

GENOME SEQUENCING

The Complete Genome Sequences of 37 Bird Species from the Ecuadorian Andes

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Biodiversity Genomes

We present the complete genome sequences of 37 Ecuadorian bird species widespread throughout the tropical Andes.

Methods

Tissues for this study were collected from wild-caught individuals in the Ecuadorian provinces of Pichincha and Manabí. Samples were collected in 2021 and 2022 by AL and JRD under permit MAE-DNB-CM-2018-0105 issued to Universidad San Francisco de Quito by the Ecuadorian Ministry of the Environment. Tissues were deposited at the Universidad San Francisco de Quito and subsequently loaned to the Field Museum of Natural History.

DNA extraction was performed using the Qiagen DNAeasy genomic extraction kit using the standard process. A paired-end sequencing library was constructed using the Illumina TruSeq kit according to the manufacturer’s instructions. The library was sequenced on an Illumina Hi-Seq platform in paired-end, 2 × 150bp format. The resulting fastq files were trimmed of adapter/primer sequences and low-quality regions with Trimmomatic v0.33 (Bolger, Lohse, and Usadel 2014). The trimmed sequence was assembled by SPAdes v2.5 (Bankevich et al. 2012) followed by a finishing step using Zanfona (M., K., and S. 2021).

Results and Data Availability

All genome sequences are available on Genbank:

Acropternis orthonyx	IRGN AL808	JAWWEU000000000
Anabacerthia variegaticeps	IRGN AL189	JAWWEW000000000
Anisognathus igniventris	IRGN AL800	JAWWET000000000
Arremon aurantirostris	IRGN AL570	JAXCLO000000000
Arremon brunneinucha	IRGN AL096	JAWWEX000000000
Basileuterus tristriatus	IRGN AL131	JAWWMR000000000
Catamblyrhynchus diadema	IRGN AL882	JAWWMN000000000
Chlorospingus flavigularis	IRGN AL118	JAWWMQ000000000
Chlorospingus semifuscus	IRGN AL824	JAWWMS000000000
Cinnycerthia olivascens	IRGN AL742	JAWWMU000000000
Cinnycerthia unirufa	IRGN AL889	JAWWMV000000000
Dendrocicla fuliginosa	IRGN AL075	JAWWMO000000000

Acropternis orthonyx	IRGN AL808	JAWWEU000000000
Dendrocicla tyrannina	IRGN AL879	JAWWMP000000000
Diglossa cyanea	IRGN AL854	JAWWMT000000000
Euphonia xanthogaster	IRGN AL161	JAYDZK000000000
Gymnopathys bicolor	IRGN AL540	JAWWLY000000000
Hafferia zeledoni	IRGN AL102	JAWWEV000000000
Lepidocolaptes lacrymiger	IRGN AL467	JAXCLP000000000
Lophotriccus pileatus	IRGN AL172	JAWWES000000000
Margarornis squamiger	IRGN AL498	JAWWTY000000000
Mionectes olivaceus	IRGN AL036	JAWWMA000000000
Myioborus melanocephalus	IRGN AL886	JAWWLS000000000
Myioborus miniatus	IRGN AL290	JAWWEB000000000
Myiothlypis chrysogaster	IRGN AL104	JAWWLX000000000
Myiothlypis coronata	IRGN AL392	JAWWLW000000000
Myiotriccus ornatus	IRGN AL167	JAYRBT000000000
Platyrinchus mystaceus	IRGN AL083	JAWWLW000000000
Poliocrania exsul	IRGN AL078	JAWWLZ000000000
Premnoplex brunnescens	IRGN AL133	JAWWLT000000000
Pseudotriccus pelzelni	IRGN AL266	JAWMRA000000000
Sphenopsis melanotis	IRGN AL450	JAWMRF000000000
Syndactyla subalaris	IRGN AL174	JAWMRD000000000
Tachyphonus luctuosus	IRGN AL191	JAWWEY000000000
Tangara arthus	IRGN AL149	JAWMQZ000000000
Thripadectes ignobilis	IRGN AL114	JAWMRC000000000
Xenops minutus	IRGN AL101	JAWWEE000000000
Xiphorhynchus erythropygius	IRGN AL109	JAWMRB000000000

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