

A new subfamily for *Robsonius* (Locustellidae)

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SUMMARY.—Phylogenetic analysis has shown that the ground warblers (*Robsonius*) are the sister-group of all other species of Locustellidae, which in turn consists of two major clades. This suggests that three subfamilies may be recognised: Locustellinae new rank, comprising the genera *Helopsaltes* and *Locustella*, Megalurinae new rank, comprising the genera *Poodytes*, *Malia*, *Cincloramphus*, *Megalurus*, *Elaphrornis*, *Schoenicola*, *Catriscus* and *Bradypterus*, and another, monotypic subfamily comprising the genus *Robsonius*, for which we introduce the name Robsoniinae.

Phylogenetic analysis of mitochondrial and nuclear DNA sequences has revealed that multiple genera traditionally considered as babblers (Timaliinae Sundevall, 1836, *sensu* Deignan 1964) are actually members of, or are closely related to, other taxonomic groups, including Vireonidae Swainson, 1837, Muscicapidae Fleming, 1822, Turdidae Billberg, 1828, Elachuridae Alström, Hooper, Liu, Olsson, Mohan, Gelang, Manh, Zhao, Lei & Price, 2014, Locustellidae Bonaparte, 1854, Cisticolidae Sundevall, 1872, Pnoepygidae Gelang, Cibois, Pasquet, Olsson, Alström & Ericson, 2009, Sylviidae Leach, 1820, and Zosteropidae Bonaparte, 1853 (reviewed by Alström *et al.* 2013; see also Alström *et al.* 2014, Reeve *et al.* 2022). One of these genera is *Robsonius* Collar, 2006. The first two known species of *Robsonius* were originally described in the genus *Napothera* G. R. Gray, 1842, within the family Timaliidae (i.e. Cordillera Ground Warbler *Napothera rabori* Rand, 1960; Bicol Ground Warbler *Napothera sorsogonensis* Rand & Rabor, 1967). Collar (2006) noted that these two species share a combination of morphological and behavioural character states not found in *Napothera*, nor in other wren-babbler genera, and are thus best placed in a new genus. Collar (2006) proposed the genus name *Robsonius* for *N. rabori* and *N. sorsogonensis*.

The first phylogenetic study to address the relationships of *Robsonius* was that by Oliveros *et al.* (2012), who found that the genus was sister to several members of Locustellidae. In a comprehensive phylogenetic analysis of this family, *Robsonius* was placed as the sister-group of all other species of Locustellidae (Alström *et al.* 2018). The latter group, in turn, consisted of two major clades: one clade was formed by the genera *Helopsaltes* and *Locustella*, and the other comprised the genera *Poodytes*, *Malia*, *Cincloramphus*, *Megalurus*, *Elaphrornis*, *Schoenicola*, *Catriscus* and *Bradypterus*. A third species of *Robsonius*, Sierra Madre Ground Warbler *R. thompsoni*, was described by Hosner *et al.* (2013), who showed that *R. sorsogonensis* is sister to *R. rabori* and *R. thompsoni*.

Robsonius is now universally placed in Locustellidae (Dickinson & Christidis 2014, Collar *et al.* 2020, Fjeldså *et al.* 2020, Clements *et al.* 2022, Gill *et al.* 2023). The deep divergence between *Robsonius* and other members of Locustellidae (Alström *et al.* 2018, Oliveros *et al.* 2019) and the strong support for all three major clades (Alström *et al.* 2018) suggest that three subfamilies may be recognised: Locustellinae Bonaparte, 1854 new rank, comprising the genera *Helopsaltes* Alström *et al.*, 2018, and *Locustella* Kaup, 1829; Megalurinae Blyth, 1875 new rank, comprising the genera *Poodytes* Cabanis, 1851, *Malia* Schlegel, 1880, *Cincloramphus* Gould, 1838, *Megalurus* Horsfield, 1821, *Elaphrornis* Legge, 1879, *Schoenicola* Blyth, 1844, *Catriscus* Cabanis, 1851, and *Bradypterus* Swainson, 1837; and

another, monotypic subfamily for the genus *Robsonius*. ‘Robsoniinae’ was recently used as a family-group name for *Robsonius* but this represents a *nomen nudum*, as was indicated by the author by his use of square brackets (Gaudin 2023). Because no family-group name is available for *Robsonius*, we propose:

Robsoniinae, new subfamily

Type genus.—*Robsonius* Collar, 2006.

Diagnosis.—Same as for the type genus (Collar 2006). Thus, Robsoniinae differs from all other oscine passerines by a combination of: (i) absence of rectal bristles; (ii) part-feathered nares; (iii) broad white tips to the wing-coverts and outer 2–3 primaries; (iv) very copious, dense, elongate rump feathering; (v) fairly long and slightly hooked bill, as in *Turdinus* Blyth, 1844; (vi) high-pitched, insect-like main vocalisation; and (vii) habit of walking (Collar 2006: 108).

In addition, our alignment, using MUSCLE (Edgar 2004) as implemented in MEGA7 (Kumar *et al.* 2016), of the fifth intron of the nuclear gene β -fibrinogen (Fib5) datasets of Moyle *et al.* (2012), Oliveros *et al.* (2012) and Hosner *et al.* (2013) obtained from GenBank, shows that there is a 1 bp insertion (corresponding to position 268 of sequence JN826141¹ of *R. sorsogonensis*) and a 1 bp deletion (corresponding to position 541 of JN826141) that are synapomorphic for *Robsonius* (and hence Robsoniinae). The alignment used for assessing indels in the fifth intron of the nuclear gene β -fibrinogen is available at Zenodo (<https://doi.org/10.5281/zenodo.15037864>).

Included taxa.—*Robsonius sorsogonensis* (Rand & Rabor, 1967), *R. rabori* (Rand, 1960) and *R. thompsoni* Hosner, Boggess, Alviola, Sánchez-González, Oliveros, Urriza & Moyle, 2013.

Discussion

With the growth of phylogenetic knowledge, taxonomic systems (classifications) are becoming more refined and include an increasing number of clade names. These names add precision to the hierarchical system of taxa. Naming clades enables straightforward discussion of the relevant taxa. Subfamilies have been used many times before in ornithology (e.g. Peters 1934, Mayr & Cottrell 1986, Sibley & Ahlquist 1990). In recent classifications, 78 subfamilies were recognised as part of 27 non-passerine families (Dickinson & Remsen 2013) and 98 subfamilies were included in 27 passerine families (Fjeldså *et al.* 2020). Examples of recently recognised subfamilies are Hypocryptadiinae Hachisuka, 1930, and Passerinae Vigors, 1825 (in Passeridae Vigors, 1825) and Plocepasserinae Des Murs, 1860, Bubalornithidae Iredale & Bannerman, 1921, and Ploceinae Sundevall, 1836 (in Ploceidae Sundevall, 1836; Fjeldså *et al.* 2020). Thus, the recognition of subfamilies in Locustellidae is consistent with the classification of other groups of birds.

Ironically, the name Robsoniinae is superfluous because the relevant clade already had a unique name, albeit at a lower rank (i.e. *Robsonius*). The reason it is named here as a subfamily is that in rank-based nomenclature, naming one taxon at a certain rank (e.g. subfamily Locustellinae) means that all other equally or more divergent branches (i.e. Megalurinae and Robsoniinae) within that clade (i.e. Locustellidae) should also be recognised at the same rank and be named. Introducing the name Robsoniinae was necessary in order to formally recognise two other subclades of Locustellidae (each comprising multiple genera), which in recent classifications did not have a unique taxonomic name, i.e. the clades here

¹ At the time of writing, this sequence was still listed as ‘*Napothera rabori*’ on GenBank.

called Locustellinae and Megalurinae. Under the rules of rank-based nomenclature, naming Robsoniinae is a necessary consequence of the taxonomic recognition of these other clades.

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