

## A family name for the monotypic oscine passerine genus *Donacobius*

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**RESUMO.** Uma nova família para o gênero monotípico *Donacobius* (Passeriformes, Oscines). Hipóteses filogenéticas publicadas recentemente indicam que o gênero monotípico *Donacobius*, de posicionamento sistemático tradicionalmente instável, não é aparentado a nenhuma das três famílias de Passeriformes Oscines onde esteve classificado em períodos diferentes desde o século XIX (Turdidae, Troglodytidae e Mimidae); na verdade, *Donacobius* constitui aparentemente uma linhagem própria, parte dos Oscines Sylvioidea do Velho Mundo. Uma vez que essas afinidades filogenéticas implicam um longo período de evolução independente de outras linhagens de Oscines neotropicais, propomos que o gênero *Donacobius* seja classificado numa família monotípica própria.

**PALAVRAS-CHAVE:** *Donacobius*, Oscines, Sylvioidea, sistemática, família nova.

**KEY WORDS:** *Donacobius*, Oscines, Sylvioidea, systematics, new family.

The taxonomic affinities of the Neotropical endemic bird genus *Donacobius* (and its only species *D. atricapilla*) have long been a challenging issue in systematic ornithology. Since the 19<sup>th</sup> century, this monotypic genus has been alternatively regarded as a member of the following oscine passerine families: Turdidae, Troglodytidae, and Mimidae (Bonaparte 1850, Pelzeln 1870, Ridgway 1907, Davis and Miller 1960). More recently, *D. atricapilla* was transferred from the Mimidae to the Troglodytidae based on several morphological, behavioral, and ecological similarities shared with species of the latter group (Miller 1964, AOU 1983, Kiltie and Fitzpatrick 1984, Wetmore *et al.* 1984). Since then, most recent classifications place *Donacobius* in the Troglodytidae (Ridgely and Tudor 1989, Sibley and Monroe 1990, AOU 1998, Kroodsmas and Brewer 2005).

However, prior to the 21<sup>st</sup> century, no study had assessed the taxonomic affinities of *Donacobius* with explicit phylogenetic methods. Barker (2004) was the first to present a phylogenetic hypothesis for the Troglodytidae based on molecular characters, and to investigate the taxonomic affinities of *Donacobius* under a phylogenetic framework. The phylogenies presented by Barker (2004) were based on both nuclear and mitochondrial DNA sequences, and consistently indicated with very strong statistical support that *Donacobius* was neither nested in the Troglodytidae nor grouped anywhere near the sampled genera of Mimidae or Turdidae. In fact, *Donacobius* could not even be parsimoniously or probabilistically placed as the sister group of the Troglodytidae; instead, it belonged with strong support in a clade with the Old World passerine genera *Zosterops* (Zosteropidae) and *Prinia* (Sylviidae). A newer study, also based on nuclear and mitochondrial DNA sequences, and with a thorough sampling of the entire superfamily Sylvioidea,

confirmed with strong statistical support that *Donacobius* is indeed nested in the Sylvioidea, although its phylogenetic affinities within this group could not be fully resolved (Alström *et al.* 2006).

Therefore, all the phylogenetic evidence available so far is unable to place *Donacobius* in any of the currently recognized families of Neotropical oscine birds, but instead indicates that it is likely a Neotropical isolate of the extensive sylvioid passerine radiation that has taken place predominantly in Africa and Eurasia since the Eocene (Barker 2004, Barker *et al.* 2004, Alström *et al.* 2006). Given the apparent evolutionary uniqueness of *Donacobius*, we follow the rules and recommendations of the International Code of Zoological Nomenclature (ICZN 1999) to propose a separate family for this monotypic genus:

### **Donacobiidae – new family**

Type genus: *Donacobius* Swainson, 1832

**Diagnosis.** Monotypic Donacobiidae is diagnosed from any other avian family by a combination of the following characters: (1) conspicuous bright orange bare skin patch on sides of neck, which tends to get paler in older specimens; (2) bright yellow iris; (3) top and sides of head and neck black; (4) base of primaries with a distinct and broad white patch; (4) long and graduated tail, with external rectrices broadly tipped white, and (5) plain buff underparts, with narrow dark black barring restricted to the flanks.

Future phylogenetic studies with dense taxon sampling regimes will certainly establish the sister-taxon relationship of *Donacobius* within Sylvioidea, and thus provide further sup-

port to or, alternatively, allow the falsification of the hypothesis that *D. atricapilla* belongs in an evolutionary independent lineage within this predominantly Old World group.

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