

Avian speciation and biodiversity in South-east Sulawesi, Indonesia: drivers of diversification

by

Darren P. O'Connell

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School of Natural Sciences (Zoology)

Trinity College Dublin

The University of Dublin

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Table of Contents

Chapters with appendices

| | |
|---|----|
| 4. Diversification of a ‘great speciator’ in the Wallacea region: differing responses of closely related resident and migratory kingfisher species (Aves: Alcedinidae: <i>Todiramphus</i>) - Supplementary information | 1 |
| 5. A sympatric pair of undescribed white-eye species with very different origins - Supplementary information | 20 |
| 5.1. Detailed Tobias scoring for potentially novel white-eye species..... | 71 |
| 5.1.1. Tobias scoring - <i>Z. chloris flavissimus</i> vs mainland South-east Sulawesi Lemon-bellied White-eyes..... | 72 |
| 5.1.2. Tobias scoring <i>Zosterops sp. nov.</i> ‘Wangi-wangi White-eye’ vs the Pale-bellied White-eye | 73 |
| 5.1.3. Assessment..... | 74 |
| 6. Island-like processes in urban populations of a ‘great speciator’ - Supplementary information..... | 80 |
| 7. Female birds crowded out by males on small islands: niche contraction in dense populations of Olive-backed Sunbirds is asymmetric - Supplementary information | 83 |
| Bibliography..... | 86 |

List of Figures

| | |
|--|----|
| Figure S5.1: Full Bayesian consensus tree for concatenated ND2/ND3 haplotypes | 53 |
| Figure S5.2: Full Bayesian consensus tree for COI haplotypes. | 54 |
| Figure S7.1: Heatmap showing the proportion overlap in morphological niche between all Olive-backed Sunbird populations | 83 |

List of Tables

| | |
|---|----|
| Table S4.1: Full list of samples utilised in the phylogenetic analysis for Chapter 4. | 1 |
| Table S4.2: Novel primers developed for this study..... | 15 |
| Table S4.3: ND2 pairwise percentage distances between the <i>Todiramphus</i> clades | 16 |
| Table S4.4: COI pairwise percentage distances between the <i>Todiramphus</i> clades..... | 17 |
| Table S4.5: Classification accuracy of the DFA for morphology of Sulawesi <i>Todiramphus</i> populations..... | 18 |
| Table S4.6: Existing vouchered specimens of Collared Kingfishers from South-east Sulawesi. . | 19 |
| Table S5.1: Full list of samples utilised in the phylogenetic analysis for Chapter 5..... | 20 |
| Table S5.2: Novel primers developed for this study..... | 48 |
| Table S5.3: Summary table of the taxa used in the ND2/ND3 phylogenetic analysis. | 49 |
| Table S5.4: Summary table of the taxa used in the COI phylogenetic analysis. | 51 |
| Table S5.5: Phylogenetic models used and summary statistics for each codon. | 52 |
| Table S5.6: ND2 pairwise percentage distances between the <i>Zosterops</i> clades..... | 55 |
| Table S5.7: COI pairwise percentage distances between the <i>Zosterops</i> clades | 62 |
| Table S5.8: A summary of the morphological data used for the <i>Zosterops chloris</i> “mainland” population, showing mean figures \pm standard error. | 64 |
| Table S5.9: A summary of the morphological data used for the <i>Zosterops chloris</i> “Wakatobi” population | 65 |
| Table S5.10: A summary of the morphological data used for <i>Zosterops consobrinorum</i> | 66 |
| Table S5.11: A summary of the morphological data used for the <i>Zosterops sp. nov.</i> “Wangi-wangi White-eye” | 66 |
| Table S5.12: Summary of the loading of the different variables in the PCs with eigenvalues >1 in the morphology PCAs and the proportion of the variance these PCs explained..... | 67 |
| Table S5.13: A summary of the song data used for the <i>Zosterops chloris</i> “mainland” population | 68 |
| Table S5.14: A summary of the song data used for the <i>Zosterops chloris</i> “Wakatobi” population | 68 |
| Table S5.15: A summary of the song data used for the <i>Zosterops chloris maxi</i> Lombok population. | 69 |
| Table S5.16: A summary of the song data used for <i>Zosterops consobrinorum</i> | 69 |
| Table S5.17: Summary of the loading of the different variables in the PCs with eigenvalues >1 in the song PCAs and the proportion of the variance these PCs explained..... | 70 |

| | |
|---|----|
| Table S5.18: Comparison photos for Tobias scoring between <i>Zosterops chloris flavissimus</i> (Wakatobi Islands) and the Lemon-bellied White-eye population on mainland South-east Sulawesi and continental islands. | 75 |
| Table S5.19: Comparison photos for Tobias scoring between the Pale-bellied White-eye and the ‘Wangi-wangi White-eye’..... | 77 |
| Table S5.20: Existing vouchered specimens of <i>Zosterops chloris</i> from South-east Sulawesi. AMNH - American Museum of Natural History..... | 79 |
| Table S6.1: A summary of the morphological data used in this analysis for Lemon-bellied White-eyes and Pale-bellied White-eyes | 80 |
| Table S6.2: A summary of the transect data used in this analysis for Lemon-bellied White-eyes and Pale-bellied White-eyes. | 81 |
| Table S6.3: Results of all comparisons in the Tukey HSD posthoc to the Negative Binomial GLM of Lemon-bellied White-eye density..... | 82 |
| Table S7.1: Total morphological niche volume for female and male Olive-backed Sunbirds on each island, and the proportion of morphological niche volume overlap between male and female sunbirds in each population..... | 84 |
| Table S7.2: A summary of the transect data used in this analysis for Olive-backed Sunbirds ... | 84 |
| Table S7.3: Results of all comparisons in the Tukey HSD posthoc test to the Poisson GLM of Olive-backed Sunbird density | 85 |

4. Diversification of a 'great speciator' in the Wallacea region: differing responses of closely related resident and migratory kingfisher species (Aves: Alcedinidae: *Todiramphus*) -Supplementary information

Table S4.1: Full list of samples utilised in the phylogenetic analysis for Chapter 4, detailing the species, sampling location and museum ID. Haplotypes identified for concatenated ND2 and ND3 sequences and for COI sequences in this study are listed. GenBank accession numbers are provided. The source column identifies whether the sequences were produced by this study, are associated with a published study or are unpublished sequences. Individuals are ordered by ND2/ND3 haplotype. Sulawesi samples collected under licence from Kementerian Negara Riset dan Teknologi (RISTEKDIKTI). Institutional abbreviations are as follows: USNM - United States National Museum; PAA - Institute of Biology University of the Philippines Diliman; SDNCU -Specimen Depository of the Graduate School of Natural Sciences Nagoya City University; NC - National Center for Biotechnology Information, NIH, Bethesda, USA; KUNHM - University of Kansas Natural History Museum; UWBM - Burke Museum University of Washington; AMNH - American Museum of Natural History; SUL - Zoology Department, Trinity College Dublin; SNZP - Smithsonian National Zoological Park; ANWC - Australian National Wildlife Collections; UDP - Institute of Biology University of the Philippines Diliman; MNHN - Le Muséum National d'Histoire Naturelle, LSUMNS - Louisiana State University Museum of Natural Science.

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|------------------------|--------------------------------|-----------------|--------------------|--------------|----------|----------|------------|------------|----------------------------------|
| USNM: Birds: 607356 | <i>Actenoides lindsayi</i> | <i>lindsayi</i> | Philippines: Luzon | | | | hapAL1 | JQ173902.2 | Schindel <i>et al.</i> (2011) |
| PAA 2413 | <i>Actenoides lindsayi</i> | <i>lindsayi</i> | Philippines: Luzon | | | | hapAL2 | KC354893.1 | Unpublished |
| SDNCU-A2689 | <i>Dacelo novaeguineae</i> | | Australia | | | | hapDN1 | LC145062.1 | Unpublished |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|-------------|----------------------------|----------------------|---------------------------|-----------|------------|------------|---------|------------|-------------------------------|
| NC_028177.1 | <i>Halcyon coromanda</i> | | SE Asia | hapHC1 | NC_028177 | NC_028177 | hapHC1 | NC_028177 | Unpublished |
| NC_024198.1 | <i>Halcyon pileata</i> | | SE Asia | hapHP1 | NC_024198 | NC_024198 | hapHP1 | NC_024198 | Unpublished |
| KY940559.1 | <i>Halcyon symrnensis</i> | | SE Asia | hapHS1 | KY940559.1 | KY940559.1 | hapHS1 | KY940559.1 | Unpublished |
| KUNHM 7143 | <i>Syma megarhyncha</i> | | PNG: Morobe Province | hapSM1 | KP291344.1 | KP291395.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 5215 | <i>Syma torotoro</i> | | PNG | hapST1 | KP291306.1 | KP291525.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 67535 | <i>Todiramphus chloris</i> | <i>humii</i> | Singapore | hapC01 | KP291392.1 | KP291461.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 76183 | <i>Todiramphus chloris</i> | <i>humii</i> | Singapore | hapC02 | KP291293.1 | KP291505.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 76211 | <i>Todiramphus chloris</i> | <i>humii</i> | Singapore | hapC03 | KP291254.1 | KP291520.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 81948 | <i>Todiramphus chloris</i> | <i>laubmannianus</i> | Malaysia: Sarawak, Borneo | hapC04 | KP291343.1 | KP291534.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|----------------|--------------------------------|-------------------|----------------------------------|----------------------|-----------------|-----------------|--------------------|-----------------|-------------------------------|
| KUNHM 13971 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Camiguin Sur Is. | hapC04 | KP291279.1 | KP291449.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 14010 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Camiguin Sur Is. | hapC04 | KP291322.1 | KP291480.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 17938 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Mindanao Is. | hapC04 | KP291258.1 | KP291467.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 18130 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Mindanao Is. | hapC04 | KP291277.1 | KP291398.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 18134 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Mindanao Is. | hapC04 | KP291336.1 | KP291544.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 14446 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Tablas Is. | hapC04 | KP291353.1 | KP291475.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 20983 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Bohol Is | hapC05 | KP291329.1 | KP291542.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 28674 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Mindanao Is. | hapC05 | KP291340.1 | KP291458.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 14447 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Tablas Is. | hapC05 | KP291384.1 | KP291522.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|-------------------|--------------------------------|-----------------|--|-----------|------------|------------|---------|----------|-------------------------------|
| KUNHM 13960 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Camiguin Sur Is. | hapC06 | KP291364.1 | KP291404.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 28455 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Mindanao Is. | hapC07 | KP291248.1 | KP291410.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 23630 | <i>Todiramphus chloris</i> | <i>teraokai</i> | Palau: Babeldaob Is. | hapC08 | KP291299.1 | KP291443.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 23690 | <i>Todiramphus chloris</i> | <i>teraokai</i> | Palau: Peleliu Is. | hapC08 | KP291341.1 | KP291472.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 23631 | <i>Todiramphus chloris</i> | <i>teraokai</i> | Palau: Babeldaob Is. | hapC09 | KP291366.1 | KP291413.1 | | | Andersen <i>et al.</i> (2015) |
| AMNH DOT 12606 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Central Sulawesi mainland | hapC10 | KP291238.1 | KP291537.1 | | | Andersen <i>et al.</i> (2015) |
| SUL1920 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Buton Island | hapC11 | MG845636 | MG845607 | hapC03 | MG845665 | This study |
| SUL1961 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Buton Island | hapC11 | MG845638 | MG845609 | hapC03 | MG845667 | This study |
| SUL2317 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Muna Island | hapC11 | MG845641 | MG845612 | | | This study |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|-----------|--------------------------------|-------------------|--|----------------------|-----------------|-----------------|--------------------|-----------------|-------------------|
| SUL2425 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: SE Sulawesi mainland | hapC11 | MG845642 | MG845613 | | | This study |
| SUL2447 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: SE Sulawesi mainland | hapC11 | MG845643 | MG845614 | | | This study |
| SUL0506 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Kabaena | hapC12 | MG845637 | MG845608 | hapC03 | MG845666 | This study |
| SUL1884 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Hoga, Wakatobi Is. | hapC13 | MG845639 | MG845610 | hapC05 | MG845668 | This study |
| SUL1864 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Binongko, Wakatobi Is. | hapC14 | MG845634 | MG845605 | hapC04 | MG845663 | This study |
| SUL1767 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Tomia, Wakatobi Is. | hapC14 | MG845635 | MG845606 | hapC04 | MG845664 | This study |
| SUL1656 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Hoga, Wakatobi Is. | hapC14 | MG845640 | MG845611 | | | This study |
| SUL1858 | <i>Todiramphus chloris</i> | <i>chloris</i> | Sulawesi: Binongko, Wakatobi Is. | hapC15 | MG845633 | MG845604 | hapC04 | MG845662 | This study |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|------------------------|---------------------------------|-----------------|---|-----------|------------|------------|---------|----------|-------------------------------|
| SNZP TKP 2003092 | <i>Todiramphus colonus</i> | | PNG: Tobwoiama Is., D'Entrecasteaux Archipelago | HapZ01 | KP291294.1 | KP291547.1 | | | Andersen <i>et al.</i> (2015) |
| SNZP TKP 2003097 | <i>Todiramphus colonus</i> | | PNG: Rossel Is., Louisiade Archipelago | HapZ01 | KP291347.1 | KP291424.1 | | | Andersen <i>et al.</i> (2015) |
| SNZP TKP2003071 | <i>Todiramphus colonus</i> | | PNG: Rossel Is., Louisiade Archipelago | HapZ01 | KP291358.1 | KP291482.1 | | | Andersen <i>et al.</i> (2015) |
| SNZP TKP 2003089 | <i>Todiramphus colonus</i> | | PNG: Rossel Is., Louisiade Archipelago | HapZ02 | KP291333.1 | KP291441.1 | | | Andersen <i>et al.</i> (2015) |
| SNZP TKP 2003070 | <i>Todiramphus colonus</i> | | PNG: Rossel Is., Louisiade Archipelago | HapZ02 | KP291383.1 | KP291459.1 | | | Andersen <i>et al.</i> (2015) |
| ANWC B33719 | <i>Todiramphus sordidus</i> | <i>sordidus</i> | Australia: NE Darwin, Northern Territory | HapY01 | KP291318.1 | KP291527.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|---------------------|-----------------------------|-------------------|--|-----------|------------|------------|---------|------------|-------------------------------|
| ANWC B33719 | <i>Todiramphus sordidus</i> | <i>sordidus</i> | Australia: Northern Territory | HapY02 | KP291318.1 | KP291527.1 | | | Andersen <i>et al.</i> (2015) |
| ANWC B337120 | <i>Todiramphus sordidus</i> | <i>sordidus</i> | Australia: Northern Territory | HapY03 | KP291361.1 | KP291442.1 | | | Andersen <i>et al.</i> (2015) |
| ANWC B51462 | <i>Todiramphus sordidus</i> | <i>sordidus</i> | Australia: Cape York Peninsula, Queensland | HapY04 | KP291240.1 | KP291515.1 | | | Andersen <i>et al.</i> (2015) |
| ANWC B44296 | <i>Todiramphus sordidus</i> | <i>colcloughi</i> | Australia: N Rockhampton, Queensland | HapY05 | KP291390.1 | KP291438.1 | | | Andersen <i>et al.</i> (2015) |
| USNM: Birds: 635317 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Cagayan, Babuyan Islands | | | | hapC01 | JQ176503.2 | Schindel <i>et al.</i> (2011) |
| UPD24 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Quezon City, Luzon | | | | hapC01 | HM622578.1 | Luczon <i>et al.</i> (2010) |
| UPD10 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Quezon City, Luzon | | | | hapC02 | HM622581.1 | Luczon <i>et al.</i> (2010) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|---------------------------|------------------------------|------------------|------------------------------------|--------------|----------|----------|------------|------------|----------------------------------|
| UPD15 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Quezon City, Luzon | | | | hapC02 | HM622580.1 | Luczon <i>et al.</i> (2010) |
| UPD16 | <i>Todiramphus chloris</i> | <i>collaris</i> | Philippines: Quezon City, Luzon | | | | hapC02 | HM622579.1 | Luczon <i>et al.</i> (2010) |
| JX297488 | <i>Todiramphus gambieri</i> | <i>gertrudae</i> | Tuamotu Is. | | | | hapG01 | JX297488.1 | Unpublished |
| USNM: Birds: 612714 | <i>Todiramphus macleayii</i> | <i>incinctus</i> | Australia: Queensland | | | | hapM01 | JQ176504.2 | Schindel <i>et al.</i> (2011) |
| USNM: Birds: 542628 | <i>Todiramphus macleayii</i> | <i>incinctus</i> | Australia: Queensland | | | | hapM02 | JQ176505.1 | Schindel <i>et al.</i> (2011) |
| SUL2578 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS01 | MG845651 | MG845622 | hapS01 | MG845675 | This study |
| SUL2582 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS01 | MG845653 | MG845624 | hapS01 | MG845677 | This study |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|------------|----------------------------|------------------|--|-----------|------------|------------|---------|----------|-------------------------------|
| SUL1634 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kaledupa, Wakatobi Is. | hapS01 | MG845646 | MG845617 | hapS03 | MG845670 | This study |
| SUL2166 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: SE Sulawesi mainland | hapS01 | MG845655 | MG845626 | hapS05 | MG845679 | This study |
| UWBM 57468 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: NSW | hapS01 | KP291317.1 | KP291469.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 62818 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: NSW | hapS01 | KP291376.1 | KP291397.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 72545 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: Queensland | hapS01 | KP291271.1 | KP291471.1 | | | Andersen <i>et al.</i> (2015) |
| SUL2575 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS01 | MG845661 | MG845632 | | | This study |
| MNHN NC83 | <i>Todiramphus sanctus</i> | <i>canacorum</i> | New Caldedonia | hapS01 | KP291303.1 | KP291473.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 7557 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | PNG: Western Province | hapS01 | KP291273.1 | KP291453.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|------------------|----------------------------|----------------|---|-----------|------------|------------|---------|----------|-------------------------------|
| UWBM 58750 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Solomon Islands: Santa Isabel Is. | hapS01 | KP291330.1 | KP291419.1 | | | Andersen <i>et al.</i> (2015) |
| AMNH DOT12594 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Central Sulawesi | hapS01 | KP291253.1 | KP291437.1 | | | Andersen <i>et al.</i> (2015) |
| SUL0509 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS01 | MG845659 | MG845630 | | | This study |
| SUL1633 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kaledupa, Wakatobi Is. | hapS01 | MG845645 | MG845616 | | | This study |
| UWBM 68062 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | PNG: Schumann Is., Bismarck Archipelago | hapS02 | KP291352.1 | KP291423.1 | | | Andersen <i>et al.</i> (2015) |
| SUL0537 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS03 | MG845650 | MG845621 | hapS01 | MG845674 | This study |
| UWBM 68059 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | PNG: Schumann Is., Bismarck Archipelago | hapS04 | KP291259.1 | KP291478.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|---------------|----------------------------|-------------------|--|----------------------|-----------------|-----------------|--------------------|-----------------|-------------------------------|
| ANWC B34659 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: Western Australia | hapS05 | KP291345.1 | KP291431.1 | | | Andersen <i>et al.</i> (2015) |
| SUL1899 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Hoga, Wakatobi Is. | hapS06 | MG845657 | MG845628 | hapS01 | MG845682 | This study |
| SUL1587 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kaledupa, Wakatobi Is. | hapS06 | MG845656 | MG845627 | hapS01 | MG845681 | This study |
| ANWC B54622 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: Roper River, Northern Territory | hapS07 | KP291377.1 | KP291495.1 | | | Andersen <i>et al.</i> (2015) |
| ANWC B34636 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: SE Darwin, Northern Territory | hapS08 | KP291332.1 | KP291540.1 | | | Andersen <i>et al.</i> (2015) |
| LSUMNS B45812 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Vanuatu | hapS09 | KP291285.1 | KP291456.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 19403 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Solomon Islands: Nendo Is., Santa Cruz Group | hapS10 | KP291372.1 | KP291491.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|-------------|----------------------------|-------------------|-------------------------------------|----------------------|-----------------|-----------------|--------------------|-----------------|-------------------------------|
| SUL0517 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS11 | MG845649 | MG845620 | hapS01 | MG845673 | This study |
| SUL2556 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS12 | MG845660 | MG845631 | | | This study |
| SUL0510 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS13 | MG845648 | MG845619 | hapS01 | MG845672 | This study |
| SUL0504 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS14 | MG845658 | MG845629 | | | This study |
| ANWC B50292 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: Western Australia | hapS15 | KP291288.1 | KP291420.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 63200 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Solomon Islands: Choiseul Is. | hapS15 | KP291281.1 | KP291492.1 | | | Andersen <i>et al.</i> (2015) |
| SUL0498 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kabaena | hapS16 | MG845647 | MG845618 | | MG845671 | This study |
| UWBM 76296 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Solomon Islands: New Georgia Is. | hapS17 | KP291245.1 | KP291484.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|----------------|----------------------------|-------------------|---|----------------------|-----------------|-----------------|--------------------|-----------------|-------------------------------|
| SUL2580 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS18 | MG845652 | MG845623 | hapS01 | MG845676 | This study |
| SUL1071 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Runduma, Wakatobi Is. | hapS19 | MG845644 | MG845615 | hapS02 | MG845669 | This study |
| KUNHM 7567 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | PNG | hapS20 | KP291262.1 | KP291531.1 | | | Andersen <i>et al.</i> (2015) |
| SUL2584 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Menui | hapS21 | MG845654 | MG845625 | hapS04 | MG845678 | This study |
| MNHN NC10 | <i>Todiramphus sanctus</i> | <i>canacorum</i> | New Caldedonia | hapS21 | KP291326.1 | KP291546.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 14879 | <i>Todiramphus sanctus</i> | <i>vagans</i> | New Zealand: Waiheke Is, Auckland | hapS21 | KP291369.1 | KP291488.1 | | | Andersen <i>et al.</i> (2015) |
| KUNHM 14877 | <i>Todiramphus sanctus</i> | <i>vagans</i> | New Zealand: Warkworth, Auckland | hapS21 | KP291278.1 | KP291536.1 | | | Andersen <i>et al.</i> (2015) |

| ID | Species | Subspecies | Locality | ND2/3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. | Source |
|------------------------|------------------------------------|--------------------|--|--------------|------------|------------|------------|------------|----------------------------------|
| USNM: Birds: 610567 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Australia: NSW | | | | hapS01 | JQ176506.1 | Schindel <i>et al.</i> (2011) |
| SUL1580 | <i>Todiramphus sanctus</i> | <i>sanctus</i> | Sulawesi: Kaledupa, Wakatobi Is. | | | | hapS06 | MG845680 | This study |
| KUNHM 27804 | <i>Todiramphus saurophagus</i> | <i>saurophagus</i> | PNG: Nusalaman Is., Bismarck Archipelago | hapX01 | KP291356.1 | KP291533.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 69666 | <i>Todiramphus saurophagus</i> | <i>saurophagus</i> | Solomon Islands: Hekelake Is. | hapX02 | KP291356.1 | KP291490.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 60326 | <i>Todiramphus saurophagus</i> | <i>saurophagus</i> | Solomon Islands: Hekelake Is. | hapX03 | KP291374.1 | KP291407.1 | | | Andersen <i>et al.</i> (2015) |
| UWBM 60204 | <i>Todiramphus saurophagus</i> | <i>saurophagus</i> | Solomon Islands: Kiaba Is. | hapX03 | KP291241.1 | KP291500.1 | | | Andersen <i>et al.</i> (2015) |

Table S4.2: Novel primers developed for this study. DOC-ND3-R1 was developed as a match for L10755 (Chesser 1999) to sequence the whole ND3 region. All other listed primers are internal primers for ND2.

| Locus | Primer name | 5' to 3' sequence | Direction |
|--------------|--------------------|--------------------------|------------------|
| ND3 | DOC-ND3-R1 | TTGTTGAGTCGAAATCAACTG | Reverse |
| ND2 | DOC-ND2-F1 | ATACCCCGAAAATGATGGT | Forward |
| ND2 | HMfar-R | CTTGTTTAAGGCTTTGAAGGC | Reverse |
| ND2 | HMnr-FK | GAAGAGATCAAACCCCTCCATACT | Forward |
| ND2 | HMnr-R | GGGAAGTCCTGCTAGGGATA | Reverse |
| ND2 | HMnr-RK | AATAGTAGGATGGTGATTGGGG | Reverse |
| ND2 | HMfar-FK | CCCCAATCACCATCCTACTATT | Forward |
| ND2 | HMfar-RK | TGCGGATCTTAACAGAACTAAGAG | Reverse |

Table S4.3: ND2 pairwise percentage distances between the *Todiramphus* clades in this study. Mean pairwise distances are reported for taxa with more than one sample.

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|---|-----|-----|-----|-----|-----|-----|-----|----|
| 1. <i>T. c. chloris</i> 'Sulawesi' | - | | | | | | | |
| 2. <i>T. c. chloris</i> 'Wakatobi' | 0.4 | - | | | | | | |
| 3. <i>T. c. humii</i> 'Singapore' | 1.3 | 1.1 | - | | | | | |
| 4. <i>T. c. collaris</i>, <i>T. c. laubmannianus</i> and <i>T. c. teraokai</i> 'Philippines, Borneo and Palau' | 1.3 | 1.0 | 0.9 | - | | | | |
| 5. <i>T. colonus</i> | 0.9 | 0.9 | 1.1 | 1.0 | - | | | |
| 6. <i>T. sordidus</i> | 1.3 | 1.1 | 1.3 | 1.2 | 0.7 | - | | |
| 7. <i>T. sanctus</i> | 1.3 | 1.0 | 1.2 | 1.1 | 0.5 | 0.7 | - | |
| 8. <i>T. saurophagus</i> | 1.4 | 1.1 | 1.3 | 1.2 | 0.9 | 0.9 | 0.9 | - |

Table S4.4: COI pairwise percentage distances between the *Todiramphus* clades in this study. Mean pairwise distances are reported for taxa with more than one sample.

| | 1. | 2. | 3. | 4. | 5. | 6. |
|---|-----|-----|-----|-----|-----|----|
| 1. <i>T. c. chloris</i> 'Sulawesi' | - | | | | | |
| 2. <i>T. c. chloris</i> 'Wakatobi' | 0.7 | - | | | | |
| 3. <i>T. c. collaris</i> 'Philippines' | 2.5 | 2.2 | - | | | |
| 4. <i>T. sanctus</i> | 2.0 | 1.7 | 1.6 | - | | |
| 5. <i>T. macleayii</i> | 5.7 | 5.4 | 5.4 | 5.5 | - | |
| 6. <i>T. gambieri</i> | 3.0 | 2.6 | 3.2 | 2.7 | 6.3 | - |

Table S4.5: Classification accuracy of the DFA for morphology of Sulawesi *Todiramphus* populations, using wing, bill and skull length, and weight.

| | Collared Kingfisher 'mainland' | Collared Kingfisher 'Wakatobi' | Sacred Kingfisher |
|---|--------------------------------|--------------------------------|-------------------|
| Collared Kingfisher 'mainland' (N = 15) | 100 | | |
| Collared Kingfisher 'Wakatobi' (N = 10) | | 100 | |
| Sacred Kingfisher (N = 18) | | | 100 |

Table S4.6: Existing vouchered specimens of Collared Kingfishers from South-east Sulawesi.

| Catalogue No. | Museum | Collector | Collector's No. | Zone | Island | Year | Preparation | Sex |
|---------------|--------|---------------|-----------------|----------|-------------|------|-------------|--------|
| SKIN 639830 | AMNH | Heinrich Kühn | 4132 | Mainland | Buton | 1901 | Skin | Male |
| SKIN 639831 | AMNH | Heinrich Kühn | 4540 | Wakatobi | Kaledupa | 1901 | Skin | Male |
| SKIN 639832 | AMNH | Heinrich Kühn | 4541 | Wakatobi | Kaledupa | 1902 | Skin | Female |
| SKIN 639833 | AMNH | Heinrich Kühn | 4356 | Wakatobi | Binongko | 1901 | Skin | Male |
| SKIN 639834 | AMNH | Heinrich Kühn | 4244 | Wakatobi | Binongko | 1901 | Skin | Male |
| SKIN 639835 | AMNH | Heinrich Kühn | 4245 | Wakatobi | Binongko | 1901 | Skin | Male |
| SKIN 639836 | AMNH | Heinrich Kühn | 4354 | Wakatobi | Tomia | 1901 | Skin | Male |
| SKIN 639837 | AMNH | Heinrich Kühn | 4355 | Wakatobi | Tomia | 1901 | Skin | Female |
| SKIN 639838 | AMNH | Heinrich Kühn | 4444 | Wakatobi | Wangi-wangi | 1901 | Skin | Male |
| SKIN 639839 | AMNH | Heinrich Kühn | 4445 | Wakatobi | Wangi-wangi | 1901 | Skin | Male |

5. A sympatric pair of undescribed white-eye species with very different origins - Supplementary information

Table S5.1: Full list of samples utilised in the phylogenetic analysis for Chapter 5, detailing the species, sampling location and museum ID. Subspecies information is given for all populations where available, following current designations in del Hoya *et al.* (2018). Haplotypes identified for concatenated ND2 and ND3 sequences and for COI sequences in this study are listed. GenBank accession numbers are provided. Sulawesi samples collected under licence from Kementerian Negara Riset dan Teknologi (RISTEKDIKTI). Institutional abbreviations are as follows: AMNH - American Museum of Natural History; SUL - Zoology Department, Trinity College Dublin; LSUMNS - Louisiana State University Museum of Natural Science; WAM - Western Australian Museum; UWBM - Burke Museum University of Washington; NMNH - National Museum of Natural History; IOZ - Institute of Zoology, Chinese Academy of Sciences; BJNSM - National Museum of Nature and Science, Tokyo; USNM - United States National Museum; YIO - Yamashina Institute for Ornithology; KUNHM - University of Kansas Natural History Museum; FMNH - Field Museum of Natural History; CMNH - Cincinnati Museum of Natural History.

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|--|---|-------------------------------|-----------------|------------|------------|---------|----------|
| AMNH DOT12558 | <i>Zosterops chloris</i> <i>intermedius</i> | Indonesia: south Sulawesi | Moyle <i>et al.</i> (2009) | hapCH01 | FJ460798.1 | FJ460866.1 | | |
| SUL2444 | <i>Zosterops chloris</i> <i>mentoris</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCH02 | MH492806 | MH492862 | | |
| SUL2445 | <i>Zosterops chloris</i> <i>mentoris</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCH02 | MH492807 | MH492863 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|-----------------------------------|--|-------------------|-----------------|----------|----------|---------|----------|
| SUL2082 | <i>Zosterops chloris mentoris</i> | Indonesia: Halu Oleo University, Kendari, mainland South-east Sulawesi | This study | hapCH02 | MH492799 | MH492855 | hapCH01 | MH492915 |
| SUL2054 | <i>Zosterops chloris mentoris</i> | Indonesia: Halu Oleo University, Kendari, mainland South-east Sulawesi | This study | hapCH02 | MH492798 | MH492854 | | |
| SUL2181 | <i>Zosterops chloris mentoris</i> | Indonesia: Kendari city mangrove, mainland South-east Sulawesi | This study | hapCH02 | MH492800 | MH492856 | hapCH01 | MH492916 |
| SUL2194 | <i>Zosterops chloris mentoris</i> | Indonesia: Kendari city mangrove, mainland South-east Sulawesi | This study | hapCH02 | MH492801 | MH492857 | | |
| SUL1359 | <i>Zosterops chloris mentoris</i> | Indonesia: Rumburumba, mainland South-east Sulawesi | This study | hapCH02 | MH492802 | MH492858 | hapCH01 | MH492913 |
| SUL1313 | <i>Zosterops chloris mentoris</i> | Indonesia: Rumburumba, mainland South-east Sulawesi | This study | hapCH02 | MH492805 | MH492861 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------------|---|-------------------|-----------------|----------|----------|---------|----------|
| SUL2007 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCH02 | MH492810 | MH492866 | hapCH01 | MH492911 |
| SUL1993 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCH02 | MH492811 | MH492867 | | |
| SUL2009 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCH02 | MH492812 | MH492868 | | |
| SUL2010 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCH02 | MH492813 | MH492869 | | |
| SUL2280 | <i>Zosterops chloris intermedius</i> | Indonesia: Kamama Mekar, Muna Is., South-east Sulawesi | This study | hapCH02 | MH492815 | MH492871 | | |
| SUL2325 | <i>Zosterops chloris intermedius</i> | Indonesia: Kamama Mekar, Muna Is., South-east Sulawesi | This study | hapCH02 | MH492818 | MH492874 | | |
| SUL0514 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | hapCH02 | MH492820 | MH492876 | | |
| SUL0497 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | hapCH02 | MH492822 | MH492878 | | |
| SUL2420 | <i>Zosterops chloris</i> | Indonesia: Dimba, Wawonii Is., South-east Sulawesi | This study | hapCH02 | MH492823 | MH492879 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------------|--|-------------------|-----------------|----------|----------|---------|----------|
| SUL1360 | <i>Zosterops chloris mentoris</i> | Indonesia: Rumburumba, mainland South-east Sulawesi | This study | hapCH03 | MH492803 | MH492859 | | |
| SUL1311 | <i>Zosterops chloris mentoris</i> | Indonesia: Rumburumba, mainland South-east Sulawesi | This study | hapCH03 | MH492804 | MH492860 | | |
| SUL2449 | <i>Zosterops chloris mentoris</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCH04 | MH492808 | MH492864 | | |
| SUL2451 | <i>Zosterops chloris mentoris</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCH04 | MH492809 | MH492865 | | |
| SUL1995 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCH05 | MH492814 | MH492870 | | |
| SUL2293 | <i>Zosterops chloris intermedius</i> | Indonesia: Kamama Mekar, Muna Is., South-east Sulawesi | This study | hapCH06 | MH492816 | MH492872 | | |
| SUL2300 | <i>Zosterops chloris intermedius</i> | Indonesia: Kamama Mekar, Muna Is., South-east Sulawesi | This study | hapCH06 | MH492817 | MH492873 | | |
| SUL0490 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | hapCH06 | MH492821 | MH492877 | | |
| SUL0558 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | hapCH07 | MH492819 | MH492875 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--|---|-------------------|-----------------|----------|----------|---------|----------|
| SUL1068 | <i>Zosterops chloris</i> | Indonesia: Runduma Is., South-east Sulawesi | This study | hapCH08 | MH492824 | MH492880 | hapCH03 | MH492919 |
| SUL1057 | <i>Zosterops chloris</i> | Indonesia: Runduma Is., South-east Sulawesi | This study | hapCH08 | MH492825 | MH492881 | | |
| SUL2228 | <i>Zosterops chloris flavissimus</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH09 | MH492832 | MH492888 | | |
| SUL2236 | <i>Zosterops chloris flavissimus</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH09 | MH492833 | MH492889 | | |
| SUL1584 | <i>Zosterops chloris flavissimus</i> | Indonesia: Kaledupa Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH10 | MH492828 | MH492884 | hapCH05 | MH492922 |
| SUL1586 | <i>Zosterops chloris flavissimus</i> | Indonesia: Kaledupa Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH10 | MH492829 | MH492885 | hapCH05 | MH492923 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------------|--|-------------------|-----------------|----------|----------|---------|----------|
| SUL1695 | <i>Zosterops chloris flavissimus</i> | Indonesia: Tomia Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH11 | MH492830 | MH492886 | | |
| SUL1700 | <i>Zosterops chloris flavissimus</i> | Indonesia: Tomia Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH12 | MH492831 | MH492887 | | |
| SUL1865 | <i>Zosterops chloris flavissimus</i> | Indonesia: Binongko Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH12 | MH492826 | MH492882 | hapCH06 | MH492927 |
| SUL1869 | <i>Zosterops chloris flavissimus</i> | Indonesia: Binongko Is., Wakatobi Islands, South-east Sulawesi | This study | hapCH12 | MH492827 | MH492883 | | |
| SUL2032 | <i>Zosterops chloris mentoris</i> | Indonesia: Halu Oleo University, Kendari, mainland South-east Sulawesi | This study | | | | hapCH01 | MH492914 |
| SUL2006 | <i>Zosterops chloris intermedius</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | | | | hapCH01 | MH492910 |
| SUL0485 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | | | | hapCH01 | MH492912 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------------|---|-------------------|-----------------|----------|----------|---------|----------|
| SUL0499 | <i>Zosterops chloris intermedius</i> | Indonesia: Sikeli, Kabaena Is., South-east Sulawesi | This study | | | | hapCH02 | MH492917 |
| SUL1064 | <i>Zosterops chloris</i> | Indonesia: Runduma Is., South-east Sulawesi | This study | | | | hapCH03 | MH492918 |
| SUL1516 | <i>Zosterops chloris flavissimus</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH04 | MH492920 |
| SUL1517 | <i>Zosterops chloris flavissimus</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH04 | MH492921 |
| SUL1593 | <i>Zosterops chloris flavissimus</i> | Indonesia: Kaledupa Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH05 | MH492924 |
| SUL1612 | <i>Zosterops chloris flavissimus</i> | Indonesia: Kaledupa Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH05 | MH492925 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------------|--|-------------------|-----------------|----------|----------|---------|----------|
| SUL1863 | <i>Zosterops chloris flavissimus</i> | Indonesia: Binongko Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH06 | MH492926 |
| SUL1871 | <i>Zosterops chloris flavissimus</i> | Indonesia: Binongko Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapCH06 | MH492928 |
| SUL2422 | <i>Zosterops consobrinorum</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCO01 | MH492838 | MH492894 | | |
| SUL2458 | <i>Zosterops consobrinorum</i> | Indonesia: Lasada village, Abuki, mainland South-east Sulawesi | This study | hapCO02 | MH492839 | MH492895 | | |
| SUL1301 | <i>Zosterops consobrinorum</i> | Indonesia: Rumberumba, mainland South-east Sulawesi | This study | hapCO03 | MH492834 | MH492890 | | |
| SUL1325 | <i>Zosterops consobrinorum</i> | Indonesia: Rumberumba, mainland South-east Sulawesi | This study | hapCO04 | MH492835 | MH492891 | hapCO01 | MH492930 |
| SUL1331 | <i>Zosterops consobrinorum</i> | Indonesia: Rumberumba, mainland South-east Sulawesi | This study | hapCO05 | MH492836 | MH492892 | | |
| SUL1347 | <i>Zosterops consobrinorum</i> | Indonesia: Rumberumba, mainland South-east Sulawesi | This study | hapCO06 | MH492837 | MH492893 | hapCO01 | MH492931 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------|---|-------------------|-----------------|----------|----------|---------|----------|
| SUL0585 | <i>Zosterops consobrinorum</i> | Indonesia: Enano, Kabaena Is., South-east Sulawesi | This study | hapCO07 | MH492840 | MH492896 | | |
| SUL0622 | <i>Zosterops consobrinorum</i> | Indonesia: Enano, Kabaena Is., South-east Sulawesi | This study | hapCO08 | MH492841 | MH492897 | | |
| SUL0417 | <i>Zosterops consobrinorum</i> | Indonesia: Tangkeno, Kabaena Is., South-east Sulawesi | This study | hapCO08 | MH492843 | MH492899 | | |
| SUL0442 | <i>Zosterops consobrinorum</i> | Indonesia: Tangkeno, Kabaena Is., South-east Sulawesi | This study | hapCO09 | MH492842 | MH492898 | hapCO02 | MH492932 |
| SUL1960 | <i>Zosterops consobrinorum</i> | Indonesia: Kusambi, Buton Is., South-east Sulawesi | This study | hapCO10 | MH492845 | MH492901 | hapCO03 | MH492934 |
| SUL1989 | <i>Zosterops consobrinorum</i> | Indonesia: Kusambi, Buton Is., South-east Sulawesi | This study | hapCO10 | MH492846 | MH492902 | | |
| SUL1923 | <i>Zosterops consobrinorum</i> | Indonesia: Labundobundo, Buton Is., South-east Sulawesi | This study | hapCO10 | MH492844 | MH492900 | hapCO03 | MH492933 |
| SUL1969 | <i>Zosterops consobrinorum</i> | Indonesia: Kusambi, Buton Is., South-east Sulawesi | This study | hapCO11 | MH492847 | MH492903 | | |
| SUL1958 | <i>Zosterops consobrinorum</i> | Indonesia: Kusambi, Buton Is., South-east Sulawesi | This study | hapCO12 | MH492848 | MH492904 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|---------|--------------------------------|---|-------------------|-----------------|----------|----------|---------|----------|
| SUL2352 | <i>Zosterops consobrinorum</i> | Indonesia: Kamama Mekar, Muna Is., South-east Sulawesi | This study | hapCO13 | MH492849 | MH492905 | | |
| SUL0195 | <i>Zosterops consobrinorum</i> | Indonesia: Bau-bau, Buton Is., South-east Sulawesi | This study | | | | hapCO04 | MH492935 |
| SUL0638 | <i>Zosterops consobrinorum</i> | Indonesia: Enano, Kabaena Is., South-east Sulawesi | This study | | | | hapCO01 | MH492929 |
| SUL2205 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCX01 | MH492850 | MH492906 | | |
| SUL2218 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCX02 | MH492851 | MH492907 | | |
| SUL2213 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCX02 | MH492853 | MH492909 | | |
| SUL2207 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | hapCX03 | MH492852 | MH492908 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|--|---|----------------------------------|-----------------|------------|------------|---------|-----------|
| SUL1514 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapX01 | MH492936 |
| SUL1557 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapX01 | MH492937 |
| SUL2221 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapX01 | MH492938 |
| SUL2243 | <i>Zosterops sp. nov.</i> | Indonesia: Wangi-wangi Is., Wakatobi Islands, South-east Sulawesi | This study | | | | hapX02 | MH492939 |
| KX181885 | <i>Zosterops flavilateralis</i> <i>flavilateralis</i> | Kenya: Chyulu Hills | Husemann <i>et al.</i> (2016) | hapAB01 | KX181885 | KX181885 | hapAB01 | KX181885 |
| NC_032058 | <i>Zosterops flavilateralis</i> <i>flavilateralis</i> | Kenya: Chyulu Hills | Husemann <i>et al.</i> (2016) | hapAB01 | NC_032058 | NC_032058 | hapAB01 | NC_032058 |
| LSUMNS B36444 | <i>Zosterops atricapilla</i> <i>atricapilla</i> | Borneo | Moyle <i>et al.</i> (2009) | hapZA01 | FJ460802.1 | FJ460870.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|--|--|--|-----------------|------------|------------|---------|-----------|
| AMNH DOT12620 | <i>Zosterops atrifrons</i> | Indonesia: Sulawesi | Moyle <i>et al.</i> (2009) | hapAT01 | FJ460809.1 | FJ460877.1 | | |
| USNM:Birds: 608699 | <i>Zosterops atrifrons</i> | Papua New Guinea: New Ireland | Schindel <i>et al.</i> (2011) | | | | hapAT01 | JQ176682 |
| NE10NW03 | <i>Zosterops ceylonensis</i> | Sri Lanka: Nuwaraeliya, Sandathenna | Wickramasinghe <i>et al.</i> (2017) | hapCE01 | KY765092 | KY765133 | | |
| MH14SF03 | <i>Zosterops ceylonensis</i> | Sri Lanka: Nuwaraeliya, Piduruthalagala | Wickramasinghe <i>et al.</i> (2017) | hapCE02 | KY765090 | KY765131 | | |
| WAM 23542 | <i>Zosterops citrinella</i> <i>citrinella</i> | Indonesia: Roti Is. | Moyle <i>et al.</i> (2009) | hapCI01 | FJ460815.1 | FJ460883.1 | | |
| LSUMNS B20626 | <i>Zosterops</i> <i>erythropleurus</i> | Captive | Moyle <i>et al.</i> (2009) | hapER01 | FJ460800.1 | FJ460868.1 | | |
| KT194322 | <i>Zosterops</i> <i>erythropleurus</i> | East Asia | Li <i>et al.</i> (2016) | hapER02 | KT194322 | KT194322 | hapER01 | KT194322 |
| NC_027942 | <i>Zosterops</i> <i>erythropleurus</i> | East Asia | Li <i>et al.</i> (2016) | hapER02 | NC_027942 | NC_027942 | hapER01 | NC_027942 |
| UWBM 58440 | <i>Zosterops</i> <i>erythropleurus</i> | Russia: Khabarovskiy Kray, Bogorodskoye, Ozero Udyl | Kerr <i>et al.</i> (2009) | | | | hapER01 | GQ482919 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|--|--|-------------------------------|-----------------|------------|------------|---------|----------|
| UWBM 47437 | <i>Zosterops erythropleurus</i> | Russia: Khabarovskiy Kray, Khurmuli | Kerr <i>et al.</i> (2009) | | | | hapER02 | GQ482918 |
| UWBM 74789 | <i>Zosterops erythropleurus</i> | Russia: Merkushevka | Kerr <i>et al.</i> (2009) | | | | hapER01 | GQ482916 |
| UWBM 72103 | <i>Zosterops erythropleurus</i> | Russia: Primorskiy Kray, Khankayskiy Rayon | Kerr <i>et al.</i> (2009) | | | | hapER01 | GQ482920 |
| UWBM 72044 | <i>Zosterops erythropleurus</i> | Russia: Primorskiy Kray, Partizanskiy Rayon, Nakhodka | Kerr <i>et al.</i> (2009) | | | | hapER03 | GQ482917 |
| LSUMNS B45805 | <i>Zosterops flavifrons</i> | Vanuatu | Moyle <i>et al.</i> (2009) | hapFL01 | FJ460805.1 | FJ460873.1 | | |
| NMNH 2003062 | <i>Zosterops fuscicapilla</i> | PNG: Louisiade Is. | Moyle <i>et al.</i> (2009) | hapFU01 | FJ460829.1 | FJ460896.1 | | |
| NMNH 2003-067 | <i>Zosterops griseotinctus</i> | PNG: Louisiade Is. | Moyle <i>et al.</i> (2009) | hapGR01 | FJ460820.1 | FJ460888.1 | | |
| 1A03823 | <i>Zosterops japonicus simplex</i> | Thailand | Unpublished | hapJA01 | KY627660.1 | KY627608.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|---|---|--------------------------------|-----------------|------------|------------|---------|------------|
| 1A08248 | <i>Zosterops japonicus simplex</i> | Thailand | Unpublished | hapJA02 | KY627659.1 | KY627607.1 | | |
| AMNH DOT10981 | <i>Zosterops japonicus simplex</i> | Vietnam | Moyle <i>et al.</i> (2009) | hapJA03 | FJ460801.1 | FJ460869.1 | | |
| IOZ2538 | <i>Zosterops japonicus simplex</i> | China: Foping, Shaanxi | Lei <i>et al.</i> (2010) | | | | hapJA01 | HQ608875 |
| BJNSM 302-10 | <i>Zosterops japonicus loochooensis</i> | Japan: Amamioshima Is., Kyushu-chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843294 |
| BJNSM 407-10 | <i>Zosterops japonicus loochooensis</i> | Japan: Amamioshima Is., Kyushu-chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843313 |
| BJNSM 304-10 | <i>Zosterops japonicus loochooensis</i> | Japan: Amamioshima Is., Kyushu-chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA17 | AB843312 |
| USNM: 641928 | <i>Zosterops japonicus japonicus</i> | Japan: Chugoku | Unpublished | | | | hapJA04 | JF499178.1 |
| USNM: 641812 | <i>Zosterops japonicus japonicus</i> | Japan: Chugoku, Iwakuni | Unpublished | | | | hapJA02 | JF499180.1 |
| USNM: 641891 | <i>Zosterops japonicus japonicus</i> | Japan: Chugoku, Iwakuni | Unpublished | | | | hapJA03 | JF499179.1 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------|---|--|--------------------------------|-----------------|----------|----------|---------|----------|
| BJNSM 147-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Hahajima Is., Tokyo, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843291 |
| BJNSM 146-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Hahajima Is., Tokyo, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA20 | AB843293 |
| YIO178-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Honshu, Chiba, Kashiwa-shi | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843853 |
| YIO324-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Honshu, Shiga, Otsu-shi | Saitoh <i>et al.</i> (2015) | | | | hapJA14 | AB843848 |
| BJNSM 001-08 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Ibaraki-ken, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843306 |
| BJNSM 190-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Ikeda-cho, Nakagawa- gun, Hokkaido | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843305 |
| BJNSM 691-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Iriomote Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843311 |
| BJNSM 123-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Iriomotejima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA15 | AB843320 |
| BJNSM 414-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Iriomotejima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA16 | AB843314 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------|---|--|--------------------------------|-----------------|----------|----------|---------|----------|
| BJNSM 682-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Iriomotejima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA16 | AB843298 |
| BJNSM 678-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Iriomotejima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA19 | AB843299 |
| BJNSM 283-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Ishigakijima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA16 | AB843316 |
| BJNSM 287-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Ishigakijima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA16 | AB843310 |
| YIO354-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Izu Is., Tokyo, Miyake- mura | Saitoh <i>et al.</i> (2015) | | | | hapJA08 | AB843857 |
| YIO353-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Izu Is., Tokyo, Miyake- mura | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843847 |
| BJNSM 802-11 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Kikai Island, Kyushu- chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843318 |
| BJNSM 320-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Kikaijima Is., Kyushu- chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843302 |
| BJNSM 269-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Kunigami-gun, Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843300 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------|---|---|--------------------------------|-----------------|----------|----------|---------|----------|
| BJNSM 168-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Kunigami-gun, Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843297 |
| BJNSM 261-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Kunigami-gun, Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843304 |
| BJNSM 186-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Miyake Is., Tokyo, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA18 | AB843307 |
| BJNSM 661-10 | <i>Zosterops japonicus</i> <i>daitoensis</i> | Japan: Miyakojima Is., Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA15 | AB843315 |
| YIO271-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Nansei Is., Kagoshima | Saitoh <i>et al.</i> (2015) | | | | hapJA13 | AB843849 |
| YIO269-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Nansei Is., Kagoshima, Toshima-mura | Saitoh <i>et al.</i> (2015) | | | | hapJA12 | AB843851 |
| YIO270-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Nansei Is., Kagoshima, Kumage-gun, Yaku-cho | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843850 |
| YIO313-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Nansei Is., Okinawa, Nago-shi | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843855 |
| YIO314-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Nansei Is., Okinawa, Shimajiri-gun, Minamidaito-son | Saitoh <i>et al.</i> (2015) | | | | hapJA11 | AB843854 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------|---|--|--------------------------------|-----------------|----------|----------|---------|----------|
| YIO312-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Nansei Is., Okinawa, Yaeyama-gun, Taketomi-cho | Saitoh <i>et al.</i> (2015) | | | | hapJA09 | AB843856 |
| YIO355-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Ogasawara Is., Tokyo, Ogasawara-mura | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843846 |
| BJNSM 039-08 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Okinawa Is. | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843321 |
| BJNSM 240-10 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Okinoerabu Is., Kyushu- chiho | Saitoh <i>et al.</i> (2015) | | | | hapJA10 | AB843292 |
| YIO183-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Shikoku-chiho, Ehime, Niihama-shi | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843852 |
| BJNSM 728-11 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Tokyo, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843309 |
| BJNSM 102-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Tokyo, Kanto | Saitoh <i>et al.</i> (2015) | | | | hapJA05 | AB843301 |
| BJNSM 100-10 | <i>Zosterops japonicus</i> <i>japonicus</i> | Japan: Toyama-ken, Honshu | Saitoh <i>et al.</i> (2015) | | | | hapJA03 | AB843295 |
| BJNSM 830-11 | <i>Zosterops japonicus</i> <i>loochooensis</i> | Japan: Yonaguni Island, Okinawa | Saitoh <i>et al.</i> (2015) | | | | hapJA16 | AB843303 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---|--|----------------------------------|-----------------|------------|------------|---------|------------|
| USNM:Birds: 601336 | <i>Zosterops japonicus</i> | USA: Hawaii, Kauai Island | Schindel <i>et al.</i> (2011) | | | | hapJA07 | JQ176683.1 |
| USNM: 643529 | <i>Zosterops japonicus</i> | USA: Hawaii, Kauai Island, Kauai, North End | Unpublished | | | | hapJA03 | JF498910.1 |
| USNM: 643560 | <i>Zosterops japonicus</i> | USA: Hawaii, Kauai Island, Kauai, North End | Unpublished | | | | hapJA03 | JF498908.1 |
| USNM: 643546 | <i>Zosterops japonicus</i> | USA: Hawaii, Kauai Island, Kauai, North End | Unpublished | | | | hapJA05 | JF498909.1 |
| USNM: 643361 | <i>Zosterops japonicus</i> | USA: Hawaii, Oahu Island, Honolulu | Unpublished | | | | hapJA06 | JF498907.1 |
| UWBM 76278 | <i>Zosterops kulambangrae</i> | Solomon Is.: Kohingo | Moyle <i>et al.</i> (2009) | hapKU01 | FJ460831.1 | FJ460898.1 | | |
| UWBM 76258 | <i>Zosterops kulambangrae paradoxus</i> | Solomon Is.: Rendova | Moyle <i>et al.</i> (2009) | HapKU02 | FJ460832.1 | FJ460899.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|--|------------------------|-------------------------------|-----------------|------------|------------|---------|-----------|
| UWBM 76356 | <i>Zosterops kulambangrae tetiparius</i> | Solomon Is.: Tetepare | Moyle <i>et al.</i> (2009) | HapKU03 | FJ460830.1 | FJ460897.1 | | |
| KUNHM 6094 | <i>Zosterops lateralis</i> | Australia | Moyle <i>et al.</i> (2009) | hapLA01 | FJ460814.1 | FJ460882.1 | | |
| LSUMNS B45835 | <i>Zosterops lateralis</i> | Vanuatu | Moyle <i>et al.</i> (2009) | hapLA02 | FJ460804.1 | FJ460872.1 | | |
| KC545407 | <i>Zosterops lateralis lateralis</i> | New Zealand | Gibb <i>et al.</i> (2015) | hapLA03 | KC545407 | KC545407 | hapLA01 | KC545407 |
| NC_029146 | <i>Zosterops lateralis lateralis</i> | New Zealand | Gibb <i>et al.</i> (2015) | hapLA03 | NC_029146 | NC_029146 | hapLA01 | NC_029146 |
| AMNH DOT113 | <i>Zosterops luteirostris</i> | Solomon Is.: Ghizo Is. | Moyle <i>et al.</i> (2009) | hapZL01 | FJ460834.1 | FJ460901.1 | | |
| KUNHM 8904 | <i>Zosterops luteus</i> | Australia | Moyle <i>et al.</i> (2009) | hapLU01 | FJ460812.1 | FJ460880.1 | | |
| FMNH 345980 | <i>Zosterops maderaspatanus maderaspatanus</i> | Madagascar | Moyle <i>et al.</i> (2009) | hapMA01 | FJ460813.1 | FJ460881.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---|--|----------------------------------|-----------------|------------|------------|---------|------------|
| UWBM 63177 | <i>Zosterops metcalfii</i> | Solomon Is.: Choiseul | Moyle <i>et al.</i> (2009) | hapME01 | FJ460817.1 | FJ460885.1 | | |
| TR21 | <i>Zosterops meyeri exiguus</i> | Philippines: Rizal, Taytay, Tungtong River | Unpublished | | | | hapME01 | KC354959 |
| AMNH DOT12552 | <i>Zosterops montanus montanus</i> | Indonesia: Sulawesi | Moyle <i>et al.</i> (2009) | hapMO01 | FJ460810.1 | FJ460878.1 | | |
| AMNH DOT193 | <i>Zosterops murphyi</i> | Solomon Is.: Kolombangara | Moyle <i>et al.</i> (2009) | hapMU01 | FJ460833.1 | FJ460900.1 | | |
| FMNH 432997 | <i>Zosterops nigrorum</i> | Philippines: Luzon | Moyle <i>et al.</i> (2009) | hapNI01 | FJ460808.1 | FJ460876.1 | | |
| USNM:Birds: 607559 | <i>Zosterops nigrorum innominatus</i> | Philippines: Luzon | Schindel <i>et al.</i> (2011) | | | | hapNI01 | JQ176684.2 |
| USNM:Birds: 607560 | <i>Zosterops nigrorum innominatus</i> | Philippines: Luzon | Schindel <i>et al.</i> (2011) | | | | hapNI01 | JQ176685.1 |
| NNGP6 | <i>Zosterops nigrorum nigrorum</i> | Philippines: Negros Occidental, Mt. Kanlaon National Park | Unpublished | | | | hapNI02 | KC354960 |
| USNM:Birds: 621682 | <i>Zosterops pallidus</i> | Swaziland | Schindel <i>et al.</i> (2011) | | | | hapPA01 | JQ176686.1 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------|--|-------------------------------------|-------------------------------------|-----------------|------------|------------|---------|----------|
| WAM 23218 | <i>Zosterops palpebrosus unicus</i> | Indonesia: Flores Is. | Moyle <i>et al.</i> (2009) | hapPA01 | FJ460807.1 | FJ460875.1 | | |
| AMNH DOT5746 | <i>Zosterops palpebrosus palpebrosus</i> | Nepal | Moyle <i>et al.</i> (2009) | hapPA02 | FJ460806.1 | FJ460874.1 | | |
| Z51241 | <i>Zosterops palpebrosus egregius</i> | India: Munnar, Rajamalai Shola | Wickramasinghe <i>et al.</i> (2017) | hapPA03 | KY765104 | KY765144 | | |
| Z51227 | <i>Zosterops palpebrosus egregius</i> | India: Munnar, Signal Station | Wickramasinghe <i>et al.</i> (2017) | hapPA04 | KY765103 | KY765143 | | |
| Z51129 | <i>Zosterops palpebrosus</i> | India: Munnar, Signal Station | Wickramasinghe <i>et al.</i> (2017) | hapPA05 | KY765102.1 | KY765142.1 | | |
| Z51123 | <i>Zosterops palpebrosus egregius</i> | India: Munnar, Rajamalai Shola | Wickramasinghe <i>et al.</i> (2017) | hapPA06 | KY765101 | KY765141 | | |
| NE09NW01 | <i>Zosterops palpebrosus egregius</i> | Sri Lanka: Nuwaraeliya, Sandathenna | Wickramasinghe <i>et al.</i> (2017) | hapPA07 | KY765095 | KY765136 | | |
| NE09NW02 | <i>Zosterops palpebrosus egregius</i> | Sri Lanka: Nuwaraeliya, Sandathenna | Wickramasinghe <i>et al.</i> (2017) | hapPA08 | KY765096 | KY765137 | | |
| NF02NW03 | <i>Zosterops palpebrosus egregius</i> | Sri Lanka: Nuwaraeliya, Maskeliya | Wickramasinghe <i>et al.</i> (2017) | hapPA09 | KY765097 | KY765138 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|------------------|--|-----------------------|-------------------------------|-----------------|------------|------------|---------|-----------|
| IOZ 6424 | <i>Zosterops palpebrosus</i> <i>palpebrosus</i> | China: Yunnan | Luo <i>et al.</i> (2009) | | | | hapPB01 | EU447060 |
| KX181886 | <i>Zosterops poliogastrus</i> | Kenya: Chyulu Hills | Husemann <i>et al.</i> (2016) | hapPO01 | KX181886 | KX181886 | hapPO01 | KX181886 |
| NC_032059 | <i>Zosterops poliogastrus</i> | Kenya: Chyulu Hills | Husemann <i>et al.</i> (2016) | hapPO01 | NC_032059 | NC_032059 | hapPO01 | NC_032059 |
| KUNHM 12803 | <i>Zosterops rendovae</i> <i>rendovae</i> | Solomon Is.: Makira | Moyle <i>et al.</i> (2009) | hapRE01 | FJ460836.1 | FJ460903.1 | | |
| UWBM 69808 | <i>Zosterops rennellianus</i> | Solomon Is.: Rennel | Moyle <i>et al.</i> (2009) | hapZR01 | FJ460818.1 | FJ460886.1 | | |
| KX181887 | <i>Zosterops senegalensis</i> <i>jacksoni</i> | Kenya: Mt. Nyeri | Husemann <i>et al.</i> (2016) | hapSE01 | KX181887 | KX181887 | hapSE01 | KX181887 |
| LSUMNS B39250 | <i>Zosterops senegalensis</i> <i>senegalensis</i> | Ghana | Moyle <i>et al.</i> (2009) | hapSE02 | FJ460803.1 | FJ460871.1 | | |
| AMNH DOT171 | <i>Zosterops splendidus</i> | Solomon Is.: Rannonga | Moyle <i>et al.</i> (2009) | hapSP01 | FJ460835.1 | FJ460902.1 | | |
| UWBM 66034 | <i>Zosterops stresemanni</i> | Solomon Is.: Malaita | Moyle <i>et al.</i> (2009) | hapST01 | FJ460819.1 | FJ460887.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---|---------------------------|----------------------------------|-----------------|------------|------------|---------|------------|
| UWBM 58818 | <i>Zosterops superciliosus</i> | Solomon Is.: Rennell | Moyle <i>et al.</i> (2009) | hapWS01 | FJ460797.1 | FJ460865.1 | | |
| AMNH DOT166 | <i>Zosterops vellalavella</i> | Solomon Is.: Vellalavella | Moyle <i>et al.</i> (2009) | hapVE01 | FJ460828.1 | FJ460895.1 | | |
| FMNH 390165 | <i>Zosterops virens</i> | South Africa | Moyle <i>et al.</i> (2009) | hapVI01 | FJ460811.1 | FJ460879.1 | | |
| LSUMNS B36359 | <i>Alcippe brunneicauda</i> <i>eriphaea</i> | Borneo | Moyle <i>et al.</i> (2009) | hapAL01 | FJ460770.1 | FJ460838.1 | | |
| LSUMNS B51361 | <i>Chlorocharis emiliae</i> | Borneo | Moyle <i>et al.</i> (2009) | hapCL01 | FJ460796.1 | FJ460864.1 | | |
| USNM:Birds: 631795 | <i>Cyanoderma</i> <i>chrysaenum chrysaenum</i> | Myanmar: Kachin | Schindel <i>et al.</i> (2011) | | | | hapSZ01 | JQ176270.1 |
| LSUMNS B36417 | <i>Cyanoderma bicolor</i> | Borneo | Moyle <i>et al.</i> (2009) | hapSR01 | FJ460771.1 | FJ460839.1 | | |
| USNM:Birds: 631826 | <i>Cyanoderma ruficeps</i> <i>bhamoense</i> | Myanmar: Kachin | Schindel <i>et al.</i> (2011) | | | | hapSR01 | JQ176274.1 |
| CMNH 37091 | <i>Dasycrotapha speciosa</i> | Philippines: Negros | Moyle <i>et al.</i> (2009) | hapSS01 | FJ460789.1 | FJ460857.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---|-----------------------|----------------------------------|-----------------|------------|------------|---------|------------|
| USNM:Birds: 620481 | <i>Erpornis zantholeuca</i> <i>zantholeuca</i> | Myanmar: Sagaing | Schindel <i>et al.</i> (2011) | | | | hapYZ01 | JQ176672.1 |
| LSUMNS B36460 | <i>Garrulax treacheri</i> | Borneo | Moyle <i>et al.</i> (2009) | hapGM01 | FJ460776.1 | FJ460844.1 | | |
| FMNH 357641 | <i>Heleia goodfellowi</i> | Philippines: Mindanao | Moyle <i>et al.</i> (2009) | hapLG01 | FJ460792.1 | FJ460860.1 | | |
| LSUMNS B51197 | <i>Heleia squamifrons</i> | Borneo | Moyle <i>et al.</i> (2009) | hapOS01 | FJ460795.1 | FJ460863.1 | | |
| AMNH DOT12549 | <i>Heleia squamiceps</i> | Indonesia: Sulawesi | Moyle <i>et al.</i> (2009) | hapLS01 | FJ460793.1 | FJ460861.1 | | |
| WAM 22903 | <i>Heleia wallacei</i> | Indonesia: Sumba Is. | Moyle <i>et al.</i> (2009) | hapWA01 | FJ460816.1 | FJ460884.1 | | |
| FMNH 357652 | <i>Hypocryptadius</i> <i>cinnamomeus</i> | Philippines: Mindanao | Moyle <i>et al.</i> (2009) | hapHC01 | FJ460769.1 | FJ460837.1 | | |
| LSUMNS B39437 | <i>Illadopsis rufipennis</i> <i>extrema</i> | Ghana | Moyle <i>et al.</i> (2009) | hapIR01 | FJ460777.1 | FJ460845.1 | | |
| LSUMNS B36395 | <i>Kenopia striata</i> | Borneo | Moyle <i>et al.</i> (2009) | hapKS01 | FJ460775.1 | FJ460843.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|--|-----------------------|----------------------------------|-----------------|------------|------------|---------|------------|
| LSUMNS B36391 | <i>Macronous ptilosus</i> <i>trichorrhos</i> | Borneo | Moyle <i>et al.</i> (2009) | hapMP01 | FJ460774.1 | FJ460842.1 | | |
| LSUMNS B36421 | <i>Malacopteron</i> <i>magnirostre</i> <i>cinereocapilla</i> | Borneo | Moyle <i>et al.</i> (2009) | Hap MM01 | FJ460778.1 | FJ460846.1 | | |
| LSUMNS B36469 | <i>Turdinus crassa</i> | Borneo | Moyle <i>et al.</i> (2009) | hapNC01 | FJ460773.1 | FJ460841.1 | | |
| LSUMNS B36430 | <i>Pellorneum</i> <i>nigrocapitatum</i> | Borneo | Moyle <i>et al.</i> (2009) | hapPC01 | FJ460772.1 | FJ460840.1 | | |
| CMNH 37769 | <i>Sterrhoptilus capitalis</i> | Philippines: Mindanao | Moyle <i>et al.</i> (2009) | hapSC01 | FJ460791.1 | FJ460859.1 | | |
| USNM:Birds: 607459 | <i>Sterrhoptilus</i> <i>dennistouni</i> | Philippines: Luzon | Schindel <i>et al.</i> (2011) | | | | hapSC01 | JQ176268.2 |
| CMNH 38201 | <i>Sterrhoptilus</i> <i>dennistouni</i> | Philippines: Luzon | Moyle <i>et al.</i> (2009) | hapSD01 | FJ460787.1 | FJ460855.1 | | |
| USNM:Birds: 631853 | <i>Stachyris nigriceps</i> <i>coltarti</i> | Myanmar: Kachin | Schindel <i>et al.</i> (2011) | | | | hapSN01 | JQ176271.1 |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---------------------------------------|-----------------|----------------------------------|-----------------|------------|------------|---------|------------|
| USNM:Birds: 631809 | <i>Stachyris oglei</i> | Myanmar: Kachin | Schindel <i>et al.</i> (2011) | | | | hapSO01 | JQ176273.1 |
| AMNH DOT5230 | <i>Yuhina brunneiceps</i> | Taiwan | Moyle <i>et al.</i> (2009) | hapYB01 | FJ460782.1 | FJ460850.1 | | |
| KUNHM 6676 | <i>Yuhina castaniceps plumbeiceps</i> | China | Moyle <i>et al.</i> (2009) | hapYC01 | FJ460780.1 | FJ460848.1 | | |
| KUNHM 11118 | <i>Yuhina diademata</i> | China | Moyle <i>et al.</i> (2009) | hapYD01 | FJ460781.1 | FJ460849.1 | | |
| LSUMNS B36290 | <i>Yuhina everetti</i> | Borneo | Moyle <i>et al.</i> (2009) | hapYE01 | FJ460779.1 | FJ460847.1 | | |
| AMNH DOT5550 | <i>Yuhina flavicollis flavicollis</i> | Nepal | Moyle <i>et al.</i> (2009) | hapYF01 | FJ460783.1 | FJ460851.1 | | |
| IOZ 6448 | <i>Yuhina flavicollis rouxi</i> | China: Yunnan | Luo <i>et al.</i> (2009) | | | | hapYF02 | EU447058 |
| USNM:Birds: 620587 | <i>Yuhina flavicollis rouxi</i> | Myanmar: Chin | Schindel <i>et al.</i> (2011) | | | | hapYF01 | JQ176667.1 |
| AMNH DOT5639 | <i>Yuhina gularis gularis</i> | Nepal | Moyle <i>et al.</i> (2009) | hapYG01 | FJ460784.1 | FJ460852.1 | | |

| ID | Species | Locality | Source | ND2/ ND3 hap | ND2 Acc. | ND3 Acc. | COI hap | COI Acc. |
|-----------------------|---|----------------------|----------------------------------|-----------------|------------|------------|---------|------------|
| USNM:Birds: 620615 | <i>Yuhina gularis gularis</i> | Myanmar: Chin | Schindel <i>et al.</i> (2011) | | | | hapYG01 | JQ176670.1 |
| AMNH DOT12297 | <i>Yuhina nigrimentas</i> | Vietnam | Moyle <i>et al.</i> (2009) | hapYN01 | FJ460785.1 | FJ460853.1 | | |
| AMNH DOT5588 | <i>Yuhina occipitalis</i> <i>occipitalis</i> | Nepal | Moyle <i>et al.</i> (2009) | hapYO01 | FJ460786.1 | FJ460854.1 | | |
| CMNH 37765 | <i>Zosterornis</i> <i>hypogrammica</i> | Philippines: Palawan | Moyle <i>et al.</i> (2009) | hapSH01 | FJ460788.1 | FJ460856.1 | | |
| CMNH 34221 | <i>Zosterornis latistriata</i> | Philippines: Panay | Moyle <i>et al.</i> (2009) | hapSL01 | FJ460790.1 | FJ460858.1 | | |
| USNM:Birds: 620492 | <i>Enicurus immaculatus</i> | Myanmar: Sagaing | Schindel <i>et al.</i> (2011) | | | | hapEI01 | JQ174785.1 |
| LSUMNS B38580 | <i>Enicurus leschenaulti</i> <i>frontalis</i> | Borneo | Moyle <i>et al.</i> (2005) | hapEL01 | AY878297 | AY878272 | | |
| LSUMNS B36442 | <i>Enicurus leschenaulti</i> <i>borneensis</i> | Borneo | Moyle <i>et al.</i> (2005) | hapEL02 | AY878291 | AY878266 | | |

Table S5.2: Novel primers developed for this study. COI primers used to amplify the full COI region. DOC-ND3-R1 was developed as a match for L10755 (Chesser, 1999) to sequence the whole ND3 region. All other listed primers are internal primers for ND2.

| Locus | Primer name | 5' to 3' sequence | Direction |
|--------------|--------------------|--------------------------|------------------|
| COI | DOC-COI-F1 | CGATGACTATTCTCAACCAACCA | Forward |
| COI | DOC-COI-R1 | AGTGGCTGATGTGAAGTATGCTC | Reverse |
| ND2 | HMnr-FW | TAAGCTATCGGGCCCATAC | Forward |
| ND2 | HMnr-RW | CTATTCAGCCTAGGTGGGAGA | Reverse |
| ND2 | HMvfar-FW | CCTTCCCTAAACCCTACAC | Forward |
| ND2 | HMv2far-RW | GTTGCATTCAGGAGATG | Reverse |
| ND2 | NHvfar-RW | ATCGAAGCCCATCTGTC | Reverse |
| ND2 | zip_lokF | CCTTCCCTAAACCCTACAC | Forward |
| ND2 | zip_lokR | GTCATTTAGGYAGGAAKCC | Reverse |
| ND2 | zip_lok2F | CTTCCCTAAACCCTACAC | Forward |
| ND2 | zip_lok2R | GTCATTTAGGTAGGAAKCC | Reverse |
| ND3 | DOC-ND3-R1 | TTGTTGAGTCGAAATCAACTG | Reverse |

Table S5.3: Summary table of the taxa used in the ND2/ND3 phylogenetic analysis.

| Species | Family | Number of samples |
|-----------------------------------|---------------|-------------------|
| <i>Enicurus leschenaulti</i> | Muscicapidae | 2 |
| <i>Hypocryptadius cinnamomeus</i> | Passeridae | 1 |
| <i>Alcippe brunneicauda</i> | Leiotrichidae | 1 |
| <i>Garrulax treacheri</i> | Leiotrichidae | 1 |
| <i>Illadopsis rufipennis</i> | Pellorneidae | 1 |
| <i>Kenopia striata</i> | Pellorneidae | 1 |
| <i>Malacopteron magnirostre</i> | Pellorneidae | 1 |
| <i>Pellorneum nigrocapitatum</i> | Pellorneidae | 1 |
| <i>Cyanoderma bicolor</i> | Timaliidae | 1 |
| <i>Macronous ptilosus</i> | Timaliidae | 1 |
| <i>Turdinus crassa</i> | Timaliidae | 1 |
| <i>Chlorocharis emiliae</i> | Zosteropidae | 1 |
| <i>Dasycrotapha speciosa</i> | Zosteropidae | 1 |
| <i>Heleia wallacei</i> | Zosteropidae | 1 |
| <i>Heleia goodfellowi</i> | Zosteropidae | 1 |
| <i>Heleia squamiceps</i> | Zosteropidae | 1 |
| <i>Heleia squamifrons</i> | Zosteropidae | 1 |
| <i>Sterrhoptilus capitalis</i> | Zosteropidae | 1 |
| <i>Sterrhoptilus dennistouni</i> | Zosteropidae | 1 |
| <i>Yuhina brunneiceps</i> | Zosteropidae | 1 |
| <i>Yuhina castaniceps</i> | Zosteropidae | 1 |
| <i>Yuhina diademata</i> | Zosteropidae | 1 |
| <i>Yuhina everetti</i> | Zosteropidae | 1 |
| <i>Yuhina flavicollis</i> | Zosteropidae | 1 |
| <i>Yuhina gularis</i> | Zosteropidae | 1 |
| <i>Yuhina nigrimentas</i> | Zosteropidae | 1 |
| <i>Yuhina occipitalis</i> | Zosteropidae | 1 |
| <i>Zosterops atricapilla</i> | Zosteropidae | 1 |
| <i>Zosterops atrifrons</i> | Zosteropidae | 1 |
| <i>Zosterops ceylonensis</i> | Zosteropidae | 2 |
| <i>Zosterops chloris</i> | Zosteropidae | 37 |

| Species | Family | Number of samples |
|---|--------------|-------------------|
| <i>Zosterops citrinella</i> | Zosteropidae | 1 |
| <i>Zosterops consobrinorum</i> | Zosteropidae | 16 |
| <i>Zosterops erythropleurus</i> | Zosteropidae | 3 |
| <i>Zosterops flavifrons</i> | Zosteropidae | 1 |
| <i>Zosterops flavilateralis</i> | Zosteropidae | 2 |
| <i>Zosterops fuscicapilla</i> | Zosteropidae | 1 |
| <i>Zosterops griseotinctus</i> | Zosteropidae | 1 |
| <i>Zosterops japonicus</i> | Zosteropidae | 3 |
| <i>Zosterops kulambangrae</i> | Zosteropidae | 3 |
| <i>Zosterops lateralis</i> | Zosteropidae | 4 |
| <i>Zosterops luteirostris</i> | Zosteropidae | 1 |
| <i>Zosterops luteus</i> | Zosteropidae | 1 |
| <i>Zosterops maderaspatanus</i> | Zosteropidae | 1 |
| <i>Zosterops metcalfii</i> | Zosteropidae | 1 |
| <i>Zosterops montanus</i> | Zosteropidae | 1 |
| <i>Zosterops murphyi</i> | Zosteropidae | 1 |
| <i>Zosterops nigrorum</i> | Zosteropidae | 1 |
| <i>Zosterops palpebrosus</i> | Zosteropidae | 9 |
| <i>Zosterops polioastrus</i> | Zosteropidae | 2 |
| <i>Zosterops rendovae</i> | Zosteropidae | 1 |
| <i>Zosterops rennellianus</i> | Zosteropidae | 1 |
| <i>Zosterops senegalensis</i> | Zosteropidae | 2 |
| <i>Zosterops sp. nov. 'Wangi-wangi White-eye'</i> | Zosteropidae | 4 |
| <i>Zosterops splendidus</i> | Zosteropidae | 1 |
| <i>Zosterops stresemanni</i> | Zosteropidae | 1 |
| <i>Zosterops superciliosus</i> | Zosteropidae | 1 |
| <i>Zosterops vellalavella</i> | Zosteropidae | 1 |
| <i>Zosterops virens</i> | Zosteropidae | 1 |
| <i>Zosterornis hypogrammica</i> | Zosteropidae | 1 |
| <i>Zosterornis latistriata</i> | Zosteropidae | 1 |

Table S5.4: Summary table of the taxa used in the COI phylogenetic analysis.

| Species | Family | Number of samples |
|---|---------------|--------------------------|
| <i>Enicurus immaculatus</i> | Muscicapidae | 1 |
| <i>Cyanoderma chrysaenum</i> | Timaliidae | 1 |
| <i>Cyanoderma ruficeps</i> | Timaliidae | 1 |
| <i>Stachyris nigriceps</i> | Timaliidae | 1 |
| <i>Stachyris oglei</i> | Timaliidae | 1 |
| <i>Erpornis zantholeuca</i> | Vireonidae | 1 |
| <i>Sterrhoptilus dennistouni</i> | Zosteropidae | 1 |
| <i>Yuhina flavicollis</i> | Zosteropidae | 2 |
| <i>Yuhina gularis</i> | Zosteropidae | 1 |
| <i>Zosterops atrifrons</i> | Zosteropidae | 1 |
| <i>Zosterops chloris</i> | Zosteropidae | 19 |
| <i>Zosterops consobrinorum</i> | Zosteropidae | 7 |
| <i>Zosterops erythropleurus</i> | Zosteropidae | 7 |
| <i>Zosterops flavilateralis</i> | Zosteropidae | 1 |
| <i>Zosterops japonicus</i> | Zosteropidae | 48 |
| <i>Zosterops lateralis</i> | Zosteropidae | 2 |
| <i>Zosterops meyeri</i> | Zosteropidae | 1 |
| <i>Zosterops nigrorum</i> | Zosteropidae | 3 |
| <i>Zosterops pallidus</i> | Zosteropidae | 1 |
| <i>Zosterops palpebrosus</i> | Zosteropidae | 1 |
| <i>Zosterops poliogastrus</i> | Zosteropidae | 2 |
| <i>Zosterops senegalensis</i> | Zosteropidae | 1 |
| <i>Zosterops sp. nov. 'Wangi-wangi White-eye'</i> | Zosteropidae | 4 |

Table S5.5: Phylogenetic models used and summary statistics for each codon. Model abbreviations: GTR - General Time Reversible, HKY - Hasegawa-Kishino-Yano, K80 - Kimura 2-parameter. Other abbreviations: G - gamma, I - invariant sites. Four gamma categories were used where a gamma shape estimate was implemented.

| Locus | Aligned Length | Position | Substitution Model | T, C, A, G Frequency | Variable Sites | Parsimony Informative Sites |
|--------------|-----------------------|-------------------------|---------------------------|------------------------------|-----------------------|------------------------------------|
| ND2 + ND3 | 1041 + 351 | ND2 codon position 1 | GTR + G + I | 0.19, 0.293, 0.359, 0.163 | 176 | 143 |
| | | ND2 codon position 2 | HKY + G + I | 0.38, 0.356, 0.165, 0.095 | 81 | 67 |
| | | ND2 codon position 3 | GTR + G + I | 0.14, 0.386, 0.425, 0.049 | 340 | 326 |
| | | ND3 codon position 1 | K80 + G | 0.21, 0.317, 0.269, 0.205 | 52 | 39 |
| | | ND3 codon position 2 | HKY + I | 0.44, 0.261, 0.177, 0.12 | 23 | 17 |
| | | ND3 codon position 3 | HKY + G | 0.12, 0.399, 0.438, 0.044 | 113 | 106 |
| COI | 615 | COI codon position 1 | K80 | 0.15, 0.289, 0.244, 0.317 | 20 | 6 |
| | | COI codon position 2 | HKY | 0.41, 0.293, 0.156, 0.136 | 2 | 2 |
| | | COI codon position 3 | HKY + G | 0.16, 0.382, 0.411, 0.049 | 181 | 149 |

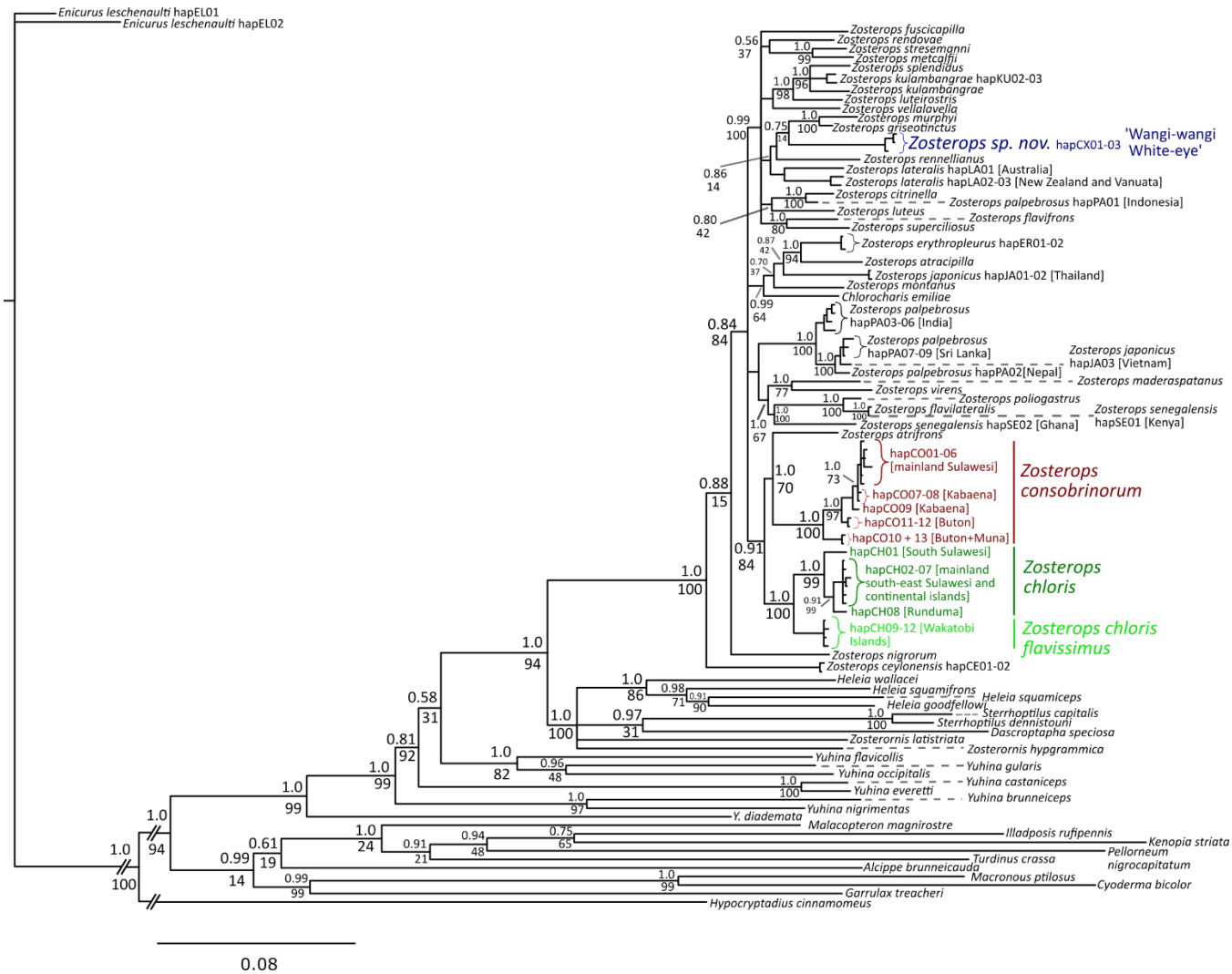


Figure S5.1: full Bayesian consensus tree for concatenated ND2/ND3 haplotypes, showing Bayesian posterior probabilities (above) and bootstrap values (below).

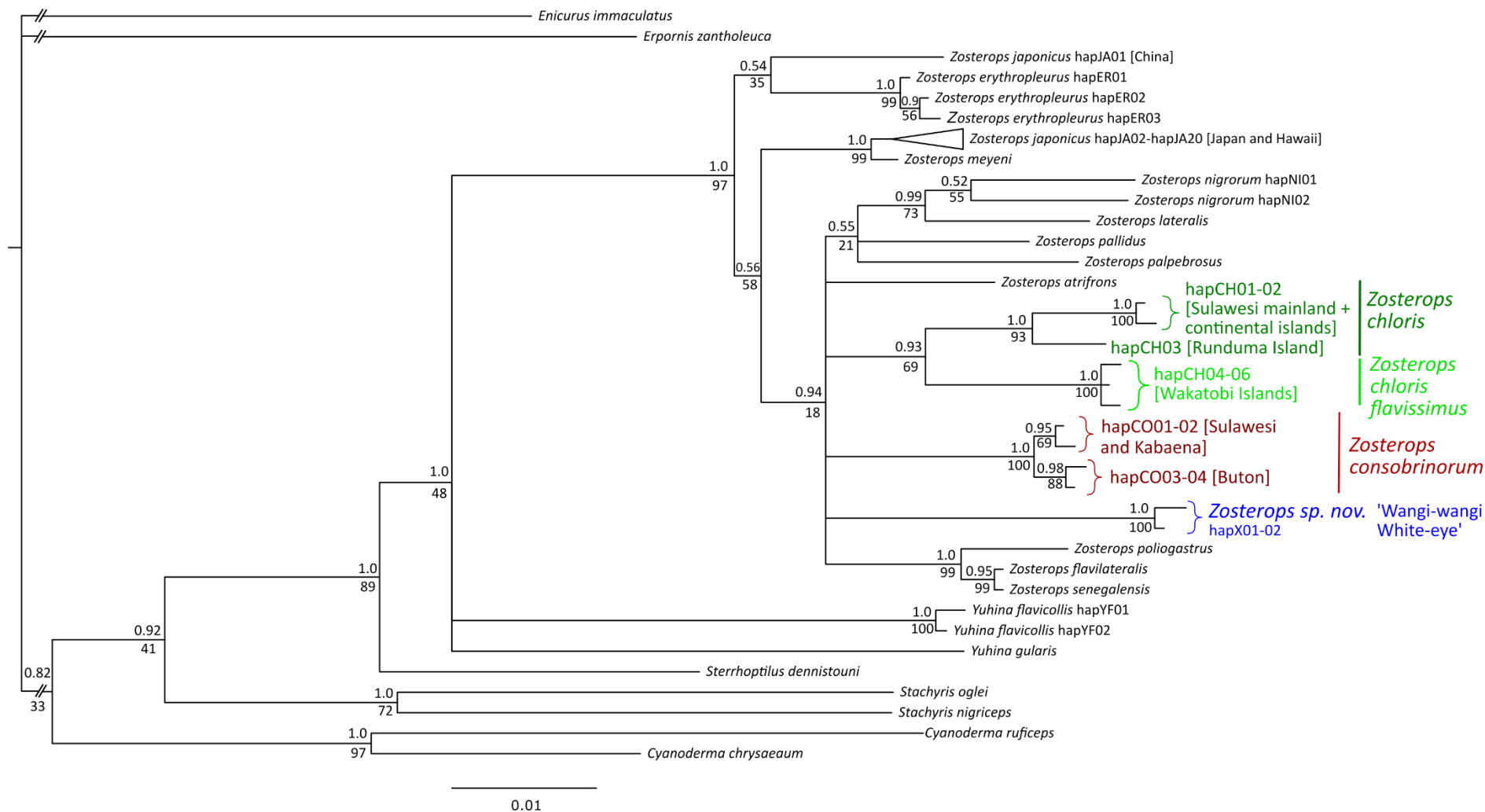


Figure S5.2: full Bayesian consensus tree for COI haplotypes, showing Bayesian posterior probabilities (above) and bootstrap values (below). Core *Z. japonicus* lineage collapsed as they were monophyletic.

Table S5.6: ND2 pairwise percentage distances between the *Zosterops* clades in this study. Mean pairwise distances are reported for taxa with more than one sample. Numbers along the top correspond to species listed in the row on the far left.

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. <i>Z. fuscicapilla</i> | - | | | | | | | | | | | |
| 2. <i>Z. erythtopleurus</i> | 6.5 | - | | | | | | | | | | |
| 3. <i>Z. palpebrosus</i> | 6.1 | 6.0 | - | | | | | | | | | |
| 4. <i>Z. ceylonensis</i> | 8.0 | 7.5 | 6.7 | - | | | | | | | | |
| 5. <i>Z. japonicus</i> | 7.3 | 5.9 | 5.3 | 7.6 | - | | | | | | | |
| 6. <i>Z. rendovae</i> | 4.9 | 6.2 | 5.5 | 7.2 | 6.9 | - | | | | | | |
| 7. <i>Z. splendidus</i> | 5.4 | 6.2 | 5.6 | 7.4 | 6.6 | 4.7 | - | | | | | |
| 8. <i>Z. luteirostris</i> | 5.6 | 6.0 | 5.4 | 7.5 | 6.8 | 4.8 | 3.5 | - | | | | |
| 9. <i>Z. murphyi</i> | 5.2 | 6.5 | 5.8 | 7.7 | 7.1 | 5.0 | 4.9 | 5.1 | - | | | |
| 10. <i>Z. kulambangrae</i> | 6.2 | 6.2 | 5.8 | 8.3 | 7.0 | 4.5 | 2.8 | 3.6 | 5.5 | - | | |
| 11. <i>Z. stresemanni</i> | 5.4 | 6.5 | 5.9 | 7.6 | 7.3 | 4.1 | 5.3 | 5.3 | 5.7 | 5.7 | - | |
| 12. <i>Z. rennellianus</i> | 5.6 | 6.5 | 5.9 | 8.1 | 7.7 | 5.7 | 5.4 | 5.0 | 5.6 | 5.8 | 6.0 | - |
| 13. <i>Z. metcalfii</i> | 5.8 | 6.1 | 6.1 | 7.3 | 7.1 | 4.5 | 5.7 | 5.5 | 5.7 | 5.8 | 2.4 | 6.2 |
| 14. <i>Z. citrinellus</i> | 5.3 | 5.5 | 4.8 | 7.5 | 6.7 | 4.4 | 5.4 | 4.8 | 4.9 | 5.8 | 5.4 | 5.5 |
| 15. <i>Z. lateralis</i> | 5.4 | 5.9 | 5.4 | 7.4 | 7.0 | 5.0 | 4.9 | 4.8 | 5.2 | 5.6 | 5.4 | 5.1 |

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 16. <i>Z. maderaspatanus</i> | 6.6 | 6.3 | 5.5 | 7.6 | 7.4 | 5.6 | 6.7 | 6.3 | 6.8 | 6.9 | 6.4 | 6.9 |
| 17. <i>Z. luteus</i> | 5.2 | 5.4 | 5.0 | 6.9 | 6.6 | 3.8 | 5.1 | 4.9 | 5.3 | 5.3 | 4.6 | 5.6 |
| 18. <i>Z. virens</i> | 6.8 | 5.6 | 6.0 | 8.3 | 7.7 | 6.5 | 6.5 | 6.9 | 7.2 | 7.1 | 6.6 | 6.7 |
| 19. <i>Z. montanus</i> | 6.8 | 4.7 | 5.6 | 7.0 | 6.1 | 5.5 | 6.3 | 6.1 | 6.3 | 6.5 | 6.7 | 6.8 |
| 20. <i>Z. atrifrons</i> | 6.1 | 5.8 | 5.4 | 8.6 | 7.0 | 5.5 | 6.5 | 6.1 | 6.1 | 6.7 | 6.2 | 5.9 |
| 21. <i>Z. nigrorum</i> | 6.8 | 7.0 | 6.3 | 7.6 | 7.7 | 6.6 | 7.1 | 6.5 | 6.8 | 7.2 | 6.4 | 7.2 |
| 22. <i>Z. poliogastrus</i> | 6.4 | 6.0 | 5.5 | 8.0 | 7.2 | 5.9 | 6.1 | 6.0 | 6.5 | 6.3 | 5.8 | 6.2 |
| 23. <i>Z. flavilateralis</i> | 6.6 | 3.1 | 5.9 | 7.8 | 6.7 | 6.3 | 6.1 | 5.9 | 6.9 | 6.3 | 6.5 | 6.5 |
| 24. <i>Z. senegalensis</i> | 6.6 | 6.0 | 5.5 | 8.2 | 7.2 | 6.0 | 5.8 | 5.8 | 6.8 | 6.3 | 6.4 | 6.2 |
| 25. <i>Z. chloris intermedius</i> 'South Sulawesi' | 5.9 | 6.0 | 5.4 | 7.2 | 6.8 | 5.1 | 6.0 | 5.5 | 5.4 | 6.3 | 6.0 | 6.1 |
| 26. <i>Z. flavifrons</i> | 5.4 | 5.9 | 5.4 | 8.5 | 6.9 | 4.7 | 5.4 | 5.0 | 5.7 | 5.6 | 5.2 | 5.6 |
| 27. <i>Z. atricapilla</i> | 6.6 | 3.2 | 5.6 | 7.1 | 5.8 | 5.7 | 6.0 | 5.8 | 6.1 | 6.4 | 5.9 | 5.9 |
| 28. <i>Z. griseotinctus</i> | 5.3 | 5.7 | 5.5 | 7.5 | 6.7 | 4.2 | 4.5 | 4.6 | 1.9 | 4.6 | 5.2 | 4.6 |
| 29. <i>Chlorocharis emiliae</i> | 6.5 | 5.5 | 6.1 | 8.2 | 6.6 | 6.0 | 6.5 | 5.6 | 6.0 | 6.9 | 6.8 | 6.8 |

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 30. <i>Z. superciliosa</i> | 5.8 | 5.7 | 5.9 | 8.1 | 7.2 | 5.2 | 5.8 | 5.4 | 6.4 | 6.2 | 6.0 | 5.8 |
| 31. <i>Z. chloris</i> ‘mainland South-east Sulawesi and continental islands’ | 6.2 | 5.9 | 5.4 | 7.0 | 6.6 | 5.6 | 6.0 | 5.5 | 5.2 | 6.1 | 6.1 | 6.2 |
| 32. <i>Z. chloris</i> ‘Runduma’ | 6.0 | 5.7 | 5.3 | 7.1 | 6.6 | 5.5 | 5.8 | 5.7 | 5.1 | 6.1 | 5.9 | 5.8 |
| 33. <i>Z. chloris flavissimus</i> ‘Wakatobi Islands’ | 5.8 | 5.5 | 4.9 | 7.1 | 6.4 | 5.1 | 5.7 | 5.3 | 5.3 | 6.0 | 5.1 | 5.8 |
| 34. <i>Z. consobrinorum</i> ‘Sulawesi’ | 6.4 | 6.6 | 5.6 | 8.5 | 7.7 | 5.4 | 6.6 | 6.2 | 6.7 | 7.1 | 7.0 | 6.3 |
| 35. <i>Z. consobrinorum</i> ‘Kabaena’ | 6.3 | 6.4 | 5.7 | 8.5 | 7.7 | 5.3 | 6.5 | 6.1 | 6.6 | 6.9 | 7.0 | 6.2 |
| 36. <i>Z. consobrinorum</i> ‘Buton and Muna’ | 6.2 | 5.8 | 5.4 | 7.9 | 7.4 | 5.4 | 6.3 | 6.1 | 6.1 | 7.0 | 6.8 | 6.2 |
| 37. <i>Zos. sp. nov.</i> ‘Wangi-wangi White-eye’ | 7.0 | 6.7 | 6.6 | 8.3 | 7.9 | 6.3 | 5.9 | 5.9 | 5.8 | 6.5 | 7.3 | 6.9 |

| | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 13. <i>Z. metcalfii</i> | - | | | | | | | | | | | |
| 14. <i>Z. citrinellus</i> | 5.2 | - | | | | | | | | | | |
| 15. <i>Z. lateralis</i> | 5.7 | 4.8 | - | | | | | | | | | |
| 16. <i>Z. maderaspatanus</i> | 6.8 | 6.4 | 6.7 | - | | | | | | | | |
| 17. <i>Z. luteus</i> | 4.6 | 3.8 | 4.9 | 6.6 | - | | | | | | | |
| 18. <i>Z. virens</i> | 7.0 | 6.5 | 6.0 | 5.1 | 6.4 | - | | | | | | |
| 19. <i>Z. montanus</i> | 6.4 | 5.5 | 6.0 | 6.0 | 5.5 | 6.7 | - | | | | | |
| 20. <i>Z. atrifrons</i> | 6.2 | 5.7 | 6.1 | 7.4 | 5.9 | 6.9 | 6.3 | - | | | | |
| 21. <i>Z. nigrorum</i> | 6.8 | 6.2 | 6.9 | 7.6 | 6.5 | 7.5 | 7.2 | 6.8 | - | | | |
| 22. <i>Z. poliogastrus</i> | 6.3 | 5.5 | 5.8 | 6.2 | 5.3 | 5.2 | 6.3 | 6.7 | 6.2 | - | | |
| 23. <i>Z. flavilateralis</i> | 6.5 | 5.7 | 6.2 | 6.3 | 5.5 | 5.8 | 5.6 | 6.4 | 6.9 | 3.9 | - | |
| 24. <i>Z. senegalensis</i> | 6.6 | 5.8 | 6.2 | 5.6 | 5.7 | 5.8 | 6.5 | 6.4 | 6.9 | 3.5 | 4.4 | - |
| 25. <i>Z. chloris intermedius</i> 'South Sulawesi' | 6.2 | 4.8 | 5.5 | 6.8 | 5.4 | 6.4 | 5.6 | 4.7 | 6.0 | 6.3 | 6.2 | 6.1 |
| 26. <i>Z. flavifrons</i> | 5.6 | 4.7 | 4.9 | 6.1 | 5.0 | 5.6 | 6.3 | 6.2 | 6.4 | 5.2 | 5.8 | 5.8 |
| 27. <i>Z. atricapilla</i> | 5.4 | 5.3 | 5.4 | 6.1 | 5.0 | 6.0 | 4.9 | 6.3 | 6.9 | 6.2 | 4.9 | 6.2 |

| | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 28. <i>Z. griseotinctus</i> | 4.7 | 4.1 | 4.5 | 6.3 | 4.3 | 6.2 | 5.9 | 6.0 | 6.5 | 5.7 | 6.1 | 6.1 |
| 29. <i>Chlorocharis emiliae</i> | 6.7 | 6.0 | 6.2 | 7.2 | 6.1 | 7.5 | 5.2 | 6.1 | 6.7 | 6.7 | 6.3 | 6.7 |
| 30. <i>Z. superciliosa</i> | 6.0 | 5.4 | 4.8 | 6.8 | 4.9 | 6.7 | 5.0 | 6.0 | 7.1 | 6.1 | 6.1 | 6. |
| 31. <i>Z. chloris</i> 'mainland South-east Sulawesi and continental islands' | 6.3 | 4.8 | 5.5 | 6.8 | 5.2 | 6.2 | 5.8 | 4.8 | 5.8 | 5.7 | 5.9 | 5.8 |
| 32. <i>Z. chloris</i> 'Runduma' | 6.1 | 4.7 | 5.3 | 6.7 | 5.1 | 5.9 | 5.5 | 4.6 | 5.6 | 5.5 | 5.8 | 5.7 |
| 33. <i>Z. chloris flavissimus</i> 'Wakatobi Islands' | 5.7 | 4.9 | 4.8 | 6.1 | 4.9 | 6.1 | 5.1 | 4.5 | 5.5 | 5.8 | 5.9 | 5.8 |
| 34. <i>Z. consobrinorum</i> 'Sulawesi' | 7.2 | 6.0 | 6.1 | 7.3 | 6.1 | 7.1 | 7.3 | 4.5 | 6.3 | 6.7 | 6.8 | 6.5 |
| 35. <i>Z. consobrinorum</i> 'Kabaena' | 7.1 | 5.8 | 6.0 | 7.4 | 5.9 | 7.0 | 7.2 | 4.4 | 6.2 | 6.6 | 6.7 | 6.4 |
| 36. <i>Z. consobrinorum</i> 'Buton and Muna' | 6.9 | 4.5 | 5.9 | 7.0 | 5.8 | 6.7 | 6.3 | 5.1 | 5.9 | 6.3 | 6.2 | 6.3 |
| 37. <i>Zos. sp. nov.</i> 'Wangi-wangi White-eye' | 7.3 | 5.3 | 6.1 | 7.6 | 6.1 | 7.3 | 6.5 | 7.0 | 7.3 | 7.4 | 7.1 | 7.2 |

| | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32. | 33. | 34. | 35. | 36. | 37. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 25. <i>Z. chloris intermedius</i> 'South Sulawesi' | - | | | | | | | | | | | | |
| 26. <i>Z. flavifrons</i> | 5.8 | - | | | | | | | | | | | |
| 27. <i>Z. atricapilla</i> | 5.9 | 5.7 | - | | | | | | | | | | |
| 28. <i>Z. griseotinctus</i> | 5.1 | 5.0 | 5.7 | - | | | | | | | | | |
| 29. <i>Chlorocharis emiliae</i> | 5.5 | 6.5 | 5.8 | 6.1 | - | | | | | | | | |
| 30. <i>Z. superciliosa</i> | 6.3 | 4.4 | 5.7 | 5.6 | 6.7 | - | | | | | | | |
| 31. <i>Z. chloris</i> 'mainland South-east Sulawesi and continental islands' | 1.2 | 5.9 | 5.5 | 4.9 | 6.0 | 5.9 | - | | | | | | |
| 32. <i>Z. chloris</i> 'Runduma' | 1.3 | 5.7 | 5.2 | 4.8 | 5.8 | 5.7 | 0.7 | - | | | | | |
| 33. <i>Z. chloris flavissimus</i> 'Wakatobi Islands' | 2.0 | 5.5 | 5.4 | 5.0 | 5.6 | 6.0 | 2.5 | 2.3 | - | | | | |
| 34. <i>Z. consobrinorum</i> 'Sulawesi' | 4.6 | 5.7 | 7.2 | 6.4 | 6.9 | 6.4 | 5.0 | 4.9 | 4.5 | - | | | |

| | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32. | 33. | 34. | 35. | 36. | 37. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 35. <i>Z. consobrinorum</i> 'Kabaena' | 4.4 | 5.7 | 7.0 | 6.2 | 6.8 | 6.5 | 4.9 | 4.8 | 4.4 | 0.3 | - | | |
| 36. <i>Z. consobrinorum</i> 'Buton and Muna' | 4.2 | 5.5 | 6.0 | 5.6 | 6.4 | 6.3 | 4.7 | 4.5 | 4.6 | 2.1 | 1.9 | - | |
| 37. <i>Zos. sp. nov.</i> 'Wangi-wangi White-eye' | 5.2 | 6.5 | 6.3 | 5.1 | 7.0 | 7.2 | 5.3 | 5.6 | 5.9 | 7.2 | 7.1 | 6.2 | - |

Table S5.7: COI pairwise percentage distances between the *Zosterops* clades in this study. Mean pairwise distances are reported for taxa with more than one sample. Numbers along the top correspond to species listed in the row on the far left.

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. |
|--|-----|-----|-----|-----|-----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. <i>Z. chloris</i> ‘mainland South-east Sulawesi and continental islands’ | - | | | | | | | | | | | | | | | | |
| 2. <i>Z. chloris</i> ‘Runduma’ | 2.2 | - | | | | | | | | | | | | | | | |
| 3. <i>Z. chloris flavissimus</i> ‘Wakatobi Islands’ | 4.9 | 4.7 | - | | | | | | | | | | | | | | |
| 4. <i>Z. consobrinorum</i> ‘Sulawesi and Kabaena’ | 6.2 | 6.6 | 5.5 | - | | | | | | | | | | | | | |
| 5. <i>Z. consobrinorum</i> ‘Buton’ | 6.4 | 6.7 | 5.7 | 0.6 | - | | | | | | | | | | | | |
| 6. <i>Zos. sp. nov.</i> ‘Wangi-wangi White-eye’ | 7.2 | 7.5 | 7.7 | 8.4 | 8.5 | - | | | | | | | | | | | |

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 7. <i>Z. japonicus</i> | 6.3 | 5.1 | 6.4 | 5.9 | 6.1 | 7.3 | - | | | | | | | | | | |
| 8. <i>Z. nigrorum</i> | 7.1 | 6.4 | 7.1 | 6.2 | 6.5 | 8.7 | 6.3 | - | | | | | | | | | |
| 9. <i>Z. meyeri</i> | 5.9 | 4.7 | 6.4 | 5.9 | 6.1 | 6.8 | 0.7 | 6.2 | - | | | | | | | | |
| 10. <i>Z. pallidus</i> | 6.6 | 6.5 | 6.5 | 6.8 | 7.0 | 7.1 | 5.9 | 5.8 | 5.7 | - | | | | | | | |
| 11. <i>Z. erythropleurus</i> | 6.6 | 5.8 | 7.1 | 5.8 | 6.1 | 7.6 | 4.2 | 5.7 | 3.9 | 5.9 | - | | | | | | |
| 12. <i>Z. atrifrons</i> | 5.8 | 5.0 | 6.0 | 5.0 | 5.4 | 6.9 | 4.5 | 6.4 | 4.2 | 5.7 | 4.8 | - | | | | | |
| 13. <i>Z. palpebrosus</i> | 7.6 | 6.3 | 7.2 | 6.3 | 6.9 | 7.9 | 5.7 | 6.0 | 5.5 | 5.1 | 5.7 | 5.4 | - | | | | |
| 14. <i>Z. flavilateralis</i> | 6.5 | 5.9 | 5.8 | 5.0 | 5.1 | 7.7 | 4.9 | 5.2 | 5.1 | 4.4 | 5.5 | 5.2 | 5.3 | - | | | |
| 15. <i>Z. senegalensis</i> | 6.5 | 5.9 | 5.8 | 5.0 | 5.1 | 7.7 | 4.9 | 5.2 | 5.1 | 4.4 | 5.5 | 5.2 | 5.3 | 0 | - | | |
| 16. <i>Z. poliogastrus</i> | 7.6 | 6.5 | 7.0 | 5.5 | 5.6 | 8.6 | 5.6 | 5.9 | 5.8 | 5.0 | 5.7 | 6.4 | 6.4 | 1.7 | 1.7 | - | |
| 17. <i>Z. lateralis</i> | 7.0 | 6.2 | 6.8 | 5.6 | 6.2 | 7.5 | 5.9 | 4.2 | 6.1 | 6.2 | 5.8 | 4.8 | 5.9 | 6.6 | 6.0 | 6.6 | - |

Table S5.8: A summary of the morphological data used for the *Zosterops chloris* “mainland” population, showing mean figures \pm standard error.

| Variable | <i>Zosterops chloris</i> “mainland South-east Sulawesi” | | | | |
|--------------------|---|--------------------------|--------------------------|-----------------------------|-----------------------------|
| | Sulawesi (<i>N</i> = 105) | Buton (<i>N</i> = 9) | Muna (<i>N</i> = 19) | Kabaena (<i>N</i> = 35) | Runduma (<i>N</i> = 45) |
| Wing length (mm) | 58.8 \pm 0.12 | 59.28 \pm 0.26 | 56.74 \pm 0.3 | 58.84 \pm 0.36 | 59.16 \pm 0.19 |
| Tail length (mm) | 41.39 \pm 0.14 | 42.06 \pm 0.29 | 40.58 \pm 0.31 | 42.6 \pm 0.24 | 42.57 \pm 0.18 |
| Tarsus length (mm) | 17.09 \pm 0.01 | 17.08 \pm 0.21 | 16.76 \pm 0.11 | 17.34 \pm 0.09 | 17.88 \pm 0.08 |
| Bill length (mm) | 14.37 \pm 0.06 | 14.81 \pm 0.23 | 14.70 \pm 0.14 | 15.17 \pm 0.13 | 15.55 \pm 0.11 |
| Skull length (mm) | 14.87 \pm 0.06 | 14.83 \pm 0.26 | 14.28 \pm 0.11 | 14.85 \pm 0.11 | 14.59 \pm 0.11 |
| Bill depth (mm) | 2.79 \pm 0.01 | 2.88 \pm 0.06 | 2.64 \pm 0.03 | 2.91 \pm 0.03 | 3.06 \pm 0.02 |
| Weight (g) | 11.26 \pm 0.06 | 11.47 \pm 0.18 | 10.27 \pm 0.13 | 11.2 \pm 0.1 | 9.91 \pm 0.09 |

Table S5.9: A summary of the morphological data used for the *Zosterops chloris* “Wakatobi” population, showing mean figures ± standard error.

| Variable | <i>Zosterops chloris</i> “Wakatobi” | | | | | |
|--------------------|-------------------------------------|------------------|----------------------|--------------------|----------------------------|----------------------|
| | Wangi-wangi (N = 47) | Oroho (N = 5) | Kaledupa (N = 83) | Tomia (N = 153) | Lintea Selatan (N = 21) | Binongko (N = 53) |
| Wing length (mm) | 53.21 ± 0.21 | 52.8 ± 0.58 | 56.14 ± 0.14 | 54.29 ± 0.11 | 54.62 ± 0.32 | 55.85 ± 0.2 |
| Tail length (mm) | 37.55 ± 0.17 | 38.8 ± 0.66 | 39.45 ± 0.13 | 38.9 ± 0.11 | 39.48 ± 0.31 | 40.48 ± 0.17 |
| Tarsus length (mm) | 16.66 ± 0.09 | 16.28 ± 0.2 | 16.66 ± 0.06 | 16.7 ± 0.05 | 16.51 ± 0.12 | 16.5 ± 0.1 |
| Bill length (mm) | 13.32 ± 0.1 | 13.74 ± 0.21 | 13.72 ± 0.06 | 13.83 ± 0.04 | 13.72 ± 0.16 | 13.85 ± 0.09 |
| Skull length (mm) | 14.75 ± 0.09 | 14.4 ± 0.15 | 14.65 ± 0.06 | 14.48 ± 0.05 | 14.67 ± 0.1 | 14.61 ± 0.08 |
| Bill depth (mm) | 2.65 ± 0.02 | 2.78 ± 0.04 | 2.66 ± 0.01 | 2.64 ± 0.01 | 2.71 ± 0.03 | 2.82 ± 0.02 |
| Weight (g) | 9.42 ± 0.09 | 8.8 ± 0.07 | 9.78 ± 0.07 | 9.34 ± 0.04 | 8.69 ± 0.13 | 9.39 ± 0.07 |

Table S5.10: A summary of the morphological data used for *Zosterops consobrinorum*, showing mean figures \pm standard error.

| Variable | <i>Zosterops consobrinorum</i> | | | |
|--------------------|--------------------------------|-------------------|------------------|---------------------|
| | Sulawesi (N = 48) | Buton (N = 37) | Muna (N = 31) | Kabaena (N = 23) |
| Wing length (mm) | 53.24 \pm 0.16 | 54.3 \pm 0.2 | 52.87 \pm 0.27 | 56.87 \pm 0.54 |
| Tail length (mm) | 37.55 \pm 0.21 | 38.19 \pm 0.2 | 38.45 \pm 0.27 | 41.7 \pm 0.48 |
| Tarsus length (mm) | 14.49 \pm 0.08 | 14.94 \pm 0.1 | 14.28 \pm 0.09 | 15.83 \pm 0.11 |
| Bill length (mm) | 13.35 \pm 0.09 | 13.46 \pm 0.11 | 13.21 \pm 0.1 | 14.21 \pm 0.13 |
| Skull length (mm) | 13.64 \pm 0.06 | 13.55 \pm 0.06 | 13.35 \pm 0.08 | 14.15 \pm 0.11 |
| Bill depth (mm) | 2.77 \pm 0.02 | 2.79 \pm 0.03 | 2.63 \pm 0.03 | 2.99 \pm 0.05 |
| Weight (g) | 8.91 \pm 0.07 | 9.62 \pm 0.08 | 8.45 \pm 0.09 | 10.91 \pm 0.18 |

Table S5.11: A summary of the morphological data used for the *Zosterops sp. nov.* “Wangi-wangi White-eye”, showing mean figures \pm standard error.

| Variable | <i>Zosterops sp. nov.</i> “Wangi-wangi White-eye” |
|--------------------|---|
| | Wangi-wangi (N = 38) |
| Wing length (mm) | 62.99 \pm 0.24 |
| Tail length (mm) | 46.22 \pm 0.21 |
| Tarsus length (mm) | 19.36 \pm 0.07 |
| Bill length (mm) | 17.25 \pm 0.11 |
| Skull length (mm) | 15.89 \pm 0.1 |
| Bill depth (mm) | 3.41 \pm 0.03 |
| Weight (g) | 14.51 \pm 0.13 |

Table S5.12: Summary of the loading of the different variables in the PCs with eigenvalues >1 in the morphology PCAs and the proportion of the variance these PCs explained.

| Variable | <i>Zosterops chloris</i> | | <i>Zosterops consobrinorum</i> and 'Wangi-wangi White-eye' |
|-------------------------------|--------------------------|-------------|---|
| | PC1 | PC2 | PC1 |
| Wing length | -0.474 | 0.089 | -0.386 |
| Tail length | -0.447 | 0.008 | -0.374 |
| Tarsus length | -0.351 | -0.074 | -0.386 |
| Bill length | -0.370 | -0.539 | -0.379 |
| Skull length | -0.111 | 0.814 | -0.368 |
| Bill depth | -0.381 | 0.048 | -0.363 |
| Weight | -0.398 | 0.177 | -0.390 |
| Proportion of variance | 78.3% | 8.3% | 88.7% |

Table S5.13: A summary of the song data used for the *Zosterops chloris* “mainland” population, showing mean figures \pm standard error.

| Variable | <i>Zosterops chloris</i> “mainland South-east Sulawesi” | | | |
|-------------------------|---|------------------|------------------|--------------------|
| | Sulawesi (N = 8) | Buton (N = 7) | Muna (N = 4) | Kabaena (N = 5) |
| Notes (n) | 12.54 \pm 0.4 | 11.29 \pm 0.33 | 10.17 \pm 0.33 | 10.35 \pm 0.44 |
| Duration (s) | 2.16 \pm 0.16 | 1.98 \pm 0.09 | 1.58 \pm 0.07 | 2.17 \pm 0.21 |
| Pace (Notes/Duration) | 5.94 \pm 0.32 | 5.75 \pm 0.27 | 6.5 \pm 0.35 | 4.93 \pm 0.46 |
| Maximum frequency (kHz) | 5.58 \pm 0.24 | 6.42 \pm 0.24 | 5.74 \pm 0.24 | 5.56 \pm 0.17 |
| Minimum frequency (kHz) | 2.04 \pm 0.09 | 2.19 \pm 0.11 | 2.34 \pm 0.08 | 1.94 \pm 0.15 |
| Bandwidth (kHz) | 3.54 \pm 0.18 | 4.23 \pm 0.25 | 3.4 \pm 0.32 | 3.62 \pm 0.16 |
| Peak frequency (kHz) | 4.38 \pm 0.12 | 4.59 \pm 0.19 | 4.05 \pm 0.19 | 4.64 \pm 0.1 |

Table S5.14: A summary of the song data used for the *Zosterops chloris* “Wakatobi” population, showing mean figures \pm standard error.

| Variable | <i>Zosterops chloris</i> “Wakatobi” | | |
|-------------------------|-------------------------------------|----------------------|------------------|
| | Wangi-wangi (N = 15) | Kaledupa (N = 11) | Tomia (N = 2) |
| Notes (n) | 13.76 \pm 0.33 | 14.19 \pm 0.31 | 16.33 \pm 2.33 |
| Duration (s) | 2.46 \pm 0.16 | 2.44 \pm 0.09 | 2.4 \pm 0.4 |
| Pace (Notes/Duration) | 5.80 \pm 0.24 | 5.86 \pm 0.13 | 6.82 \pm 0.18 |
| Maximum frequency (kHz) | 7.39 \pm 0.13 | 7.22 \pm 0.14 | 6.54 \pm 0.51 |
| Minimum frequency (kHz) | 2.27 \pm 0.04 | 2.03 \pm 0.05 | 2.06 \pm 0.03 |
| Bandwidth (kHz) | 5.13 \pm 0.14 | 5.19 \pm 0.17 | 4.48 \pm 0.54 |
| Peak frequency (kHz) | 4.68 \pm 0.19 | 4.69 \pm 0.12 | 4.92 \pm 0.82 |

Table S5.15: A summary of the song data used for the *Zosterops chloris maxi* Lombok population, showing mean figures \pm standard error.

| Variable | <i>Zosterops chloris maxi</i> |
|-------------------------|-------------------------------|
| | Lombok (N = 2) |
| Notes (n) | 18.5 \pm 1.3 |
| Duration (s) | 3.6 \pm 0.46 |
| Pace (Notes/Duration) | 5.18 \pm 0.3 |
| Maximum frequency (kHz) | 6.55 \pm 0.12 |
| Minimum frequency (kHz) | 1.62 \pm 0.01 |
| Bandwidth (kHz) | 4.93 \pm 0.11 |
| Peak frequency (kHz) | 4.64 \pm 0.16 |

Table S5.16: A summary of the song data used for *Zosterops consobrinorum*, showing mean figures \pm standard error.

| Variable | <i>Zosterops consobrinorum</i> | | | |
|-------------------------|--------------------------------|-------------------|-----------------|---------------------|
| | Sulawesi (N = 11) | Buton (N = 27) | Muna (N = 4) | Kabaena (N = 27) |
| Notes (n) | 7.8 \pm 0.12 | 7.73 \pm 0.13 | 8.48 \pm 0.34 | 8.29 \pm 0.11 |
| Duration (s) | 1.41 \pm 0.05 | 1.38 \pm 0.04 | 1.42 \pm 0.06 | 1.45 \pm 0.04 |
| Pace (Notes/Duration) | 5.6 \pm 0.19 | 5.67 \pm 0.14 | 6.0 \pm 0.29 | 5.81 \pm 0.14 |
| Maximum frequency (kHz) | 6.91 \pm 0.21 | 6.5 \pm 0.1 | 6.03 \pm 0.25 | 6.89 \pm 0.1 |
| Minimum frequency (kHz) | 2.57 \pm 0.05 | 2.53 \pm 0.04 | 2.47 \pm 0.14 | 2.45 \pm 0.03 |
| Bandwidth (kHz) | 4.34 \pm 0.23 | 3.97 \pm 0.12 | 3.56 \pm 0.38 | 4.44 \pm 0.09 |
| Peak frequency (kHz) | 4.57 \pm 0.2 | 4.48 \pm 0.09 | 4.57 \pm 0.14 | 4.59 \pm 0.08 |

Table S5.17: Summary of the loading of the different variables in the PCs with eigenvalues >1 in the song PCAs and the proportion of the variance these PCs explained.

| Variable | <i>Zosterops chloris</i> | | | <i>Zosterops consobrinorum</i> | | |
|-------------------------------|--------------------------|--------------|--------------|--------------------------------|--------------|--------------|
| | PC1 | PC2 | PC3 | PC1 | PC2 | PC3 |
| Notes | -0.471 | 0.163 | 0.286 | 0.354 | -0.306 | -0.455 |
| Duration | -0.415 | 0.535 | -0.093 | 0.473 | 0.302 | -0.385 |
| Pace | 0.124 | -0.586 | 0.434 | -0.312 | -0.606 | 0.141 |
| Maximum frequency | -0.495 | -0.344 | -0.247 | 0.454 | -0.028 | 0.582 |
| Minimum frequency | 0.082 | -0.245 | -0.805 | -0.302 | 0.388 | 0.311 |
| Bandwidth | -0.528 | -0.282 | -0.024 | 0.505 | -0.144 | 0.433 |
| Peak frequency | -0.245 | -0.294 | 0.109 | -0.04 | 0.526 | 0.038 |
| Proportion of variance | 39.8% | 24.0% | 16.4% | 41.7% | 21.8% | 16.2% |

5.1. Detailed Tobias scoring for potentially novel white-eye species

Defining the line between a species and a subspecies presents conceptual and practical problems. While molecular methods are often used for species delimitation (Irestedt *et al.* 2013; Andersen *et al.* 2015) and some attempts have been made to provide guidelines for the level of genetic divergence expected between species (Hebert *et al.* 2004), relying on molecular methods alone can be problematic. Other features generally should be consulted, particularly plumage and song as these are of vital importance in maintaining reproductive isolation (Uy *et al.* 2009).

Due to these concerns, the Handbook of the Birds of the World and Birdlife International have been employing the Tobias criteria in their taxonomic revisions (<https://www.hbw.com/taxonomic-scoring-system>). This is a scoring system based on Tobias *et al.* (2010) which provides quantitative criteria for species delimitation based solely on phenotypic differences (i.e. differences in plumage, morphology, and vocalizations) which are scored as minor (1), medium (2), major (3) and exceptional (4), depending on their perceived degree of strength. Co-varying differences (e.g. longer wing length and proportionately longer bill size) can be scored only once, so only the trait with the largest difference in each category can be included. Up to three differences in plumage and/or bare parts can be included. Quantitative traits are scored using Cohen's *d* effect size statistic. Scoring is carried out as follows:

- A *minor* difference (1) involves weak divergence in a plumage or morphology character, in the form of a slightly different wash or suffusion on an area of feathering or on a bare part (although minor differences in bare part coloration are either not common or infrequently detected). A minor morphology or vocal character is one in which the effect size is 0.2–1.99.
- A *medium* difference (2) involves a distinctly different tone (shade: light yellow vs dusky yellow, etc.) on an area of feathering or bare part. A medium morphology or vocal character is one in which the effect size is 2–4.99.
- A *major* difference (3) involves a contrastingly different hue (colour: e.g. white vs yellow) on an area of feathering or bare part, and/or the presence of an entirely different patterning (such as strong spotting vs strong stripes). A strong morphology or vocal character is one in which the effect size is 5–9.99.
- An *exceptional* difference (4) involves a radically different coloration or pattern (a striking contrast in colours or shapes) applying to the majority of the plumage area, or

any trait directly involved in courtship and mate choice. An exceptional morphology or vocal character is one in which the effect size is 10 or more.

A taxon must reach a score of 7 to be considered for designation as a separate species. Here we present a Tobias scoring for the *Z. c. flavissimus* population (confined to the Wakatobi Islands), comparing it to the nearest population of Lemon-bellied White-eyes, *Z. chloris* on mainland South-east Sulawesi and its continental islands.

5.1.1. Tobias scoring - *Z. chloris flavissimus* vs mainland South-east Sulawesi Lemon-bellied White-eyes

MORPHOLOGY

For this comparison we considered all *Z. c. flavissimus* individuals ($N = 362$, from Wangi-wangi, Oroho, Kaledupa, Tomia, Lintea Selatan and Binongko Islands) and mainland South-east Sulawesi Lemon-bellied White-eye individuals used in this study ($N = 168$, from mainland South-east Sulawesi, Kabaena, Muna and Buton Islands). Runduma Island individuals were excluded as they may represent an independent subspecies.

Trait displaying the largest difference: wing length

Mean *Z. c. flavissimus* (mm): 54.8 ± 0.09

Mean Mainland South-east Sulawesi Lemon-bellied White-eye (mm): 58.6 ± 0.12

Cohen's d effect size: 2.3

Tobias score for morphology: 2

SONG

Tobias scoring allows for the using of one temporal and one spectral vocal character.

For these comparisons we considered all *Z. c. flavissimus* ($N = 28$, from Wangi-wangi, Kaledupa and Tomia Islands) and mainland South-east Sulawesi Lemon-bellied White-eye recordings ($N = 24$, from mainland South-east Sulawesi, Kabaena, Muna and Buton Islands).

Song: temporal character

Trait displaying the largest difference: number of notes

Mean *Z. c. flavissimus* (n): 14.11 ± 0.27

Mean Mainland South-east Sulawesi Lemon-bellied White-eye (n): 11.32 ± 0.27

Cohen's d effect size: 2.02

Tobias score for song temporal character: 2

Song: spectral character

Trait displaying the largest difference: maximum frequency

Mean *Z. c. flavissimus* (kHz): 7.26 ± 0.1

Mean Mainland South-east Sulawesi Lemon-bellied White-eye (kHz): 5.85 ± 0.14

Cohen's d effect size: 2.35

Tobias score for spectral character: 2

PLUMAGE AND BARE PARTS

Z. c. flavissimus is described as yellower than the other Lemon-bellied White-eye subspecies, with "yellow, not blackish or dusky lores, below which a dusky-black stripe extends to under [the] eyering" (van Balen 2008). We have found this to be the case (Table S5.18). In addition *Z. c. flavissimus* has a paler bill than mainland South-east Sulawesi Lemon-bellied White-eye.

Bill colour

Z. c. flavissimus: pale horn

Mainland South-east Sulawesi Lemon-bellied White-eye: grey/black

Tobias score for bill colour: 2

Head and face

Z. c. flavissimus: head more yellow, with a reduced dark area on the face, only showing a thin dark stripe on the lores

Mainland South-east Sulawesi Lemon-bellied White-eye: head darker, with the face showing a thicker dark stripe on the lores

Tobias score for head and lores: 1

Total Tobias score for *Z. c. flavissimus*: 9

5.1.2. Tobias scoring *Zosterops sp. nov.* 'Wangi-wangi White-eye' vs the Pale-bellied White-eye

While the genetic distinctiveness of the 'Wangi-wangi White-eye' is compelling, a Tobias scoring was carried out between the 'Wangi-wangi White-eye' and the Pale-bellied White-eye *Zosterops consobrinorum* to further establish the status of the 'Wangi-wangi White-eye' as a novel species. As the 'Wangi-wangi White-eye' lives in sympatry with *Z. c. flavissimus* and the two remain distinct, they automatically receive a Tobias score of 7, as their reproductive isolation has been demonstrated.

MORPHOLOGY

As we do not recommend any taxonomic reconsideration of the Pale-bellied White-eye, all Pale-bellied White-eye individuals were pooled for this assessment ($N = 139$ from mainland Sulawesi, Kabaena, Muna and Buton Islands). All 38 'Wangi-wangi White-eyes' were included.

Trait displaying the largest difference: wing length

Mean Pale-bellied White-eye (mm): 14.78 ± 0.06

Mean 'Wangi-wangi White-eye' (mm): 19.36 ± 0.07

Cohen's d effect size: 6.47

Tobias score for morphology: 3

PLUMAGE AND BARE PARTS

The 'Wangi-wangi White-eye' has a bill which is distinctly different in colouration to the Pale-bellied White-eye (Table S5.19). In addition the two species show a minor difference in the colouration of their feet and legs.

Bill colour

'Wangi-wangi White-eye': yellow

Pale-bellied White-eye: black

Tobias score for bill colour: 3

Feet colour

'Wangi-wangi White-eye': pale fleshy colour

Pale-bellied White-eye: dark grey

Tobias score for feet colour: 1

Total Tobias score for the 'Wangi-wangi White-eye': 7

5.1.3. Assessment

Both *Z. c. flavissimus* (Tobias score = 9) and the 'Wangi-wangi White-eye' (Tobias score = 7) fulfil the criteria required to be considered full species by the Tobias scoring system.

Table S5.18: Comparison photos for Tobias scoring between *Zosterops chloris flavissimus* (Wakatobi Islands) and the Lemon-bellied White-eye population on mainland South-east Sulawesi and continental islands.

| <i>Zosterops chloris flavissimus</i> | Lemon-bellied White-eye mainland South-east Sulawesi |
|--|---|
| <p data-bbox="440 501 675 533">Wangi-wangi Island</p>  | <p data-bbox="1015 501 1243 533">Mainland Sulawesi</p>  |
| <p data-bbox="464 1077 651 1108">Kaledupa Island</p>  | <p data-bbox="1051 1048 1206 1079">Buton Island</p>  |

Tomia Island



Muna Island







Binongko Island



Kabaena Island



Table S5.19: Comparison photos for Tobias scoring between the Pale-bellied White-eye and the 'Wangi-wangi White-eye'.

| Pale-bellied White-eye | 'Wangi-wangi White-eye' |
|---|---|
| <p data-bbox="485 315 632 344">Muna Island</p>  A photograph of a Pale-bellied White-eye bird from Muna Island. The bird is shown in profile, facing left, perched on a person's hand. It has a bright yellow head and throat, a white breast, and olive-green wings and back. The white eye-ring is clearly visible. | <p data-bbox="967 349 1347 383">Wangi-wangi Island (all photos)</p>  A photograph of a 'Wangi-wangi White-eye' bird from Wangi-wangi Island. The bird is shown in profile, facing right, perched on a person's hand. It has a yellowish-green head and throat, a white breast, and olive-green wings and back. The white eye-ring is clearly visible. |
| <p data-bbox="485 999 632 1028">Buton Island</p>  A photograph of a Pale-bellied White-eye bird from Buton Island. The bird is shown in profile, facing left, perched on a person's hand. It has a bright yellow head and throat, a white breast, and olive-green wings and back. The white eye-ring is clearly visible. |  A photograph of a 'Wangi-wangi White-eye' bird from Buton Island. The bird is shown in profile, facing right, perched on a person's hand. It has a yellowish-green head and throat, a white breast, and olive-green wings and back. The white eye-ring is clearly visible. |

Mainland Sulawesi



Kabaena Island



Table S5.20: Existing vouchered specimens of *Zosterops chloris* from South-east Sulawesi. AMNH - American Museum of Natural History.

| Catalogue No. | Museum | Collector | Collector's No. | Zone | Island | Current subspecies | Preparation |
|---------------|--------|---------------|-----------------|----------|-------------|--------------------|-------------|
| SKIN 700315 | AMNH | Heinrich Kühn | 4215 | Wakatobi | Binongko | <i>flavissimus</i> | Skin |
| SKIN 700316 | AMNH | Heinrich Kühn | 4217 | Wakatobi | Binongko | <i>flavissimus</i> | Skin |
| SKIN 700317 | AMNH | Heinrich Kühn | 4219 | Wakatobi | Binongko | <i>flavissimus</i> | Skin |
| SKIN 700318 | AMNH | Heinrich Kühn | 4221 | Wakatobi | Binongko | <i>flavissimus</i> | Skin |
| SKIN 295140 | AMNH | Heinrich Kühn | 4224 | Wakatobi | Binongko | <i>flavissimus</i> | Skin |
| SKIN 700320 | AMNH | Heinrich Kühn | 4579 | Wakatobi | Kaledupa | <i>flavissimus</i> | Skin |
| SKIN 700319 | AMNH | Heinrich Kühn | 4580 | Wakatobi | Kaledupa | <i>flavissimus</i> | Skin |
| SKIN 700321 | AMNH | Heinrich Kühn | 4425 | Wakatobi | Tomia | <i>flavissimus</i> | Skin |
| SKIN 700322 | AMNH | Heinrich Kühn | 4422 | Wakatobi | Tomia | <i>flavissimus</i> | Skin |
| SKIN 700323 | AMNH | Heinrich Kühn | 4423 | Wakatobi | Tomia | <i>flavissimus</i> | Skin |
| SKIN 700324 | AMNH | Heinrich Kühn | 4448 | Wakatobi | Wangi-Wangi | <i>flavissimus</i> | Skin |
| SKIN 700331 | AMNH | Heinrich Kühn | 4152 | Mainland | Buton | <i>intermedius</i> | Skin |
| SKIN 700332 | AMNH | Heinrich Kühn | 4169 | Mainland | Buton | <i>intermedius</i> | Skin |

6. Island-like processes in urban populations of a 'great speciator' - Supplementary information

Table S6.1: A summary of the morphological data used in this analysis for Lemon-bellied White-eyes and Pale-bellied White-eyes, showing mean figures \pm standard error. The island identity is included in brackets after the site name.

| Population | Wing length (mm) | Bill length (mm) | Mass (g) |
|---|------------------|------------------|------------------|
| Lemon-bellied White-eye Kendari (Sulawesi) (<i>N</i> = 86) | 58.81 \pm 0.13 | 14.33 \pm 0.06 | 11.39 \pm 0.07 |
| Lemon-bellied White-eye Rumbarumba (Sulawesi) (<i>N</i> = 15) | 58.83 \pm 0.2 | 14.71 \pm 0.12 | 10.89 \pm 0.13 |
| Lemon-bellied White-eye Labundobundo (Buton) (<i>N</i> = 10) | 59.15 \pm 0.27 | 14.73 \pm 0.22 | 11.44 \pm 0.16 |
| Lemon-bellied White-eye Kamama Mekar (Muna) (<i>N</i> = 19) | 56.74 \pm 0.3 | 14.71 \pm 0.14 | 10.27 \pm 0.13 |
| Lemon-bellied White-eye Sikeli (Kabaena) (<i>N</i> = 49) | 59.19 \pm 0.22 | 15.04 \pm 0.11 | 11.06 \pm 0.11 |
| Lemon-bellied White-eye Rumduma (Rumduma) (<i>N</i> = 45) | 59.16 \pm 0.17 | 15.55 \pm 0.1 | 9.91 \pm 0.08 |
| Pale-bellied White-eye Rumbarumba (Sulawesi) (<i>N</i> = 45) | 53.28 \pm 0.17 | 13.36 \pm 0.09 | 8.89 \pm 0.07 |
| Pale-bellied White-eye Kusambi (Buton) (<i>N</i> = 18) | 54.5 \pm 0.29 | 13.7 \pm 0.14 | 9.7 \pm 0.11 |
| Pale-bellied White-eye Kaikalu (Buton) (<i>N</i> = 16) | 54.09 \pm 0.33 | 13.25 \pm 0.18 | 9.58 \pm 0.14 |
| Pale-bellied White-eye Labundobundo (Buton) (<i>N</i> = 5) | 54.7 \pm 0.44 | 13.52 \pm 0.24 | 9.36 \pm 0.17 |
| Pale-bellied White-eye Kamama Mekar (Muna) (<i>N</i> = 30) | 52.7 \pm 0.22 | 13.18 \pm 0.1 | 8.44 \pm 0.1 |
| Pale-bellied White-eye Enano (Kabaena) (<i>N</i> = 13) | 55.46 \pm 0.53 | 14.08 \pm 0.2 | 10.47 \pm 0.2 |
| Pale-bellied White-eye Tangkeno (Kabaena) (<i>N</i> = 15) | 57.87 \pm 0.59 | 14.26 \pm 0.13 | 11.21 \pm 0.18 |

Table S6.2: A summary of the transect data used in this analysis for Lemon-bellied White-eyes and Pale-bellied White-eyes, showing mean count \pm standard error. The island identity is included in brackets after the site name. A dash indicates no records for that site.

| Population | Lemon-bellied White-eye mean count | Pale-bellied White-eye mean count |
|---------------------------------------|---------------------------------------|--------------------------------------|
| Kendari (Sulawesi) (<i>N</i> = 6) | 42.67 \pm 10.91 | - |
| Rumbarumba (Sulawesi) (<i>N</i> = 9) | 2.78 \pm 0.78 | 4.78 \pm 1.0 |
| Kusambi (Buton) (<i>N</i> = 4) | - | 11.25 \pm 3.35 |
| Labundobundo (Buton) (<i>N</i> = 6) | 1.33 \pm 0.42 | 3.0 \pm 0.52 |
| Kamama Mekar (Muna) (<i>N</i> = 5) | 6.2 \pm 1.66 | 8.0 \pm 0.77 |
| Enano (Kabaena) (<i>N</i> = 8) | - | 6.38 \pm 1.82 |
| Tangkeno (Kabaena) (<i>N</i> = 11) | - | 8.18 \pm 0.76 |
| Sikeli (Kabaena) (<i>N</i> = 4) | 29.5 \pm 11.32 | - |
| Runduma (Runduma) (<i>N</i> = 6) | 30.17 \pm 2.31 | - |

Table S6.3: Results of all comparisons in the Tukey HSD posthoc to the Negative Binomial GLM of Lemon-bellied White-eye density. The island identity is included in brackets after the site name. Site abbreviations; KEN - Kendari (Sulawesi), SIK - (Kabaena), RUND - Runduma Island, KUS - Kusambi (Buton), TAN - Tangkeno (Kabaena), ENA - Enano (Kabaena), KAM - Kamama Mekar (Muna), RUM - Rumbarumba (Sulawesi), LBB - Labundobundo (Buton).

| Comparison | Estimate | Std. Error | z value | Pr(> z) | Significance |
|------------|----------|------------|---------|----------|--------------|
| LBB - KEN | -3.46574 | 0.442 | -7.841 | <0.001 | *** |
| KAM - KEN | -1.92887 | 0.33055 | -5.835 | <0.001 | *** |
| RUM - KEN | -2.73177 | 0.3151 | -8.67 | <0.001 | *** |
| RUND - KEN | -0.34668 | 0.27547 | -1.258 | 0.8016 | NS |
| SIK - KEN | -0.36903 | 0.30895 | -1.194 | 0.834 | NS |
| KAM - LBB | 1.53687 | 0.47996 | 3.202 | 0.0163 | * |
| RUM - LBB | 0.73397 | 0.46945 | 1.563 | 0.614 | NS |
| RUND - LBB | 3.11906 | 0.44382 | 7.028 | <0.001 | *** |
| SIK - LBB | 3.09671 | 0.46534 | 6.655 | <0.001 | *** |
| RUM - KAM | -0.80290 | 0.36645 | -2.191 | 0.2344 | NS |
| RUND - KAM | 1.58219 | 0.33299 | 4.751 | <0.001 | *** |
| SIK - KAM | 1.55984 | 0.36117 | 4.319 | <0.001 | *** |
| RUND - RUM | 2.38509 | 0.31765 | 7.508 | <0.001 | *** |
| SIK - RUM | 2.36274 | 0.34708 | 6.807 | <0.001 | *** |
| SIK - RUND | -0.02235 | 0.31156 | -0.072 | 1.0 | NS |

7. Female birds crowded out by males on small islands: niche contraction in dense populations of Olive-backed Sunbirds is asymmetric - Supplementary information

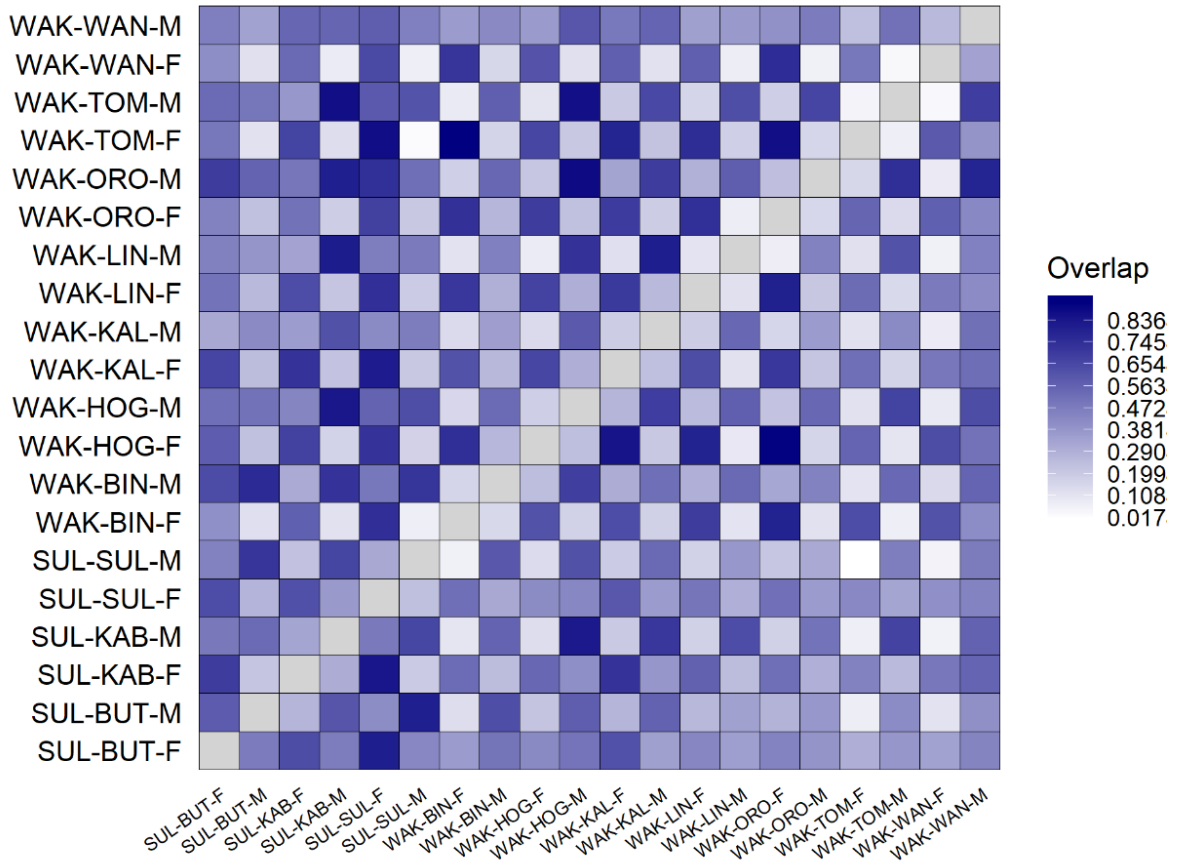


Figure S7.1: Heatmap showing the proportion overlap in morphological niche between all Olive-backed Sunbird populations. Population abbreviations are given in the form, ZONE-ISLAND-SEX. Zone abbreviations; SUL - Sulawesi mainland and continental islands, WAK - Wakatobi Islands. Island abbreviations; SUL- Sulawesi mainland, BUT - Buton, KAB - Kabaena, WAN - Wangi-wangi, ORO - Oroho, KAL - Kaledupa, HOG - Hoga, TOM - Tomia, LIN - Lintea Selatan and BIN - Binongko. Sex abbreviations; F - Female, M - Male.

Table S7.1: Total morphological niche volume for female and male Olive-backed Sunbirds on each island, and the proportion of morphological niche volume overlap between male and female sunbirds in each population. The Sulawesi mainland and its continental islands are highlighted in bold, Wakatobi Islands are highlighted in italics.

| Population | Female Olive-backed Sunbird morphological niche volume | Male Olive-backed Sunbird morphological niche volume | Mean overlap |
|-----------------------|--|--|--------------|
| Sulawesi | 0.828 | 0.675 | 0.281 |
| Buton | 0.720 | 0.630 | 0.534 |
| Kabaena | 0.705 | 0.681 | 0.320 |
| <i>Wangi-wangi</i> | 0.585 | 0.707 | 0.304 |
| <i>Oroho</i> | 0.693 | 0.501 | 0.199 |
| <i>Kaledupa</i> | 0.658 | 0.745 | 0.218 |
| <i>Hoga</i> | 0.550 | 0.690 | 0.217 |
| <i>Tomia</i> | 0.497 | 0.547 | 0.066 |
| <i>Lintea Selatan</i> | 0.636 | 0.559 | 0.119 |
| <i>Binongko</i> | 0.643 | 0.608 | 0.157 |

Table S7.2: A summary of the transect data used in this analysis for Olive-backed Sunbirds, showing mean figures \pm standard error of the counts of Olive-backed Sunbirds. The Sulawesi mainland and its continental islands are highlighted in bold, Wakatobi Islands are highlighted in italics.

| Population | Olive-backed Sunbird mean count |
|------------------------------------|---------------------------------|
| Sulawesi (<i>n</i> = 21) | 2.29 \pm 0.59 |
| Buton (<i>n</i> = 16) | 1.56 \pm 0.33 |
| Kabaena (<i>n</i> = 30) | 4.17 \pm 0.7 |
| <i>Wangi-wangi (<i>n</i> = 10)</i> | 18.4 \pm 2.41 |
| <i>Kaledupa (<i>n</i> = 11)</i> | 17.55 \pm 1.19 |
| <i>Hoga (<i>n</i> = 6)</i> | 21.67 \pm 1.3 |
| <i>Tomia (<i>n</i> = 10)</i> | 23.9 \pm 2.45 |
| <i>Binongko (<i>n</i> = 10)</i> | 19.2 \pm 2.57 |

Table S7.3: Results of all comparisons in the Tukey HSD posthoc test to the Poisson GLM of Olive-backed Sunbird density. Island abbreviations; SUL - mainland Sulawesi, BUT - Buton, KAB - Kabaena, WAN - Wangi-wangi, KAL - Kaledupa, HOG - Hoga, TOM - Tomia and BIN - Binongko.

| Comparison | Estimate | Std. Error | z value | Pr(> z) | Significance |
|------------|----------|------------|---------|----------|--------------|
| BUT - BIN | -2.50862 | 0.21262 | -11.798 | <0.001 | *** |
| HOG - BIN | 0.09752 | 0.11438 | 0.853 | 0.98872 | NS |
| KAB - BIN | -1.52779 | 0.11493 | -13.294 | <0.001 | *** |
| KAL - BIN | -0.09012 | 0.10193 | -0.884 | 0.98601 | NS |
| SUL - BIN | -2.12823 | 0.16137 | -13.188 | <0.001 | *** |
| TOM - BIN | 0.21897 | 0.09691 | 2.259 | 0.29622 | NS |
| WAN - BIN | -0.04256 | 0.10317 | -0.413 | 0.99989 | NS |
| HOG - BUT | 2.60614 | 0.2188 | 11.911 | <0.001 | *** |
| KAB - BUT | 0.98083 | 0.21909 | 4.477 | <0.001 | *** |
| KAL - BUT | 2.41851 | 0.21256 | 11.378 | <0.001 | *** |
| SUL - BUT | 0.38039 | 0.24664 | 1.542 | 0.76813 | NS |
| TOM - BUT | 2.72759 | 0.2102 | 12.976 | <0.001 | *** |
| WAN - BUT | 2.46606 | 0.21315 | 11.569 | <0.001 | *** |
| KAB - HOG | -1.62531 | 0.12599 | -12.9 | <0.001 | *** |
| KAL - HOG | -0.18763 | 0.11426 | -1.642 | 0.70568 | NS |
| SUL - HOG | -2.22575 | 0.16943 | -13.137 | <0.001 | *** |
| TOM - HOG | 0.12145 | 0.10981 | 1.106 | 0.95096 | NS |
| WAN - HOG | -0.14008 | 0.11536 | -1.214 | 0.92079 | NS |
| KAL - KAB | 1.43768 | 0.11481 | 12.522 | <0.001 | *** |
| SUL - KAB | -0.60044 | 0.1698 | -3.536 | 0.00866 | ** |
| TOM - KAB | 1.74676 | 0.11038 | 15.825 | <0.001 | *** |
| WAN - KAB | 1.48523 | 0.11591 | 12.814 | <0.001 | *** |
| SUL - KAL | -2.03812 | 0.16129 | -12.636 | <0.001 | *** |
| TOM - KAL | 0.30908 | 0.09678 | 3.194 | 0.0274 | * |
| WAN - KAL | 0.04756 | 0.10303 | 0.462 | 0.99978 | NS |
| TOM - SUL | 2.3472 | 0.15817 | 14.84 | <0.001 | *** |
| WAN - SUL | 2.08567 | 0.16207 | 12.869 | <0.001 | *** |
| WAN - TOM | -0.26153 | 0.09808 | -2.667 | 0.1211 | NS |

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