

ABSTRACTS FOR *CONDOR* 103(2) MAY 2001

FEATURE ARTICLES

PHYLOGENETIC RELATIONSHIPS IN BEARDED MANAKINS (PIPRIDAE: *MANACUS*) DEMONSTRATE THAT MALE PLUMAGE COLOR IS A MISLEADING TAXONOMIC MARKER¹

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Abstract. The piprid genus *Manacus* is composed of four allospecies that are readily distinguishable by differences in male plumage color. Electrophoretic data for two populations of each of the four forms plus seven outgroup piprid taxa were collected from 32 isozyme loci and used to infer phylogenetic relationships. Each *Manacus* form was monophyletic, with the exception of *M. manacus*, in which the trans-Andean (west of the Andes) population was sister to *M. vitellinus*, rather than to its conspecific cis-Andean (east of the Andes) population. This controversial relationship, supported by the synapomorphic allele PGM-2^b as well as allele frequencies at ADA, GOT-1 and LGG, is consistent with general biogeographic patterns in the region, but indicates that male plumage color is an unreliable taxonomic marker. Reconstruction of male plumage color on the tree confirms that gold plumage is a derived state in *M. vitellinus*, a finding consistent with the possibility that gold plumage is an evolutionary novelty in *vitellinus* which has spread recently under positive selection. Among piprids, there was strong support for a group composed of *Antilophia*, *Chiroxiphia*, and *Corapipo*, and for a group composed of *Pipra mentalis*, *P. fasciicauda*, and *Dixiphia pipra*. *Manacus* is more closely related to the *P. mentalis* + *P. fasciicauda* + *D. pipra* group. The isozymes supported *Lepidothrix* as the basal taxon of those examined.

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