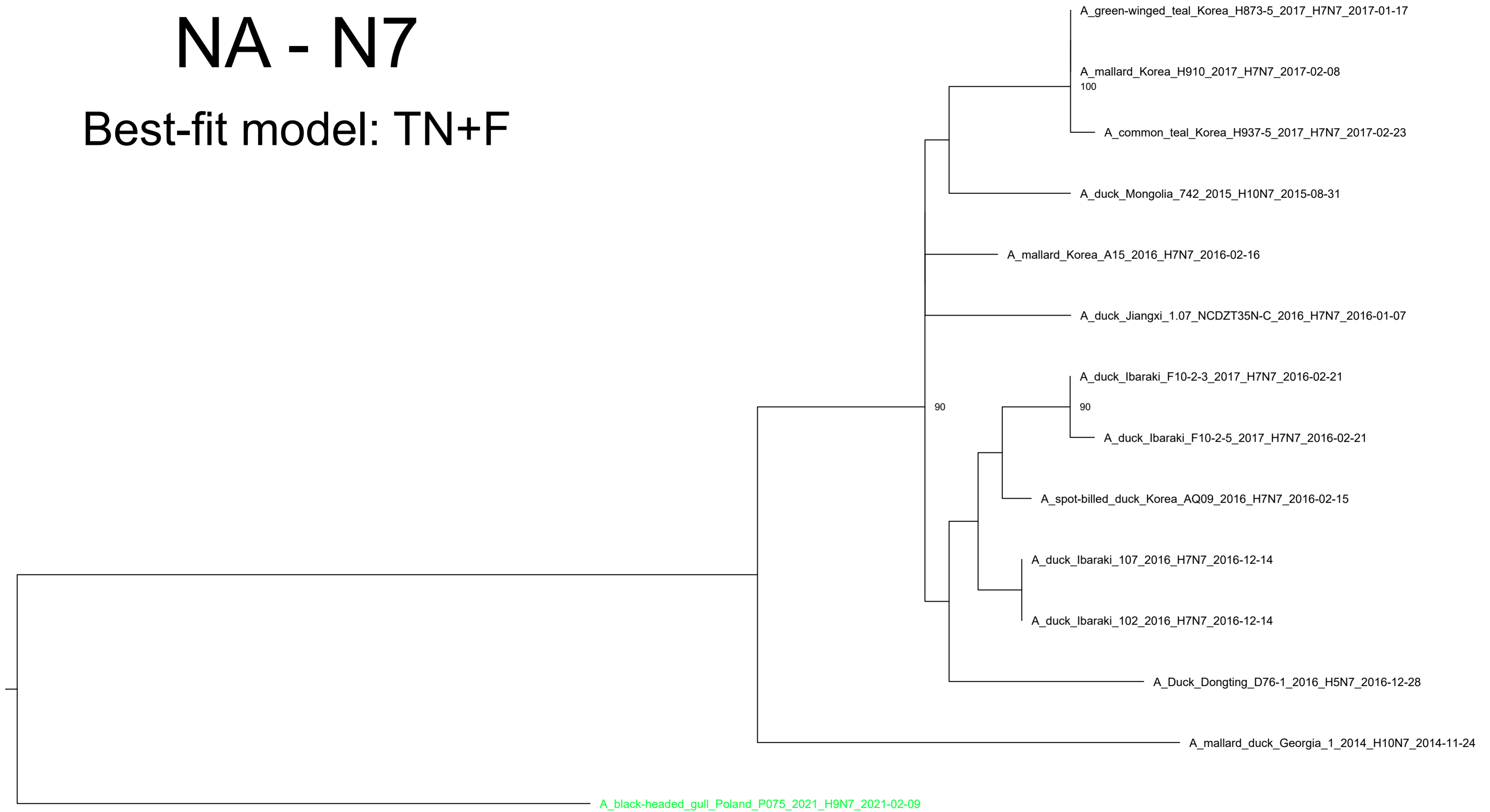
NA - N5

Best-fit model: HKY+F+G4



NA - N7

Best-fit model: TN+F



0.004

NA - N8

Best-fit model: K3Pu+F+G4

