

Supplementary Table

Table S1. Summary of all bird sampled, prevalence and the corresponding parasite lineages recorded in each infected bird host. Title headings n = sample size; H = *Haemoproteus* spp; P = *Plasmodium* spp; L = *Leucocytozoon*. Bold lineages indicate new lineages. Numbers in grey column indicate sample sizes of bird(s) infected by lineage for that species.

| Species | n | Infected | Prevalence (%) | H | P | L | Lineages | |
|-----------------------------------|-----|----------|----------------|-----|-----|-----|--|---|
| <i>Acridotheres tristis</i> | 2 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Actophilornis africanus</i> | 5 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Alopochen aegyptiaca</i> | 3 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Amaurornis flavirostris</i> | 1 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Anaplectes rubriceps</i> | 10 | 6 | 60 | 4 | 0 | 2 | AFR173 ANARUB02 ANARUB03 SPISEN02 | 1 1 3 1 |
| <i>Bostrychia hagedash</i> | 1 | 1 | 100 | 1 | 0 | 0 | BOSHAG01 | 1 |
| <i>Bradypterus baboecala</i> | 1 | 1 | 100 | 1 | 0 | 0 | BRABAB01 | 1 |
| <i>Buphagus erythrorhynchus</i> | 30 | 14 | 43 | 0 | 0 | 13 | BUPERY01 REB7 RECOB3 RS4 | 4 3 5 2 |
| <i>Burhinus vermiculatus</i> | 2 | 2 | 100 | 2 | 0 | 0 | BUTVER01 | 2 |
| <i>Cecropis abyssinica</i> | 4 | 2 | 50 | 1 | 1 | 0 | RBQ22 | 2 |
| <i>Cinnyricinclus leucogaster</i> | 4 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Colius striatus</i> | 6 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Cossypha heuglini</i> | 1 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Creatophora cinerea</i> | 38 | 16 | 42 | 13 | 3 | 0 | AFR084 CRECIN01 CRECIN02 CRECRI01 RTSR1 TOCERY01 | 1 1 1 10 1 2 |
| <i>Crithagra mozambica</i> | 25 | 17 | 56 | 9 | 1 | 7 | AFR072 AFR073 AFR161 CRIMOZ02 CRIMOZ03 CRIMOZ04 REB7 SPISAL01 SYBOR06 | 1 4 1 2 1 1 5 1 1 |
| <i>Dicrurus adsimilis</i> | 14 | 2 | 29 | 2 | 0 | 0 | DICADS01 | 2 |
| <i>Emberiza flaviventris</i> | 1 | 1 | 100 | 1 | 0 | 0 | EMBFLA01 | 1 |
| <i>Euplectes orix</i> | 9 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Gymnoris supercilialis</i> | 1 | 1 | 100 | 1 | 0 | 0 | PAMEL01 | 1 |
| <i>Halcyon albiventris</i> | 5 | 1 | 20 | 1 | 0 | 0 | HALALB01 | 1 |
| <i>Hirundo rustica</i> | 28 | 1 | 7 | 1 | 0 | 0 | HIRUS05 | 1 |
| <i>Hirundo smithii</i> | 22 | 4 | 18 | 4 | 0 | 0 | Unidentified | |

| Species | <i>n</i> | Infected | Prevalence (%) | <i>H</i> | <i>P</i> | <i>L</i> | Lineages | |
|---------------------------------|----------|----------|----------------|----------|----------|----------|---|---|
| <i>Lamprotornis australis</i> | 1 | 1 | 100 | 0 | 1 | 0 | LAMCHA05 | 1 |
| <i>lamprotornis chalybaeus</i> | 191 | 64 | 34 | 45 | 18 | 2 | AFR041 AFR076 AFR084 LAMCHA01 LAMCHA02 LAMCHA03 LAMCHA04 LAMCHA05 LUME1 RS4 RTSR1 SYBOR10 | |
| <i>Lamprotornis nitens</i> | 15 | 5 | 33 | 5 | 0 | 0 | AFR041 AFR076 LAMCHA04 | |
| <i>Lanius collurio</i> | 1 | 1 | 100 | 1 | 0 | 0 | RBS5 | |
| <i>Leptoptilos crumeniferus</i> | 1 | 1 | 100 | 0 | 1 | 0 | RTSR1 | |
| <i>Lybius torquatus</i> | 3 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Melaniparus niger</i> | 1 | 1 | 100 | 1 | 0 | 1 | RS4 | |
| <i>Merops bullockoides</i> | 6 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Motacilla aguimp</i> | 7 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Passer diffusus</i> | 31 | 20 | 65 | 14 | 1 | 10 | AFR042 AFR173 PAMEL01 PAMEL02 PASDIF01 PASDIF02 PASDIF03 PASDIF04 PASDIF05 PASDIF06 PASDIF07 RS4 | |
| <i>Passer domesticus</i> | 84 | 18 | 21 | 3 | 0 | 16 | AFR164 PADOM39 PAMEL01 PASDIF03 REB7 RS4 VILWE2 | |
| <i>Peliperdix sephaena</i> | 10 | 5 | 50 | 0 | 3 | 3 | PELSEP01 PELSEP02 PELSEP03 PELSEP04 | |
| <i>Phoeniculus purpureus</i> | 1 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Ploceus capensis</i> | 7 | 4 | 57 | 3 | 1 | 0 | LINOLI01 MALNI02 VILWE04 VILWE2 | |
| <i>Ploceus cucullatus</i> | 69 | 38 | 55 | 18 | 15 | 8 | AEMO01 COLL7 LINOLI01 MALNI02 PLOCUC06 | |

| Species | <i>n</i> | Infected | Prevalence (%) | <i>H</i> | <i>P</i> | <i>L</i> | Lineages |
|----------------------------------|-------------|------------|----------------|------------|-----------|-----------|--|
| | | | | | | | PLOCUC07 PLOCUC08 PLOCUC09 PLOCUC11 PLOCUC12 PLOCUC13 RBQ22 REB7 RS4 SYBOR10 VILWE2 VIMWE1 WCH2 WW3 |
| <i>Ploceus intermedius</i> | 23 | 4 | 17 | 4 | 0 | 0 | VILWE2 VIMWE1 |
| <i>Ploceus velatus</i> | 8 | 3 | 38 | 2 | 1 | 0 | MELMEL06 PLOVEL02 VIMWE1 |
| <i>Prinia subflava</i> | 7 | 1 | 14 | 1 | 0 | 0 | PRISUB01 |
| <i>Prionops plumatus</i> | 5 | 0 | 0 | 0 | 0 | 0 | |
| <i>Pycnonotus tricolor</i> | 17 | 8 | 47 | 4 | 1 | 7 | AFR223 BUL2 PYCBAR03 PYCTRI01 PYCTRI02 PYCTRI03 PYCTRI04 |
| <i>Pytilia melba</i> | 2 | 0 | 0 | 0 | 0 | 0 | |
| <i>Quelea quelea</i> | 65 | 1 | 2 | 1 | 0 | 0 | Unidentified |
| <i>Spermestes cucullata</i> | 5 | 0 | 0 | 0 | 0 | 0 | |
| <i>Spilopelia senegalensis</i> | 102 | 35 | 34 | 22 | 0 | 20 | SPISEN01 SPISEN02 SPISEN04 SPISEN05 SPISEN06 |
| <i>Streptopelia decipiens</i> | 54 | 2 | 4 | 2 | 0 | 0 | STRTUR03 |
| <i>Streptopelia semitorquata</i> | 8 | 3 | 38 | 3 | 0 | 1 | STRSEM01 |
| <i>Terpsiphone viridis</i> | 9 | 1 | 11 | 1 | 0 | 1 | EUPHOR02 TERUF01 |
| <i>Tockus erythrorhynchus</i> | 40 | 3 | 5 | 1 | 1 | 0 | SYBOR10 |
| <i>Tockus leucomelas</i> | 30 | 1 | 3 | 1 | 0 | 0 | TOCLEU01 |
| <i>Trachyphonus vaillantii</i> | 5 | 2 | 40 | 2 | 0 | 1 | AFR002 CIAE02 |
| <i>Turdoides jardineii</i> | 6 | 3 | 50 | 0 | 0 | 3 | TURJAR02 TURJAR03 TURJAR04 TURJAR05 |
| <i>Tychaemon quadrivirgata</i> | 1 | 1 | 100 | 1 | 0 | 1 | TYCQUA01 TYCQUA02 |
| <i>Uraeginthus angolensis</i> | 7 | 1 | 14 | 1 | 0 | 0 | URANG01 |
| Total | 1035 | 294 | | 180 | 48 | 96 | |