

Supplementary Table 1. Louse sequences obtained from GenBank that were included in the phylogenetic analysis with louse sequences from South Texas. Host species and collection locality data are indicated, if known.

| Louse species | Host Species | Collection Locality | COI | 18S | EF-1 α |
|--------------------------------|-------------------------------|---------------------|----------|----------|---------------|
| Amblycera | | | | | |
| <i>Hohorstiella passerinae</i> | <i>Columbina passerina</i> | USA | AF545716 | — | — |
| <i>Menacanthus camelinus</i> | <i>Lanius collurio</i> | Costa Rica | KJ730544 | — | KJ730695 |
| <i>Menacanthus eurysternus</i> | <i>Tanagera dowii</i> | Costa Rica | KJ730661 | — | — |
| <i>Menacanthus eurysternus</i> | <i>Turdus grayi</i> | Costa Rica | KJ730647 | — | KJ730778 |
| <i>Menacanthus</i> sp. | <i>Attila spadiceus</i> | Costa Rica | AF545726 | — | AF320425 |
| <i>Myrsidea cruickshanki</i> | <i>Tanagera dowii</i> | Panama | GQ454449 | — | — |
| <i>Myrsidea fusca</i> | <i>Ramphocelus passerinii</i> | Panama | FJ171267 | — | — |
| <i>Myrsidea incerta</i> | <i>Catharus minimus</i> | USA (Illinois) | FJ171270 | — | — |
| <i>Myrsidea incerta</i> | <i>Catharus ustulatus</i> | USA (Illinois) | FJ171268 | — | FJ171295 |
| <i>Myrsidea nesomimi</i> | <i>Mimus parvulus</i> | Ecuador | JF734299 | — | — |
| <i>Myrsidea pricei</i> | <i>Catharus guttatus</i> | USA (Illinois) | FJ171277 | — | FJ171303 |
| <i>Myrsidea</i> sp. | <i>Hylocichla mustelina</i> | USA (Illinois) | FJ171284 | — | — |
| <i>Myrsidea</i> sp. | <i>Psilorhinus morio</i> | Mexico | FJ171281 | — | — |
| <i>Myrsidea</i> sp. | <i>Seiurus aurocapilla</i> | USA (Illinois) | FJ171289 | — | — |
| <i>Myrsidea</i> sp. | <i>Troglodytes aedon</i> | Panama | KF614514 | — | — |
| <i>Myrsidea simplex</i> | <i>Catharus fuscater</i> | Panama | FJ171276 | — | — |
| <i>Myrsidea textoris</i> | <i>Ploceus velatus</i> | South Africa | KF768814 | — | — |
| <i>Ricinus mugimaki</i> | <i>Cossypha dichroa</i> | South Africa | KF768816 | — | — |
| <i>Ricinus</i> sp. | <i>Cyanocompsa parellina</i> | — | AF385014 | AF385072 | AF385033 |
| Ischnocera | | | | | |
| <i>Anaticola crassicornis</i> | <i>Anas</i> sp. | — | KT587831 | GU569186 | KT588020 |
| <i>Anatoecus</i> sp. | <i>Anas platyrhynchos</i> | USA | AF385006 | — | — |

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| <i>Brueelia anamariae</i> | <i>Troglodytes aedon</i> | USA (Illinois) | FJ171220 | — | — |
| <i>Brueelia antiqua</i> | <i>Hylocichla mustelina</i> | USA (Illinois) | FJ171222 | — | — |
| <i>Brueelia brunneinucha</i> | <i>Dumatella carolinensis</i> | USA (Illinois) | FJ171223 | — | FJ171246 |
| <i>Brueelia cedrorum</i> | <i>Bombycilla cedrorum</i> | USA | KT892073 | — | — |
| <i>Brueelia deficiens</i> | <i>Aphelocoma californica</i> | USA | KT892285 | — | — |
| <i>Brueelia dorsale</i> | <i>Toxostoma rufum</i> | USA (Illinois) | FJ171224 | — | FJ171247 |
| <i>Brueelia iliaci</i> | <i>Turdus migratorius</i> | USA | KT892078 | — | — |
| <i>Brueelia ornatissima</i> | <i>Agelaius phoeniceus</i> | USA | KT892090 | — | — |
| <i>Brueelia ornatissima</i> | <i>Molothrus ater</i> | USA | KT892087 | — | — |
| <i>Brueelia pallidula</i> | <i>Pheucticus ludovicianus</i> | USA | KT892089 | — | KT892089 |
| <i>Brueelia picturata</i> | <i>Sturnella</i> sp. | USA | KT892320 | — | KT892611 |
| <i>Brueelia</i> sp. | <i>Cardellina canadensis</i> | USA | KT892275 | — | — |
| <i>Brueelia</i> sp. | <i>Carduelis pinus</i> | USA | KT892116 | — | — |
| <i>Brueelia</i> sp. | <i>Sialia currucoides</i> | USA | KT892319 | — | — |
| <i>Brueelia</i> sp. | <i>Dolichonyx oryzivorus</i> | USA (Illinois) | FJ171230 | — | — |
| <i>Brueelia</i> sp. | <i>Melanerpes cruentatus</i> | — | KT892195 | — | — |
| <i>Brueelia</i> sp. | <i>Melanerpes erythrocephalus</i> | USA | KT892330 | — | — |
| <i>Brueelia</i> sp. | <i>Melospia lincolnii</i> | USA | KT892201 | — | — |
| <i>Brueelia</i> sp. | <i>Melanerpes carolinus</i> | USA | KT892329 | — | — |
| <i>Brueelia vulgata</i> | <i>Zonotrichia albicollis</i> | USA (Illinois) | FJ171234 | — | FJ171259 |
| <i>Brueelia xanthocephali</i> | <i>Xanthocephalus xanthocephalus</i> | USA | KT892325 | — | — |
| <i>Columbicola passerinae</i> | <i>Columbina passerina</i> | Texas | AF414730 | — | — |
| <i>Columbicola passerinae</i> | <i>Columbina passerina</i> | Mexico | AF414728 | — | — |
| <i>Columbicola macrourae</i> | <i>Zenaida macroura</i> | USA | FJ656460 | — | — |
| <i>Columbicola macrourae</i> | <i>Zenaida asiatica</i> | USA | FJ656439 | — | — |
| <i>Cotingacola engeli</i> | <i>Phoenicircus nigricollis</i> | Brazil | JN662442 | — | — |
| <i>Contingacola lutzae</i> | <i>Laniocera hypopyrra</i> | Brazil | JN662441 | — | — |
| <i>Contingacola parmpipapillae</i> | <i>Querula purpurata</i> | Brazil | JN662443 | — | — |
| <i>Cotingacola stotzi</i> | <i>Querula purpurata</i> | Brazil | JN662444 | — | — |

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| <i>Cuculoecus</i> sp. | <i>Cerococcyx olivinus</i> | Africa | KU187329 | — | — |
| <i>Cummingsiella longirostricola</i> | <i>Numenius americanus</i> | USA | JN900159 | — | — |
| <i>Degeeriella fulva</i> | <i>Buteo</i> sp. | — | AF444861 | AY077766 | AF447197 |
| <i>Goinodes</i> sp. | <i>Callipepla californica</i> | USA | AF545708 | — | — |
| <i>Lunaceps actophilus</i> | <i>Calidris alba</i> | USA (Florida) | JN900147 | — | — |
| <i>Penenirmus auritus</i> | <i>Mecopicos poertae</i> | Africa | AF356701 | — | — |
| <i>Penenirmus</i> sp. | <i>Psaltiparus minimus</i> | USA (Utah) | AY149409 | — | — |
| <i>Philopterus</i> sp. | <i>Motmotus momota</i> | Brazil | AF356716 | — | — |
| <i>Philopterus</i> sp. | <i>Spizella pusilla</i> | USA | AY314820 | — | AY314841 |
| <i>Picicola faucetti</i> | <i>Galbula cyanicollis</i> | Brazil | EF101571 | — | — |
| <i>Picicola galbulica</i> | <i>Galbula tombacea</i> | Peru | EF101575 | — | — |
| <i>Picicola snodgrassi</i> | <i>Melanerpes carolinus</i> | USA | AF444868 | — | — |
| <i>Picicola striata</i> | <i>Monasa nigrifrons</i> | Bolivia | EF101577 | — | — |
| <i>Picicola oneilli</i> | <i>Notharchus macrorhynchos</i> | Peru | EF101573 | — | — |
| <i>Trogoninirmus</i> sp. | <i>Trogon melanocephalus</i> | Mexico | AF444876 | — | — |

Outgroup Taxa

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|----------------------------------|-----------------------------|------------|----------|----------|----------|
| <i>Fahrenholzia zacatecae</i> | <i>Chaetodipus eremicus</i> | New Mexico | HM171445 | HM171407 | HM171477 |
| <i>Haematopinus eurysterunus</i> | <i>Bos</i> sp. | Egypt | HM171422 | HM171381 | HM171457 |
