**Supplementary Material**

Table S1. Details of the 190 feather mites collected from six seabird species breeding in Cape Verde Archipelago included in the genetic analyses of this study (50 *Zachvatkinia*, 37 *Microspalax*, 66 *Brephosceles*, 19 *Laminalloptes*, 13 *Plicatalloptes* and 5 *Onychalloptes*). Specimen codes, host species, sampling locations and the genes amplified per individual with their corresponding GenBank Accession numbers are indicated. Haplotypes for concatenated mitochondrial data corresponding to those in Figure 3 are indicated. Intraspecific lineages are defined based on general mixed Yule-coalescent method (GMYC).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mite ID** | **Mite species** | **Mite sex** | **Host species** | **Host ID (ring)** | **Locality** | **Sampling year** | **Loci** | **Loci** | **Haplotype** | **Species**  **delimitation**  **(TCS network analysis)** | **Species**  **delimitation**  **(GMYC)** |
|  |  |  |  |  |  |  | **12S** | **16S** |  |  |  |
| Z143 | *Z. ovata* | F | *Calonectris edwardsii* | 7500527 | Raso (Rs) | 2009 | MH077594 | MH077775 | H2 | *Z. ovata* | *Z. ovata* |
| Z164 | *Z. ovata* | M | *Calonectris edwardsii* | 7500260 | Raso (Rs) | 2009 | MH077599 | MH077780 | H2 | *Z. ovata* | *Z. ovata* |
| Z215 | *Z. ovata* | M | *Calonectris edwardsii* | 7500178 | Raso (Rs) | 2008 | MH077613 | MH077794 | H21 | *Z. ovata* | *Z. ovata* |
| Z216 | *Z. ovata* | F | *Calonectris edwardsii* | 7500289 | Raso (Rs) | 2004 | MH077614 | MH077795 | H22 | *Z. ovata* | *Z. ovata* |
| Z243 | *Z. ovata* | M | *Calonectris edwardsii* | - | Raso (Rs) | 2006 | MH077638 | MH077819 | H2 | *Z. ovata* | *Z. ovata* |
| Z136 | *Z. ovata* | F | *Calonectris edwardsii* | 7500109 | Curral Velho (CV) | 2007 | MH077591 | MH077772 | H2 | *Z. ovata* | *Z. ovata* |
| Z139 | *Z. ovata* | F | *Calonectris edwardsii* | 7500121 | Curral Velho (CV) | 2007 | MH077592 | MH077773 | H3 | *Z. ovata* | *Z. ovata* |
| Z142 | *Z. ovata* | F | *Calonectris edwardsii* | 7500654 | Curral Velho (CV) | 2009 | MH077593 | MH077774 | H4 | *Z. ovata* | *Z. ovata* |
| Z217 | *Z. ovata* | M | *Calonectris edwardsii* | 7500128 | Curral Velho (CV) | 2007 | MH077615 | MH077796 | H4 | *Z. ovata* | *Z. ovata* |
| Z69 | *Z. sp.1* | F | *Puffinus boydi* | 5500004 | Raso (Rs) | 2007 | MH077590 | MH077771 | H1 | *Z. sp1* | *Z. sp1* |
| Z146 | *Z. sp.1* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077595 | MH077776 | H5 | *Z. sp1* | *Z. sp1* |
| Z147 | *Z. sp.1* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077596 | MH077777 | H6 | *Z. sp1* | *Z. sp1* |
| Z150 | *Z. sp.1* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077597 | MH077778 | H7 | *Z. sp1* | *Z. sp1* |
| Z244 | *Z. sp.1* | F | *Puffinus boydi* | 5500026 | Raso (Rs) | 2007 | MH077639 | MH077820 | H31 | *Z. sp1* | *Z. sp1* |
| Z168 | *Z. sp.1* | F | *Puffinus boydi* | 5500369 | Ilheu Cima (IC) | 2012 | MH077600 | MH077781 | H9 | *Z. sp1* | *Z. sp1* |
| Z218 | *Z. sp.1* | M | *Puffinus boydi* | 5500370 | Ilheu Cima (IC) | 2012 | MH077616 | MH077797 | H9 | *Z. sp1* | *Z. sp1* |
| Z219 | *Z. sp.1* | F | *Puffinus boydi* | 5500371 | Ilheu Cima (IC) | 2012 | MH077617 | MH077798 | H9 | *Z. sp1* | *Z. sp1* |
| Z220 | *Z. sp.1* | M | *Puffinus boydi* | 5500491 | Ilheu Cima (IC) | 2012 | MH077618 | MH077799 | H23 | *Z. sp1* | *Z. sp1* |
| Z221 | *Z. sp.1* | F | *Puffinus boydi* | 5500492 | Ilheu Cima (IC) | 2012 | MH077619 | MH077800 | H9 | *Z. sp1* | *Z. sp1* |
| Z169 | *Z. sp.2* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077601 | MH077782 | H10 | *Z. sp2* | *Z. sp2* |
| Z222 | *Z. sp.2* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077620 | MH077801 | H10 | *Z. sp2* | *Z. sp2* |
| Z223 | *Z. sp.2* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077621 | MH077802 | H24 | *Z. sp2* | *Z. sp2* |
| Z224 | *Z. sp.2* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077622 | MH077803 | H10 | *Z. sp2* | *Z. sp2* |
| Z225 | *Z. sp.2* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077623 | MH077804 | H25 | *Z. sp2* | *Z. sp2* |
| Z173 | *Z. sp.2* | M | *Bulweria bulwerii* | 4200438 | Ilheu Cima (IC) | 2012 | MH077603 | MH077784 | H12 | *Z. sp2* | *Z. sp2* |
| Z226 | *Z. sp.2* | F | *Bulweria bulwerii* | 4200331 | Ilheu Cima (IC) | 2010 | MH077624 | MH077805 | H10 | *Z. sp2* | *Z. sp2* |
| Z227 | *Z. sp.2* | F | *Bulweria bulwerii* | 4200348 | Ilheu Cima (IC) | 2010 | MH077625 | MH077806 | H10 | *Z. sp2* | *Z. sp2* |
| Z171 | *Z. sp.2* | M | *Bulweria bulwerii* | 4200064 | Ilheu Grande (IG) | 2009 | MH077602 | MH077783 | H11 | *Z. sp2* | *Z. sp2* |
| Z228 | *Z. sp.2* | F | *Bulweria bulwerii* | 4200048 | Ilheu Grande (IG) | 2009 | MH077626 | MH077807 | H10 | *Z. sp2* | *Z. sp2* |
| Z229 | *Z. sp.2* | M | *Bulweria bulwerii* | 4200052 | Ilheu Grande (IG) | 2009 | MH077627 | MH077808 | H10 | *Z. sp2* | *Z. sp2* |
| Z230 | *Z. sp.2* | F | *Bulweria bulwerii* | 4200057 | Ilheu Grande (IG) | 2009 | MH077628 | MH077809 | H26 | *Z. sp2* | *Z. sp2* |
| Z231 | *Z. sp.2* | F | *Bulweria bulwerii* | 4200061 | Ilheu Grande (IG) | 2012 | MH077629 | MH077810 | H10 | *Z. sp2* | *Z. sp2* |
| Z177 | *Z. oceanodromae* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077606 | MH077787 | H15 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z178 | *Z. oceanodromae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077607 | MH077788 | H16 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z179 | *Z. oceanodromae* | M | *Hydrobates castro* | 2800392 | Raso (Rs) | 2009 | MH077608 | MH077789 | H17 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z234 | *Z. oceanodromae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077632 | MH077813 | H29 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z235 | *Z. oceanodromae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077633 | MH077814 | H30 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z237 | *Z. oceanodromae* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077634 | MH077815 | H29 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z238 | *Z. oceanodromae* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077635 | MH077816 | H29 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z239 | *Z. oceanodromae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077636 | MH077817 | H18 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z242 | *Z. oceanodromae* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077637 | MH077818 | H20 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z183 | *Z. oceanodromae* | M | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077611 | MH077792 | H15 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z184 | *Z. oceanodromae* | F | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077612 | MH077793 | H20 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z181 | *Z. oceanodromae* | M | *Hydrobates castro* | 2800301 | Ilheu Grande (IG) | 2009 | MH077609 | MH077790 | H18 | *Z. oceanodromae A* | *Z. oceanodromae A* |
| Z182 | *Z. oceanodromae* | M | *Hydrobates castro* | 2800458 | Ilheu Cima (IC) | 2011 | MH077610 | MH077791 | H19 | *Z. oceanodromae B* | *Z. oceanodromae B* |
| Z153 | *Z. sp.3* | F | *Pterodroma feae* | 5500062 | Fogo (Fg) | 2007 | MH077598 | MH077779 | H8 | *Z. sp3* | *Z. sp3* |
| Z175 | *Z. sp.3* | M | *Pterodroma feae* | 5500066 | Fogo (Fg) | 2007 | MH077604 | MH077785 | H13 | *Z. sp3* | *Z. sp3* |
| Z176 | *Z. sp.3* | F | *Pterodroma feae* | 5500074 | Fogo (Fg) | 2007 | MH077605 | MH077786 | H14 | *Z. sp3* | *Z. sp3* |
| Z232 | *Z. sp.3* | M | *Pterodroma feae* | 5500076 | Fogo (Fg) | 2007 | MH077630 | MH077811 | H27 | *Z. sp3* | *Z. sp3* |
| Z233 | *Z. sp.3* | F | *Pterodroma feae* | 5500345 | Fogo (Fg) | 2012 | MH077631 | MH077812 | H28 | *Z. sp3* | *Z. sp3* |
| M42 | *M. brevipes* | F | *Calonectris edwardsii* | 7500004 | Raso (Rs) | 2007 | MH077640 | MH077821 | H1 | *M. brevipes* | *M. brevipes A* |
| M43 | *M. brevipes* | F | *Calonectris edwardsii* | 7500240 | Raso (Rs) | 2008 | MH077641 | MH077822 | H2 | *M. brevipes* | *M. brevipes A* |
| M44 | *M. brevipes* | F | *Calonectris edwardsii* | 7500241 | Raso (Rs) | 2008 | MH077642 | MH077823 | H3 | *M. brevipes* | *M. brevipes A* |
| M45 | *M. brevipes* | F | *Calonectris edwardsii* | 7500242 | Raso (Rs) | 2008 | MH077643 | MH077824 | H1 | *M. brevipes* | *M. brevipes A* |
| M97 | *M. brevipes* | F | *Calonectris edwardsii* | 7500533 | Raso (Rs) | 2009 | MH077653 | MH077834 | H11 | *M. brevipes* | *M. brevipes A* |
| M46 | *M. brevipes* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077644 | MH077825 | H3 | *M. brevipes* | *M. brevipes A* |
| M47 | *M. brevipes* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077645 | MH077826 | H4 | *M. brevipes* | *M. brevipes A* |
| M89 | *M. brevipes* | F | *Calonectris edwardsii* | 7500110 | Curral Velho (CV) | 2007 | MH077650 | MH077831 | H9 | *M. brevipes* | *M. brevipes A* |
| M90 | *M. brevipes* | F | *Calonectris edwardsii* | 7500121 | Curral Velho (CV) | 2007 | MH077651 | MH077832 | H3 | *M. brevipes* | *M. brevipes A* |
| M91 | *M. brevipes* | F | *Calonectris edwardsii* | 7500128 | Curral Velho (CV) | 2007 | MH077652 | MH077833 | H10 | *M. brevipes* | *M. brevipes A* |
| M53 | *M. brevipes* | F | *Puffinus boydi* | 5500011 | Raso (Rs) | 2007 | MH077646 | MH077827 | H5 | *M. brevipes* | *M. brevipes B* |
| M120 | *M. brevipes* | M | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077654 | MH077835 | H12 | *M. brevipes* | *M. brevipes B* |
| M173 | *M. brevipes* | M | *Puffinus boydi* | 5500023 | Raso (Rs) | 2007 | MH077663 | MH077844 | H17 | *M. brevipes* | *M. brevipes B* |
| M174 | *M. brevipes* | F | *Puffinus boydi* | 5500024 | Raso (Rs) | 2007 | MH077664 | MH077845 | H17 | *M. brevipes* | *M. brevipes B* |
| M175 | *M. brevipes* | M | *Puffinus boydi* | 5500025 | Raso (Rs) | 2007 | MH077665 | MH077846 | H17 | *M. brevipes* | *M. brevipes B* |
| M121 | *M. brevipes* | M | *Puffinus boydi* | 5500369 | Ilheu Cima (IC) | 2012 | MH077655 | MH077836 | H12 | *M. brevipes* | *M. brevipes B* |
| M176 | *M. brevipes* | M | *Puffinus boydi* | 5500365 | Ilheu Cima (IC) | 2012 | MH077666 | MH077847 | H17 | *M. brevipes* | *M. brevipes B* |
| M177 | *M. brevipes* | F | *Puffinus boydi* | 5500366 | Ilheu Cima (IC) | 2012 | MH077667 | MH077848 | H18 | *M. brevipes* | *M. brevipes B* |
| M178 | *M. brevipes* | F | *Puffinus boydi* | 5500492 | Ilheu Cima (IC) | 2012 | MH077668 | MH077849 | H17 | *M. brevipes* | *M. brevipes B* |
| M179 | *M. brevipes* | F | *Puffinus boydi* | 5500491 | Ilheu Cima (IC) | 2012 | MH077669 | MH077850 | H19 | *M. brevipes* | *M. brevipes B* |
| M55 | *M. bulweriae* | F | *Bulweria bulwerii* | 4200032 | Raso (Rs) | 2008 | MH077648 | MH077829 | H7 | *M. bulweriae* | *M. bulweriae* |
| M123 | *M. bulweriae* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077656 | MH077837 | H13 | *M. bulweriae* | *M. bulweriae* |
| M181 | *M. bulweriae* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077671 | MH077852 | H13 | *M. bulweriae* | *M. bulweriae* |
| M182 | *M. bulweriae* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077672 | MH077853 | H13 | *M. bulweriae* | *M. bulweriae* |
| M183 | *M. bulweriae* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077673 | MH077854 | H13 | *M. bulweriae* | *M. bulweriae* |
| M128 | *M. bulweriae* | F | *Bulweria bulwerii* | 4200083 | Ilheu Cima (IC) | 2009 | MH077658 | MH077839 | H7 | *M. bulweriae* | *M. bulweriae* |
| M180 | *M. bulweriae* | F | *Bulweria bulwerii* | 4200098 | Ilheu Cima (IC) | 2009 | MH077670 | MH077851 | H20 | *M. bulweriae* | *M. bulweriae* |
| M125 | *M. bulweriae* | M | *Bulweria bulwerii* | 4200060 | Ilheu Grande (IG) | 2009 | MH077657 | MH077838 | H13 | *M. bulweriae* | *M. bulweriae* |
| M54 | *M. cymochoreae* | F | *Hydrobates castro* | 2800053 | Raso (Rs) | 2008 | MH077647 | MH077828 | H6 | *M. cymochoreae* | *M. cymochoreae* |
| M129 | *M. cymochoreae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077659 | MH077840 | H14 | *M. cymochoreae* | *M. cymochoreae* |
| M184 | *M. cymochoreae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077674 | MH077855 | H6 | *M. cymochoreae* | *M. cymochoreae* |
| M185 | *M. cymochoreae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077675 | MH077856 | H6 | *M. cymochoreae* | *M. cymochoreae* |
| M186 | *M. cymochoreae* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077676 | MH077857 | H6 | *M. cymochoreae* | *M. cymochoreae* |
| M132 | *M. cymochoreae* | M | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077660 | MH077841 | H15 | *M. cymochoreae* | *M. cymochoreae* |
| M133 | *M. cymochoreae* | F | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077661 | MH077842 | H16 | *M. cymochoreae* | *M. cymochoreae* |
| M134 | *M. cymochoreae* | M | *Hydrobates castro* | 2800462 | Ilheu Cima (IC) | 2011 | MH077662 | MH077843 | H6 | *M. cymochoreae* | *M. cymochoreae* |
| M56 | *M. pterodromae* | F | *Pterodroma feae* | 5500084 | Fogo (Fg) | 2008 | MH077649 | MH077830 | H8 | *M. pterodromae* | *M. pterodromae* |
| B47 | *B. puffini* | F | *Calonectris edwardsii* | 7500004 | Raso (Rs) | 2007 | MH077700 | MH077881 | H5 | *B. puffini* | *B. puffini* |
| B61 | *B. puffini* | F | *Calonectris edwardsii* | 7500527 | Raso (Rs) | 2009 | MH077708 | MH077889 | H8 | *B. puffini* | *B. puffini* |
| B62 | *B. puffini* | F | *Calonectris edwardsii* | 7500530 | Raso (Rs) | 2009 | MH077709 | MH077890 | H8 | *B. puffini* | *B. puffini* |
| B63 | *B. puffini* | F | *Calonectris edwardsii* | 7500260 | Raso (Rs) | 2009 | MH077710 | MH077891 | H3 | *B. puffini* | *B. puffini* |
| B156 | *B. puffini* | M | *Calonectris edwardsii* | 7500178 | Raso (Rs) | 2008 | MH077725 | MH077906 | H7 | *B. puffini* | *B. puffini* |
| B50 | *B. puffini* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077701 | MH077882 | H6 | *B. puffini* | *B. puffini* |
| B53 | *B. puffini* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077702 | MH077883 | H6 | *B. puffini* | *B. puffini* |
| B58 | *B. puffini* | F | *Calonectris edwardsii* | 7500110 | Curral Velho (CV) | 2007 | MH077705 | MH077886 | H3 | *B. puffini* | *B. puffini* |
| B59 | *B. puffini* | F | *Calonectris edwardsii* | 7500128 | Curral Velho (CV) | 2007 | MH077706 | MH077887 | H6 | *B. puffini* | *B. puffini* |
| B60 | *B. puffini* | F | *Calonectris edwardsii* | 7500132 | Curral Velho (CV) | 2007 | MH077707 | MH077888 | H7 | *B. puffini* | *B. puffini* |
| B35 | *B. puffini* | F | *Puffinus boydi* | 5500005 | Raso (Rs) | 2007 | MH077698 | MH077879 | H3 | *B. puffini* | *B. puffini* |
| B36 | *B. puffini* | F | *Puffinus boydi* | 5500101 | Raso (Rs) | 2008 | MH077699 | MH077880 | H4 | *B. puffini* | *B. puffini* |
| B56 | *B. puffini* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077703 | MH077884 | H3 | *B. puffini* | *B. puffini* |
| B57 | *B. puffini* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077704 | MH077885 | H3 | *B. puffini* | *B. puffini* |
| B157 | *B. puffini* | M | *Puffinus boydi* | 5500025 | Raso (Rs) | 2007 | MH077726 | MH077907 | H15 | *B. puffini* | *B. puffini* |
| B100 | *B. puffini* | M | *Puffinus boydi* | 5500369 | Ilheu Cima (IC) | 2012 | MH077711 | MH077892 | H3 | *B. puffini* | *B. puffini* |
| B158 | *B. puffini* | F | *Puffinus boydi* | 5500489 | Ilheu Cima (IC) | 2012 | MH077727 | MH077908 | H3 | *B. puffini* | *B. puffini* |
| B159 | *B. puffini* | M | *Puffinus boydi* | 5500370 | Ilheu Cima (IC) | 2012 | MH077728 | MH077909 | H3 | *B. puffini* | *B. puffini* |
| B160 | *B. puffini* | F | *Puffinus boydi* | 5500371 | Ilheu Cima (IC) | 2012 | MH077729 | MH077910 | H6 | *B. puffini* | *B. puffini* |
| B161 | *B. puffini* | F | *Puffinus boydi* | 5500491 | Ilheu Cima (IC) | 2012 | MH077730 | MH077911 | H3 | *B. puffini* | *B. puffini* |
| B31 | *B. sp.1* | F | *Bulweria bulwerii* | 4200032 | Raso (Rs) | 2008 | MH077697 | MH077878 | H2 | *B. sp1* | *B. sp1* |
| B102 | *B. sp.1* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077712 | MH077893 | H9 | *B. sp1* | *B. sp1* |
| B162 | *B. sp.1* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077731 | MH077912 | H9 | *B. sp1* | *B. sp1* |
| B163 | *B. sp.1* | F | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077732 | MH077913 | H16 | *B. sp1* | *B. sp1* |
| B164 | *B. sp.1* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077733 | MH077914 | H9 | *B. sp1* | *B. sp1* |
| B107 | *B. sp.1* | F | *Bulweria bulwerii* | 4200438 | Ilheu Cima (IC) | 2012 | MH077714 | MH077895 | H9 | *B. sp1* | *B. sp1* |
| B165 | *B. sp.1* | F | *Bulweria bulwerii* | 4200080 | Ilheu Cima (IC) | 2009 | MH077734 | MH077915 | H17 | *B. sp1* | *B. sp1* |
| B166 | *B. sp.1* | M | *Bulweria bulwerii* | 4200330 | Ilheu Cima (IC) | 2010 | MH077735 | MH077916 | H18 | *B. sp1* | *B. sp1* |
| B167 | *B. sp.1* | F | *Bulweria bulwerii* | 4200475 | Ilheu Cima (IC) | 2012 | MH077736 | MH077917 | H9 | *B. sp1* | *B. sp1* |
| B168 | *B. sp.1* | M | *Bulweria bulwerii* | 4200351 | Ilheu Cima (IC) | 2010 | MH077737 | MH077918 | H9 | *B. sp1* | *B. sp1* |
| B104 | *B. sp.1* | M | *Bulweria bulwerii* | 4200061 | Ilheu Grande (IG) | 2012 | MH077713 | MH077894 | H9 | *B. sp1* | *B. sp1* |
| B169 | *B. sp.1* | F | *Bulweria bulwerii* | 4200049 | Ilheu Grande (IG) | 2009 | MH077738 | MH077919 | H17 | *B. sp1* | *B. sp1* |
| B170 | *B. sp.1* | M | *Bulweria bulwerii* | 4200052 | Ilheu Grande (IG) | 2009 | MH077739 | MH077920 | H19 | *B. sp1* | *B. sp1* |
| B171 | *B. sp.1* | F | *Bulweria bulwerii* | 4200060 | Ilheu Grande (IG) | 2009 | MH077740 | MH077921 | H9 | *B. sp1* | *B. sp1* |
| B172 | *B. sp.1* | F | *Bulweria bulwerii* | 4200064 | Ilheu Grande (IG) | 2009 | MH077741 | MH077922 | H9 | *B. sp1* | *B. sp1* |
| B173 | *B. sp.2* | M | *Bulweria bulwerii* | - | Raso (Rs) | 2006 | MH077742 | MH077923 | H20 | *B. sp2* | *B. sp2* |
| B116 | *B. sp.2* | M | *Bulweria bulwerii* | 4200438 | Ilheu Cima (IC) | 2012 | MH077720 | MH077901 | H12 | *B. sp2* | *B. sp2* |
| B174 | *B. sp.3* | M | *Bulweria bulwerii* | 4200437 | Ilheu Cima (IC) | 2012 | MH077743 | MH077924 | H21 | *B. sp3* | *B. sp3* |
| B175 | *B. sp.3* | M | *Bulweria bulwerii* | 4200461 | Ilheu Cima (IC) | 2012 | MH077744 | MH077925 | H22 | *B. sp3* | *B. sp3* |
| B 193 | *B. sp.4* | M | *Calonectris edwardsii* | 7500178 | Raso (Rs) | 2008 | MH077760 | MH077941 | H28 | *B. sp4* | *B. sp4* |
| B194 | *B. sp.5* | M | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077761 | MH077942 | H29 | *B. sp5* | *B. sp5* |
| B30 | *B. decapus* | F | *Hydrobates castro* | 2800053 | Raso (Rs) | 2008 | MH077696 | MH077877 | H1 | *B. decapus* | *B. decapus* |
| B110 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077716 | MH077897 | H1 | *B. decapus* | *B. decapus* |
| B111 | *B. decapus* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077717 | MH077898 | H11 | *B. decapus* | *B. decapus* |
| B112 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077718 | MH077899 | H1 | *B. decapus* | *B. decapus* |
| B177 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077745 | MH077926 | H23 | *B. decapus* | *B. decapus* |
| B178 | *B. decapus* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077746 | MH077927 | H1 | *B. decapus* | *B. decapus* |
| B179 | *B. decapus* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077747 | MH077928 | H1 | *B. decapus* | *B. decapus* |
| B180 | *B. decapus* | F | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077748 | MH077929 | H1 | *B. decapus* | *B. decapus* |
| B181 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077749 | MH077930 | H24 | *B. decapus* | *B. decapus* |
| B185 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077753 | MH077934 | H1 | *B. decapus* | *B. decapus* |
| B186 | *B. decapus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077754 | MH077935 | H25 | *B. decapus* | *B. decapus* |
| B114 | *B. decapus* | M | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077719 | MH077900 | H1 | *B. decapus* | *B. decapus* |
| B182 | *B. decapus* | F | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077750 | MH077931 | H1 | *B. decapus* | *B. decapus* |
| B183 | *B. decapus* | M | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077751 | MH077932 | H23 | *B. decapus* | *B. decapus* |
| B184 | *B. decapus* | F | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077752 | MH077933 | H1 | *B. decapus* | *B. decapus* |
| B122 | *B. lanceolatus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077724 | MH077905 | H13 | *B. lanceolatus* | *B. lanceolatus* |
| B187 | *B. lanceolatus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077755 | MH077936 | H13 | *B. lanceolatus* | *B. lanceolatus* |
| B188 | *B. lanceolatus* | M | *Hydrobates castro* | - | Raso (Rs) | 2006 | MH077756 | MH077937 | H26 | *B. lanceolatus* | *B. lanceolatus* |
| B119 | *B. lanceolatus* | M | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077721 | MH077902 | H13 | *B. lanceolatus* | *B. lanceolatus* |
| B120 | *B. lanceolatus* | F | *Hydrobates castro* | - | Curral Velho (CV) | 2006 | MH077722 | MH077903 | H13 | *B. lanceolatus* | *B. lanceolatus* |
| B121 | *B. lanceolatus* | F | *Hydrobates castro* | 2800447 | Ilheu Cima (IC) | 2011 | MH077723 | MH077904 | H14 | *B. lanceolatus* | *B. lanceolatus* |
| B109 | *B. disjunctus* | F | *Pterodroma feae* | 5500404 | Fogo (Fg) | 2010 | MH077715 | MH077896 | H10 | *B. disjunctus* | *B. disjunctus* |
| B189 | *B. disjunctus* | F | *Pterodroma feae* | 5500412 | Fogo (Fg) | 2010 | MH077757 | MH077938 | H27 | *B. disjunctus* | *B. disjunctus* |
| B190 | *B. disjunctus* | M | *Pterodroma feae* | 5500405 | Fogo (Fg) | 2010 | MH077758 | MH077939 | H27 | *B. disjunctus* | *B. disjunctus* |
| B192 | *B. disjunctus* | F | *Pterodroma feae* | 5500331 | Fogo (Fg) | 2012 | MH077759 | MH077940 | H27 | *B. disjunctus* | *B. disjunctus* |
| P12 | *P. sp.1* | F | *Calonectris edwardsii* | 7500240 | Raso (Rs) | 2008 | MH077677 | MH077858 | H1 | *P. sp1* | *P. sp1* |
| P27 | *P. sp.1* | F | *Calonectris edwardsii* | 7500260 | Raso (Rs) | 2009 | MH077682 | MH077863 | H6 | *P. sp1* | *P. sp1* |
| P48 | *P. sp.1* | M | *Calonectris edwardsii* | 7500533 | Raso (Rs) | 2009 | MH077686 | MH077867 | H9 | *P. sp1* | *P. sp1* |
| P57 | *P. sp.1* | M | *Calonectris edwardsii* | 7500178 | Raso (Rs) | 2008 | MH077689 | MH077870 | H2 | *P. sp1* | *P. sp1* |
| P58 | *P. sp.1* | F | *Calonectris edwardsii* | 7500289 | Raso (Rs) | 2004 | MH077690 | MH077871 | H2 | *P. sp1* | *P. sp1* |
| P13 | *P. sp.1* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077678 | MH077859 | H2 | *P. sp1* | *P. sp1* |
| P14 | *P. sp.1* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077679 | MH077860 | H3 | *P. sp1* | *P. sp1* |
| P15 | *P. sp.1* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077680 | MH077861 | H4 | *P. sp1* | *P. sp1* |
| P16 | *P. sp.1* | F | *Calonectris edwardsii* | - | Curral Velho (CV) | 2006 | MH077681 | MH077862 | H5 | *P. sp1* | *P. sp1* |
| P28 | *P. sp.1* | F | *Calonectris edwardsii* | 7500110 | Curral Velho (CV) | 2007 | MH077683 | MH077864 | H7 | *P. sp1* | *P. sp1* |
| P29 | *P. sp.1* | F | *Calonectris edwardsii* | 7500121 | Curral Velho (CV) | 2007 | MH077684 | MH077865 | H2 | *P. sp1* | *P. sp1* |
| P30 | *P. sp.1* | F | *Calonectris edwardsii* | 7500132 | Curral Velho (CV) | 2007 | MH077685 | MH077866 | H8 | *P. sp1* | *P. sp1* |
| P54 | *P. sp.1* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077688 | MH077869 | H10 | *P. sp1* | *P. sp1* |
| P60 | *P. sp.1* | M | *Puffinus boydi* | 5500025 | Raso (Rs) | 2007 | MH077691 | MH077872 | H2 | *P. sp1* | *P. sp1* |
| P61 | *P. sp.1* | M | *Puffinus boydi* | 5500026 | Raso (Rs) | 2007 | MH077692 | MH077873 | H11 | *P. sp1* | *P. sp1* |
| P62 | *P. sp.1* | F | *Puffinus boydi* | - | Raso (Rs) | 2006 | MH077693 | MH077874 | H2 | *P. sp1* | *P. sp1* |
| P52 | *P. sp.1* | F | *Puffinus boydi* | 5500369 | Ilheu Cima (IC) | 2012 | MH077687 | MH077868 | H2 | *P. sp1* | *P. sp1* |
| P63 | *P. sp.1* | M | *Puffinus boydi* | 5500370 | Ilheu Cima (IC) | 2012 | MH077694 | MH077875 | H12 | *P. sp1* | *P. sp1* |
| P64 | *P. sp.1* | F | *Puffinus boydi* | 5500492 | Ilheu Cima (IC) | 2012 | MH077695 | MH077876 | H13 | *P. sp1* | *P. sp1* |
| L1 | *L. phaetontis* | F | *Phaethon aethereus* | 7500201 | Raso (Rs) | 2008 | MH077762 | MH077943 | H3 | *L. phaetontis* | *L. phaetontis* |
| L8 | *L. phaetontis* | F | *Phaethon aethereus* | 7500203 | Raso (Rs) | 2008 | MH077763 | MH077944 | H4 | *L. phaetontis* | *L. phaetontis* |
| L10 | *L. phaetontis* | F | *Phaethon aethereus* | 7500194 | Raso (Rs) | 2008 | MH077764 | MH077945 | H4 | *L. phaetontis* | *L. phaetontis* |
| L12 | *L. phaetontis* | M | *Phaethon aethereus* | 7500202 | Raso (Rs) | 2008 | MH077765 | MH077946 | H4 | *L. phaetontis* | *L. phaetontis* |
| L19 | *L. simplex* | F | *Phaethon aethereus* | 7500201 | Raso (Rs) | 2008 | KX372355 | KX372364 | H1 | *L. simplex A* | *L. simplex A* |
| L21 | *L. simplex* | F | *Phaethon aethereus* | 7500197 | Raso (Rs) | 2008 | KX372356 | KX372365 | H1 | *L. simplex A* | *L. simplex A* |
| L24 | *L. simplex* | F | *Phaethon aethereus* | 7500210 | Raso (Rs) | 2008 | KX372357 | KX372366 | H2 | *L. simplex A* | *L. simplex A* |
| L15 | *L. simplex* | M | *Phaethon aethereus* | - | Raso (Rs) | 2006 | KX372358 | KX372367 | H6 | *L. simplex A* | *L. simplex A* |
| L17 | *L. simplex* | M | *Phaethon aethereus* | 7500197 | Raso (Rs) | 2008 | KX372359 | KX372368 | H1 | *L. simplex A* | *L. simplex A* |
| L18 | *L. simplex* | M | *Phaethon aethereus* | 7500210 | Raso (Rs) | 2008 | KX372360 | KX372369 | H1 | *L. simplex A* | *L. simplex A* |
| L28 | *L. simplex* | M | *Phaethon aethereus* | 7500202 | Raso (Rs) | 2008 | KX372361 | KX372370 | H1 | *L. simplex A* | *L. simplex A* |
| L16 | *L. simplex* | M | *Phaethon aethereus* | 7500201 | Raso (Rs) | 2008 | KX372362 | KX372371 | H7 | *L. simplex B* | *L. simplex B* |
| L13 | *L. minor* | F | *Phaethon aethereus* | 7500202 | Raso (Rs) | 2008 | KX372354 | KX372363 | H5 | *L. minor* | *L. minor* |
| O1 | *O. microphaeton* | F | *Phaethon aethereus* | 7500201 | Raso (Rs) | 2008 | MH077766 | MH077947 | H1 | *O. microphaeton* | *O. microphaeton* |
| O2 | *O. microphaeton* | F | *Phaethon aethereus* | 7500202 | Raso (Rs) | 2008 | MH077767 | MH077948 | H1 | *O. microphaeton* | *O. microphaeton* |
| O3 | *O. microphaeton* | F | *Phaethon aethereus* | 7500197 | Raso (Rs) | 2008 | MH077768 | MH077949 | H1 | *O. microphaeton* | *O. microphaeton* |
| O4 | *O. microphaeton* | F | *Phaethon aethereus* | 7500203 | Raso (Rs) | 2008 | MH077769 | MH077950 | H1 | *O. microphaeton* | *O. microphaeton* |
| O5 | *O. microphaeton* | F | *Phaethon aethereus* | 7500194 | Raso (Rs) | 2008 | MH077770 | MH077951 | H2 | *O. microphaeton* | *O. microphaeton* |

Table S2. Basic genetic statistics of 23 feather mite morphospecies (or 25 genetic lineages) from Cape Verde Islands analysed in this study based on two mitochondrial genes (12S and 16S). Number of individuals sequenced (N), number of polymorphic sites (Np), number of haplotypes (Nh), haplotype diversity (h), nucleotide diversity (π), average number of nucleotide differences (k) and average genetic divergence (d) are shown. Island abbreviations: Rs – Raso, CV – Curral Velho, IC – Ilhéu Cima, IG – Ilhéu Grande, Fg – Fogo.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mite species | Host species | Locality | N | Np | | Nh | | h | | Π | | k | | d | |
|  |  |  |  | 12S | 16S | 12S | 16S | 12S | 16S | 12S | 16S | 12S | 16S | 12S | 16S |
| *Z. ovata* | *C. edwardsii* | Rs, CV | 9 | 4/316 | 1/132 | 5 | 2 | 0.806 | 0.222 | 0.0033 | 0.0017 | 1.056 | 0.222 | 0.003 (SE=0.002) | 0.002 (SE=0.002) |
| *Z. sp.1* | *P. boydi* | Rs, IC | 10 | 0/319 | 1/133 | 1 | 2 | 0 | 0.200 | 0 | 0.0015 | 0 | 0.200 | 0 | 0.002 (SE=0.002) |
| *Z. sp.2* | *B. bulwerii* | Rs, IC, IG | 13 | 6/320 | 2/134 | 5 | 3 | 0.538 | 0.295 | 0.0029 | 0.0048 | 0.923 | 0.308 | 0.003 (SE=0.001) | 0.002 (SE=0.002) |
| *Z. oceanodromae* (morphospecies) | *H. castro* | Rs, CV, IC, IG | 13 | 23/325 | 9/133 | 4 | 4 | 0.679 | 0.603 | 0.0123 | 0.0143 | 3.923 | 1.885 | 0.010 (SE=0.002) | 0.015 (SE=0.006) |
| *Z. oceanodromae* A (genetic lineage) | *H. castro* | Rs, CV, IG | 12 | 2/325 | 2/133 | 3 | 3 | 0.621 | 0.530 | 0.0022 | 0.0049 | 0.712 | 0.652 | 0 | 0.005 (SE=0.004) |
| *Z. oceanodromae* B (genetic lineage) | *H. castro* | IC | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *Z. sp.3* | *P. feae* | Fg | 5 | 3/324 | 0/136 | 3 | 1 | 0.700 | 0 | 0.0037 | 0 | 1.200 | 0 | 0.004 (SE=0.002) | 0 |
| *M. brevipes* | *C. edwardsii, P. boydi* | Rs, CV, IC | 20 | 7/326 | 3/148 | 6 | 4 | 0.737 | 0.621 | 0.0051 | 0.0049 | 1.642 | 0.726 | 0.005 (SE=0.002) | 0.005 (SE=0.004) |
| *M. bulweriae* | *B. bulwerii* | Rs, IC, IG | 8 | 0/322 | 1/153 | 1 | 2 | 0 | 0.250 | 0 | 0.0016 | 0 | 0.250 | 0 | 0.002 (SE=0.002) |
| *M. cymochoreae* | *H. castro* | Rs, CV, IC | 8 | 1/324 | 1/148 | 2 | 2 | 0.250 | 0.250 | 0.0008 | 0.0017 | 0.250 | 0.250 | 0.001 (SE=0.001) | 0.002 (SE=0.002) |
| *M. pterodromae* | *P. feae* | Fg | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *B. puffini* | *C. edwardsii, P. boydi* | Rs, CV, IC | 20 | 3/312 | 1/145 | 4 | 2 | 0.432 | 0.189 | 0.0018 | 0.0013 | 0.558 | 0.189 | 0.002 (SE=0.001) | 0 |
| *B. sp.1* | *B. bulwerii* | Rs, IC, IG | 15 | 1/315 | 1/151 | 2 | 2 | 0.248 | 0.133 | 0.0008 | 0.0009 | 0.248 | 0.133 | 0.001 (SE=0.001) | 0.001 (SE=0.001) |
| *B. sp.2* | *B. bulwerii* | Rs, IC | 2 | 1/311 | 0/148 | 2 | 1 | 1 | 0 | 0.003 | 0 | 1 | 0 | 0.003 (SE=0.003) | 0 |
| *B. sp.3* | *B. bulwerii* | IC | 2 | 0/310 | 1/140 | 1 | 2 | 0 | 1 | 0 | 0.007 | 0 | 1 | 0 | 0.007 (SE=0.007) |
| *B. sp.4* | *C. edwardsii* | Rs | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *B. sp.5* | *P. boydi* | Rs | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *B. decapus* | *H. castro* | Rs, CV | 15 | 1/310 | 2/141 | 2 | 3 | 0.248 | 0.362 | 0.0008 | 0.0027 | 0.248 | 0.381 | 0.001 (SE=0.001) | 0.003 (SE=0.002) |
| *B. lanceolatus* | *H. castro* | Rs, CV, IC | 6 | 0/310 | 2/141 | 1 | 3 | 0 | 0.600 | 0 | 0.0047 | 0 | 0.667 | 0 | 0.005 (SE=0.004) |
| *B. disjunctus* | *P. feae* | Fg | 4 | 0/311 | 1/145 | 1 | 2 | 0 | 0.500 | 0 | 0.0034 | 0 | 0.500 | 0 | 0.004 (SE=0.004) |
| *P. sp.1* | *C. edwardsii, P. boydi* | Rs, CV, IC | 19 | 10/322 | 5/139 | 11 | 6 | 0.830 | 0.538 | 0.0047 | 0.0045 | 1.509 | 0.620 | 0.005 (SE=0.002) | 0.005 (SE=0.002) |
| *L. phaetontis* | *P. aethereus* | Rs | 4 | 0/312 | 1/142 | 1 | 2 | 0 | 0.500 | 0 | 0.0035 | 0 | 0.500 | 0 | 0.004 (SE=0.003) |
| *L. simplex* (morphospecies) | *P. aethereus* | Rs | 8 | 33/308 | 19/147 | 2 | 4 | 0.250 | 0.643 | 0.0268 | 0.0347 | 8.250 | 4.929 | 0.028 (SE=0.005) | 0.044 (SE=0.010) |
| *L. simplex* A (genetic lineage) | *P. aethereus* | Rs | 7 | 0/308 | 2/143 | 1 | 3 | 0 | 0.524 | 0 | 0.0040 | 0 | 0.571 | 0 | 0.004 (SE=0.003) |
| *L. simplex* B (genetic lineage) | *P. aethereus* | Rs | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *L. minor* | *P. aethereus* | Rs | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| *O. microphaeton* | *P. aethereus* | Rs | 5 | 1/310 | 0/152 | 2 | 1 | 0.400 | 0 | 0.0013 | 0 | 0.400 | 0 | 0.001 (SE=0.001) | 0 |

Table S3. Mean genetic distances measured as Fst among feather mite species within four genera: *Zachvatkinia*, *Microspalax*, *Brephosceles* and *Laminalloptes* from Cape Verde Islands based on the 12S (A) and the 16S (B) genes. Two mite genera, *Plicatalloptes* and *Onychalloptes*, included only a single species and are therefore not shown.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(A – 12S gene)** | *Z. sp.1* | *Z. ova* | *Z. sp.3* | *Z. sp.2* | *M. bre* | *M. cym* | *M. bul* | *B. dec* | *B. sp.1* | *B. puf* | *B. dis* | *B. sp.2* | *B. lan* | *B. sp.3* | *B. sp.4* | *L. min* | *L. pha* |
| *Z. sp.1* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. ovata* | 0.075 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. sp.3* | 0.127 | 0.131 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. sp.2* | 0.148 | 0.154 | 0.149 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. oceanodromae* | 0.111 | 0.129 | 0.106 | 0.156 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. brevipes* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. cymochoreae* |  |  |  |  | 0.097 |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. bulweriae* |  |  |  |  | 0.092 | 0.119 |  |  |  |  |  |  |  |  |  |  |  |
| *M. pterodromae* |  |  |  |  | 0.105 | 0.138 | 0.120 |  |  |  |  |  |  |  |  |  |  |
| *B. decapus* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *B. sp.1* |  |  |  |  |  |  |  | 0.197 |  |  |  |  |  |  |  |  |  |
| *B. puffini* |  |  |  |  |  |  |  | 0.233 | 0.169 |  |  |  |  |  |  |  |  |
| *B. disjunctus* |  |  |  |  |  |  |  | 0.275 | 0.274 | 0.255 |  |  |  |  |  |  |  |
| *B. sp.2* |  |  |  |  |  |  |  | 0.254 | 0.235 | 0.230 | 0.089 |  |  |  |  |  |  |
| *B. lanceolatus* |  |  |  |  |  |  |  | 0.294 | 0.284 | 0.274 | 0.110 | 0.116 |  |  |  |  |  |
| *B. sp.3* |  |  |  |  |  |  |  | 0.288 | 0.270 | 0.274 | 0.125 | 0.155 | 0.173 |  |  |  |  |
| *B. sp.4* |  |  |  |  |  |  |  | 0.288 | 0.251 | 0.265 | 0.109 | 0.127 | 0.144 | 0.037 |  |  |  |
| *B. sp.5* |  |  |  |  |  |  |  | 0.307 | 0.270 | 0.285 | 0.133 | 0.155 | 0.152 | 0.051 | 0.037 |  |  |
| *L. minor* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *L. phaetontis* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.249 |  |
| *L. simplex* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.205 | 0.233 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(B – 16S gene)** | *Z. sp.1* | *Z. ova* | *Z. sp.3* | *Z. sp.2* | *M. bre* | *M. cym* | *M. bul* | *B. dec* | *B. sp.1* | *B. puf* | *B. dis* | *B. sp.2* | *B. lan* | *B. sp.3* | *B. sp.4* | *L. min* | *L. pha* |
| *Z. sp.1* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. ovata* | 0.066 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. sp.3* | 0.142 | 0.170 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. sp.2* | 0.165 | 0.152 | 0.191 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Z. oceanodromae* | 0.185 | 0.176 | 0.167 | 0.165 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. brevipes* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. cymochoreae* |  |  |  |  | 0.179 |  |  |  |  |  |  |  |  |  |  |  |  |
| *M. bulweriae* |  |  |  |  | 0.129 | 0.156 |  |  |  |  |  |  |  |  |  |  |  |
| *M. pterodromae* |  |  |  |  | 0.114 | 0.200 | 0.156 |  |  |  |  |  |  |  |  |  |  |
| *B. decapus* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *B. sp.1* |  |  |  |  |  |  |  | 0.210 |  |  |  |  |  |  |  |  |  |
| *B. puffini* |  |  |  |  |  |  |  | 0.219 | 0.218 |  |  |  |  |  |  |  |  |
| *B. disjunctus* |  |  |  |  |  |  |  | 0.282 | 0.172 | 0.250 |  |  |  |  |  |  |  |
| *B. sp.2* |  |  |  |  |  |  |  | 0.228 | 0.151 | 0.239 | 0.099 |  |  |  |  |  |  |
| *B. lanceolatus* |  |  |  |  |  |  |  | 0.201 | 0.118 | 0.234 | 0.166 | 0.136 |  |  |  |  |  |
| *B. sp.3* |  |  |  |  |  |  |  | 0.229 | 0.194 | 0.260 | 0.184 | 0.155 | 0.148 |  |  |  |  |
| *B. sp.4* |  |  |  |  |  |  |  | 0.208 | 0.190 | 0.239 | 0.191 | 0.141 | 0.143 | 0.019 |  |  |  |
| *B. sp.5* |  |  |  |  |  |  |  | 0.239 | 0.199 | 0.272 | 0.191 | 0.141 | 0.135 | 0.027 | 0.023 |  |  |
| *L. minor* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *L. phaetontis* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.322 |  |
| *L. simplex* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.219 | 0.317 |

Table S4. Analysis of molecular variance for mitochondrial haplotypes from twelve feather mite species partitioned by geography.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Species | Partition | d.f. | Sum of squares | % variation | ФST | P |
| *Zachvatkinia ovata* | Among-island populations | 1 | 0.961 | 12.26 | 0.122 | 0.122 |
|  | Within-island populations | 7 | 4.150 | 87.74 | - | - |
| *Zachvatkinia sp.1* | Among-island populations | 1 | 1.500 | 24.34 | 0.243 | 0.053 |
|  | Within-island populations | 8 | 4.600 | 75.66 | - | - |
| *Zachvatkinia sp.2* | Among-island populations | 2 | 1.251 | 0.47 | 0.005 | 0.597 |
|  | Within-island populations | 10 | 6.133 | 99.53 | - | - |
| *Zachvatkinia oceanodromae* A | Among-island populations | 2 | 1.333 | -23.17 | -0.231 | 0.883 |
| (genetic lineage) | Within-island populations | 9 | 11.000 | 123.17 | - | - |
| *Microspalax brevipes* | Among-island populations | 1 | 1.700 | 20.21 | 0.202 | 0.071 |
| (*C. edwardsii*) | Within-island populations | 8 | 6.000 | 79.79 | - | - |
| *Microspalax brevipes* | Among-island populations | 1 | 0.500 | -4.84 | -0.048 | 1 |
| (*P. boydi*) | Within-island populations | 8 | 5.200 | 104.84 | - | - |
| *Microspalax bulweriae* | Among-island populations | 2 | 1.450 | 45.70 | 0.457 | 0.218 |
|  | Within-island populations | 5 | 1.300 | 54.30 | - | - |
| *Microspalax cymochoreae* | Among-island populations | 2 | 0.825 | 6.42 | 0.064 | 0.473 |
|  | Within-island populations | 5 | 1.800 | 93.58 | - | - |
| *Brephosceles puffini* | Among-island populations | 2 | 1.750 | 6.64 | 0.066 | 0.227 |
|  | Within-island populations | 17 | 10.300 | 93.36 | - | - |
| *Brephosceles sp.1* | Among-island populations | 2 | 0.933 | -2.56 | -0.025 | 1 |
|  | Within-island populations | 12 | 6.400 | 102.56 | - | - |
| *Brephosceles decapus* | Among-island populations | 1 | 0.220 | -8.14 | -0.081 | 0.944 |
|  | Within-island populations | 13 | 5.114 | 108.14 | - | - |
| *Brephosceles lanceolatus* | Among-island populations | 2 | 1.000 | 40.54 | 0.405 | 0.325 |
|  | Within-island populations | 3 | 0.667 | 59.46 | - | - |
| *Plicatalloptes sp.1* | Among-island populations | 2 | 2.682 | 4.92 | 0.049 | 0.132 |
|  | Within-island populations | 16 | 16.476 | 95.08 | - | - |