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Saxicola syenitica Heuglin, 1869 (Aves: Passeriformes: Muscicapidae), an overlooked taxon of *Oenanthe*?

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Abstract

The North African population of the Black Wheatear has been treated as *Oenanthe leucura syenitica* for over 100 years. The type of *syenitica* was collected by Heuglin in June 1852 near the southern Egypt/northern Sudan border, well outside the range of the sedentary Black Wheatear. Morphometric inference and genetic analyses of partial sequences of the mitochondrial gene COI demonstrate that the type specimen of *syenitica* is not conspecific with *O. leucura,* but instead is closely related to *O. lugens* of the Middle East and North Africa, being most similar in plumage to *O. lugens warriae* of the basalt deserts of north-east Jordan and southern Syria. While *syenitica* was not separable in the analysed part of its mitochondrial DNA from *O. l. lugens* and *O. l. warriae*, it differs in morphometrics and plumage features from the latter. The type specimen is a first-summer bird with abraded plumage as expected for June, and may thus have been collected in its breeding range. Its morphological distinctiveness implies that *syenitica* might be taxonomically distinct from *warriae*. However, as it is known only from the type and its few associated data, we propose to treat it as a *subspecies inquirenda* of *O. lugens*. As a consequence of this, and the fact that we found no genetic or morphological differences between North African populations of *O. leucura* and *riggenbachi* Hartert, 1909, the name originally applied to the population in Western Sahara, the North African population takes the oldest available name to become *O. leucura riggenbachi*.

Key words: Nomenclatural revision, taxonomy, mitochondrial DNA, *Oenanthe*, morphometric analyses

Introduction

Wheatears of the genus *Oenanthe* have long caused taxonomic debate as a consequence of hybridization between different species, the existence of distinctive allopatric populations in several species complexes, the presence of different morphs in some species, and, as recently revealed by molecular analyses, the convergent evolution of morphological and ecological features in different clades (Panov 1992, 2005; Shirihai *et al*. 2011; Aliabadian *et al*. 2012; Schweizer & Shirihai 2013).

The Black Wheatear *Oenanthe leucura* is a sedentary, open-country chat found in Iberia and North Africa. North African populations have been universally considered *O. l. syenitica* in major checklists and monographs (e.g. Vaurie 1959; Cramp 1988; Dickinson 2003; Collar 2005), since Hartert (1910) applied the name *syenitica* to this population. However, in his description, Heuglin (1869a: 359) specifically stated that the type of *Saxicola syenitica* Heuglin, 1869, from El Kab, upper Egypt, is not closely related to *O. leucura*. Over a decade ago, HS noted that this type locality lies far outside the breeding range of the population to which the name is applied. When, in 2011–2012, HS studied the holotype of *syenitica* at the Naturhistorisches Museum Wien, Austria, he found that it is unrelated to *O. leucura* based on structure, but is most similar to taxa traditionally assigned to the *O. lugens* complex (*cf.* Shirihai *et al*. 2011), especially to the almost identically coloured *O. lugens warriae* (hereafter *warriae*). However, it differs from the latter in the important features of size, wing length and bill structure.

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'*Saxicola syenitica*' might represent an analogous case to that of *warriae* (Shirihai *et al*. 2011). Both could be recent peripheral isolates of *lugens* that have independently developed black plumage as an adaption to a locally dark substrate. Black plumage has apparently repeatedly evolved in parallel within different clades of *Oenanthe* (*cf*. Aliabadian *et al*. 2012), with *warriae*, *syenitica*, *O. leucura* and males of *O. picata opistholeuca* being almost identical in plumage (Shirihai 2012). An ancestral population of *lugens* might potentially have been polymorphic, with black-and-white and black morphs as in nominate *O. lugubris* in the Horn of Africa (Vaurie 1950). As different colour morphs are often favoured in different habitats (Roulin 2004), the black morph could have become fixed in areas with predominantly dark substrates, whereas the black-and-white morph became fixed within the current distribution of *lugens*. Both scenarios result in geographical variation in colour that can be associated with incipient speciation or facilitating this process (Price 2008; Hugall & Stuart-Fox 2012). In such a case, *warriae* and *syenitica* would have evolved in parallel through independent adaptations to similar habitats. If such processes are accompanied by the evolution of reproductive isolation, they are termed parallel speciation (*cf*. Schluter & Nagel 1995). Further work employing multi-locus molecular approaches and behavioural studies may reveal whether such evolutionary scenarios are prevalent in taxa of *O. lugens*.

Nomenclatural and taxonomic implications for *O. leucura*. The North African populations of *O. leucura* differ moderately from Iberian birds (e.g. Vaurie 1959; Shirihai & Svensson in prep.) and should be treated subspecifically, but we have demonstrated that *syenitica* is not the correct name for this population. Based on four specimens from Rio de Oro, Western Sahara, Hartert (1909) described a new subspecies *O. leucura riggenbachi* Hartert, 1909. These birds were collected in July 1902 by F. W. Riggenbach and were claimed to differ from *O. leucura* elsewhere in North Africa by their broader black terminal tail-band and broader black on the central rectrices. Steinbacher (in Hartert 1938: 314) commented (translated into English): "Spatz has collected 2 more specimens of *Oe. leucura riggenbachi* from Rio de Oro, which differ far less from *syenitica* with respect to the characters mentioned by Hartert on p. 699."

Vaurie (1959) then synonymized *riggenbachi* with "*syenitica*". An extensive comparison by LS of the type series of *riggenbachi* (of which only one is an adult) with relevant specimens of *O. leucura* from elsewhere in North Africa revealed no consistent differences. We consider that, on present knowledge, the slight difference between the birds from Rio de Oro and those breeding from Morocco to Libya may be individual variation. Consequently, *riggenbachi* becomes the oldest available name for the North African populations of *O. leucura*.

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