

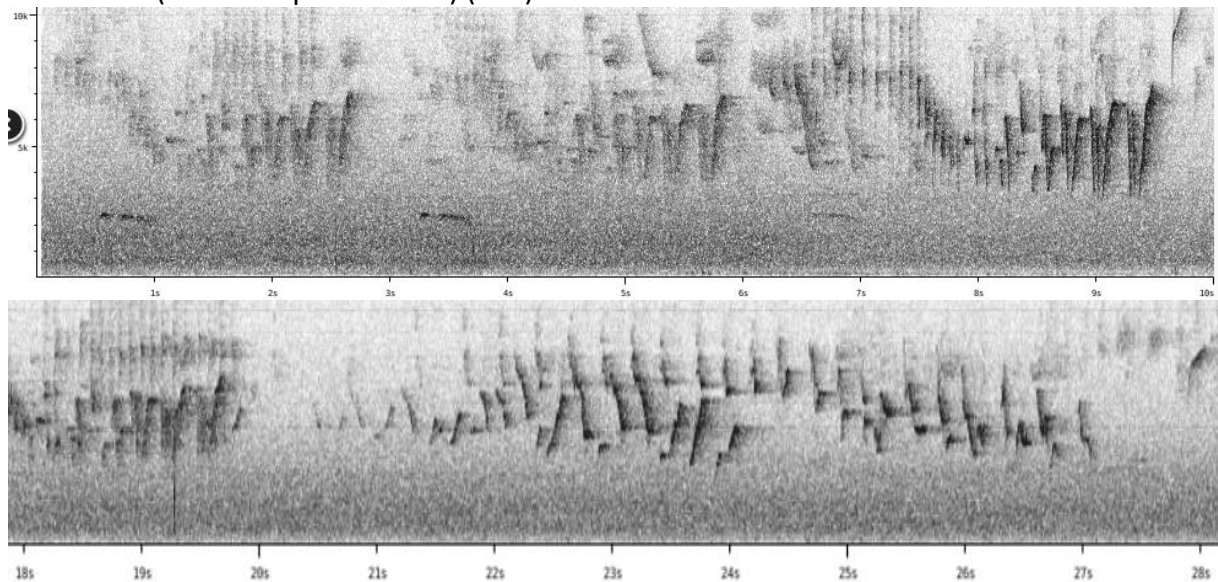
Notes on the vocalizations of Citrine Warbler (*Basileuterus luteoviridis*)

Peter Boesman

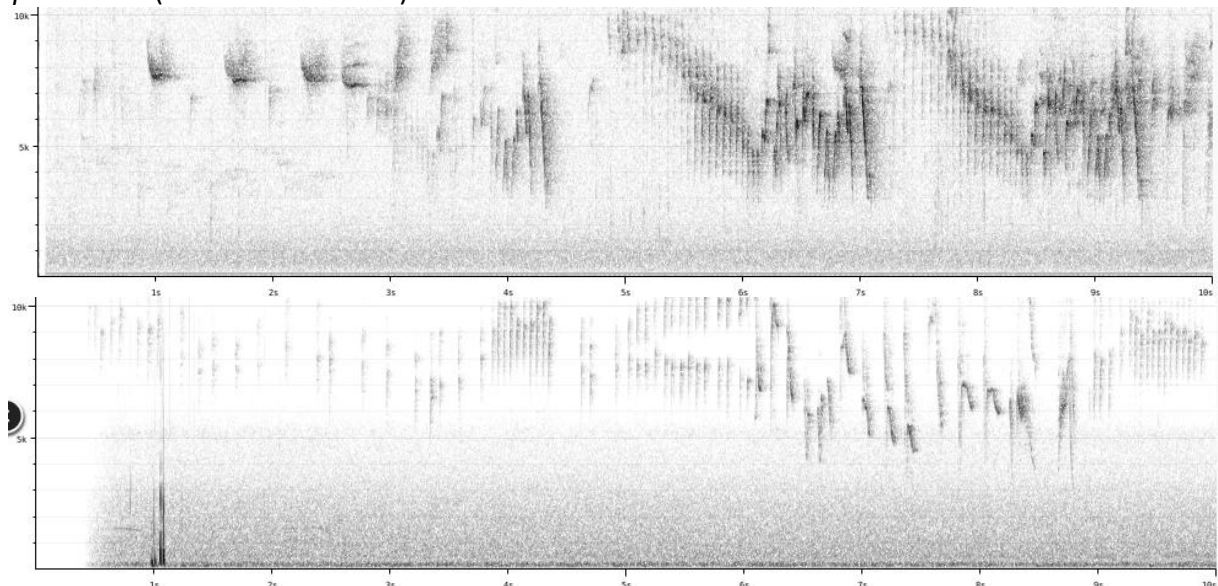
In the following we briefly analyze and compare voice of the different races of Citrine Warbler (*Basileuterus luteoviridis*). We also try to quantify the extent of any vocal differences using the criteria proposed by Tobias *et al.* (2010), as a support for taxonomic review. We have made use of sound recordings available on-line from Xeno Canto (XC) and Macaulay Library (ML).

An overview of song per race, illustrated with sonograms:

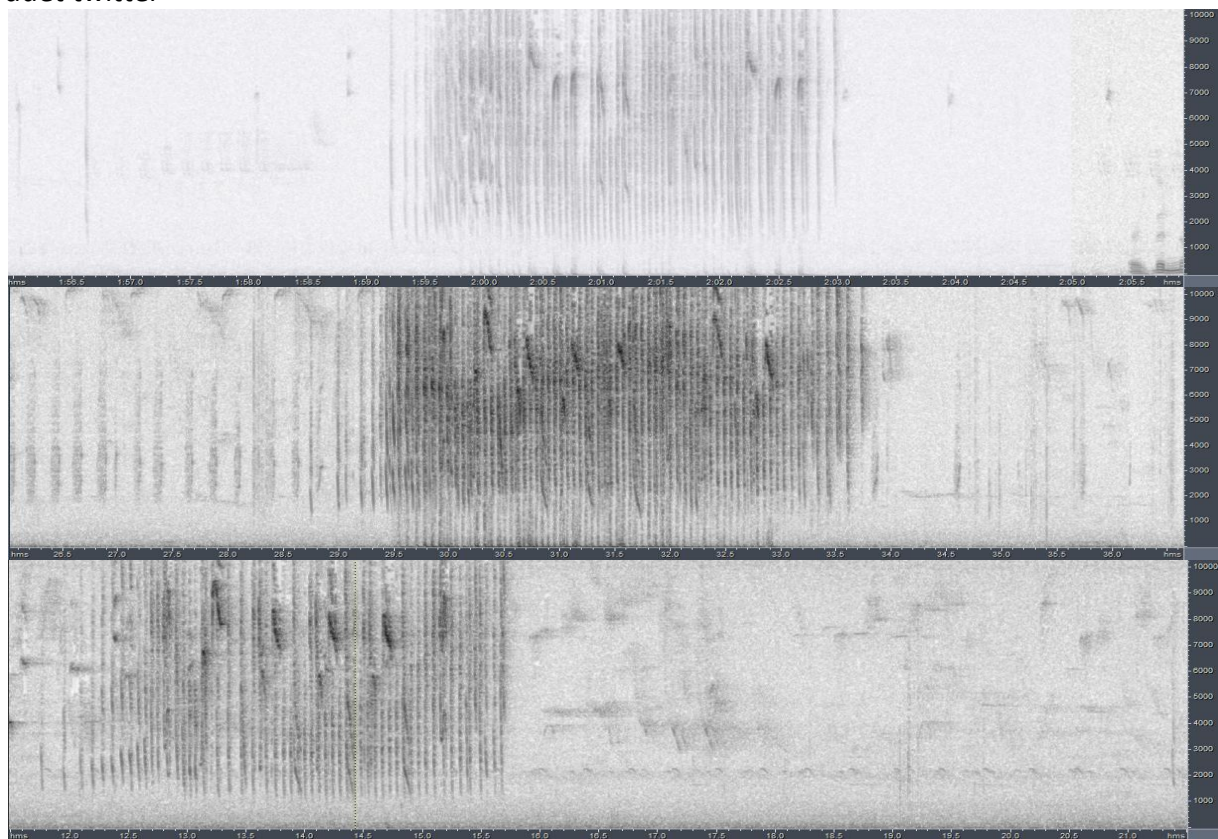
richardsoni (Pacific slope W Andes) (n=2)



quindianus (C Andes Colombia)

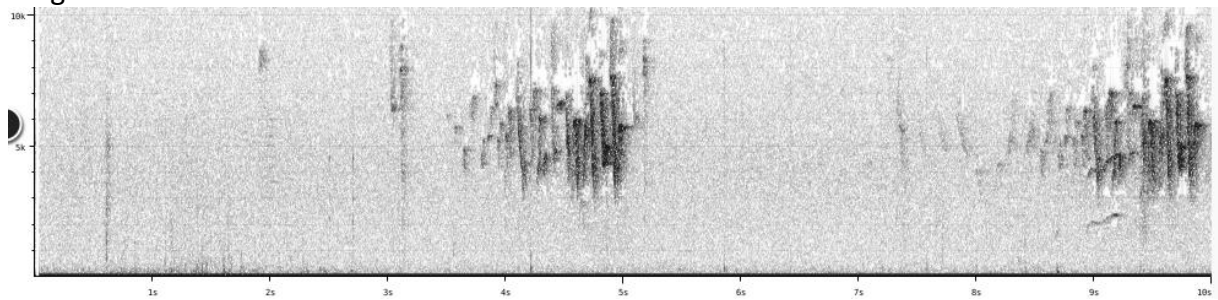


nominate
Venezuela (N of Tachira gap)
duet twitter



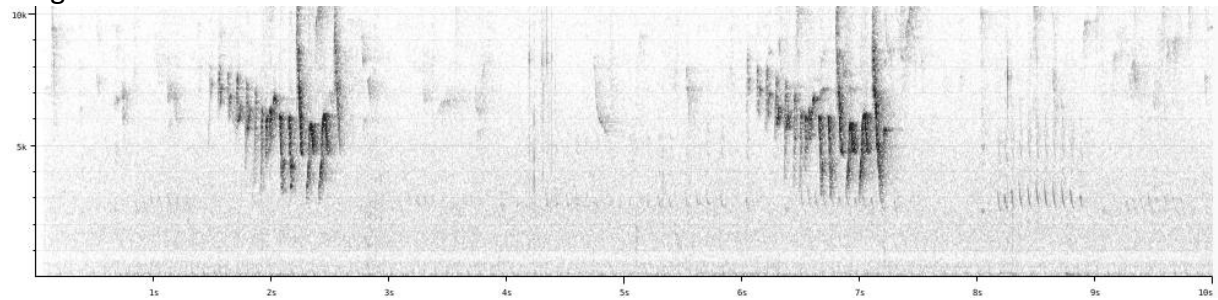
E Andes Colombia

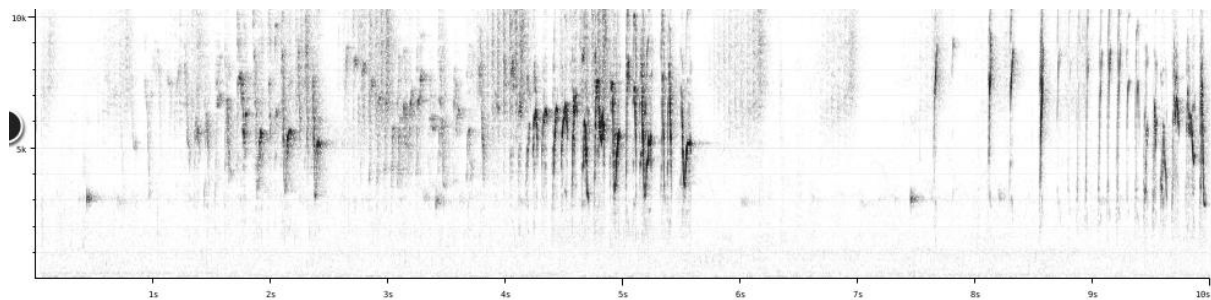
song



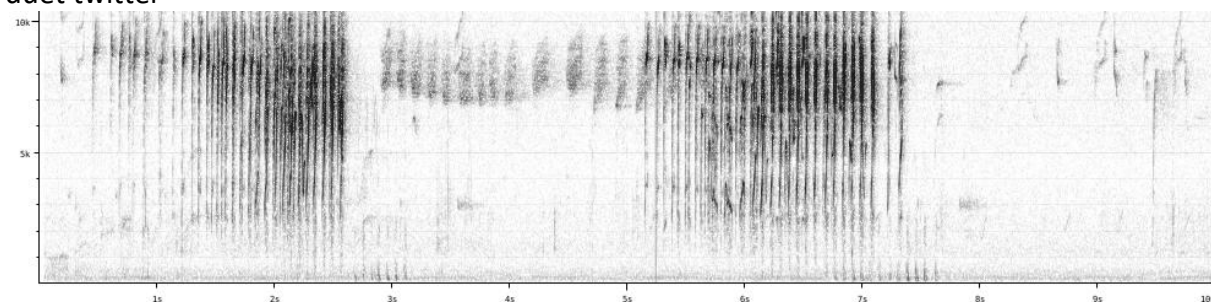
E Andes Ecuador

song





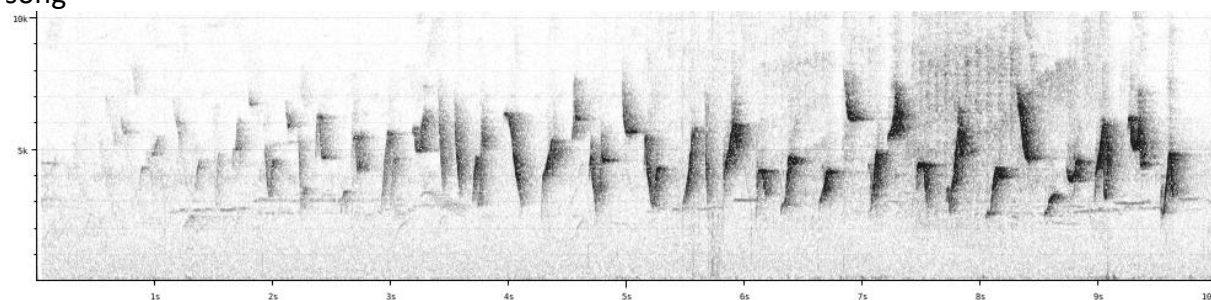
duet twitter



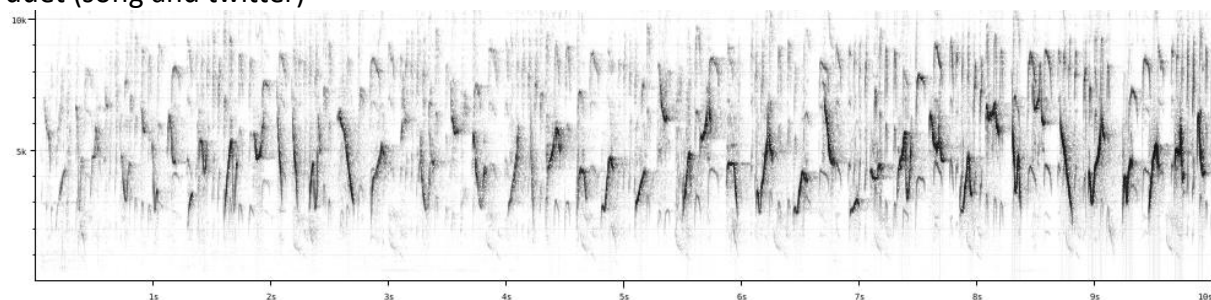
striaticiceps

N Peru

song

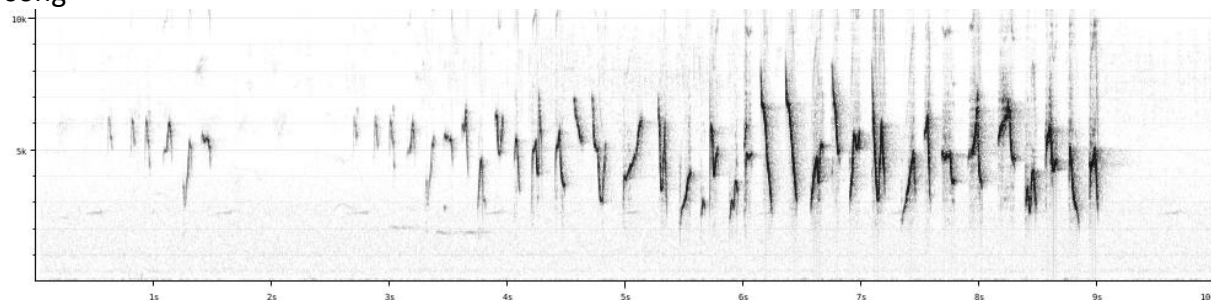


duet (song and twitter)

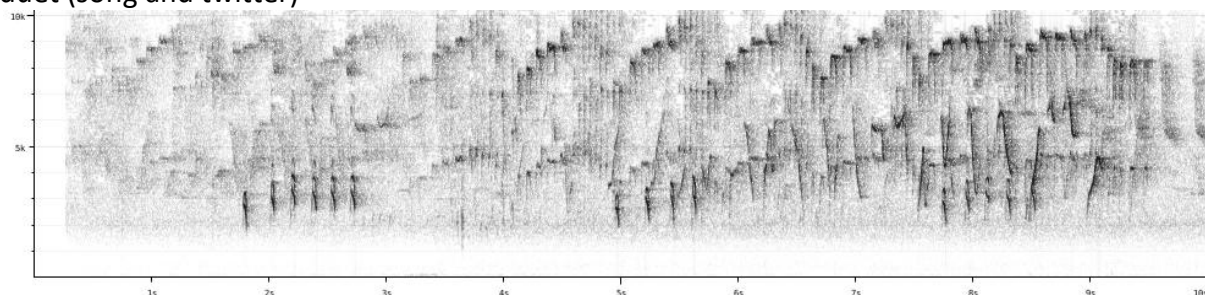


C Peru

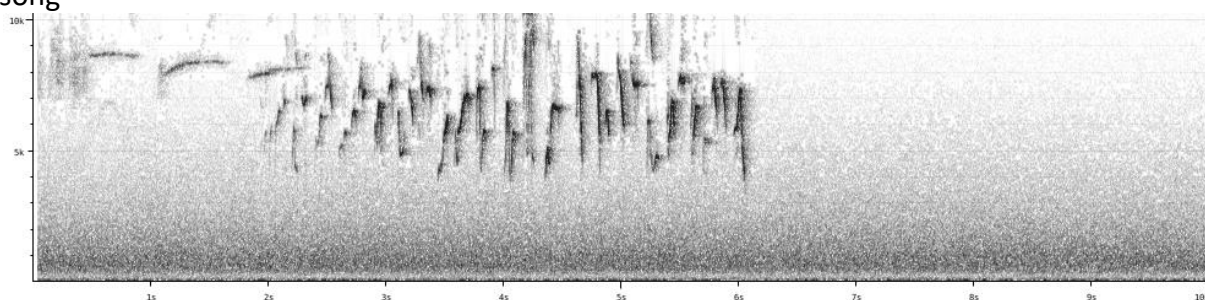
song



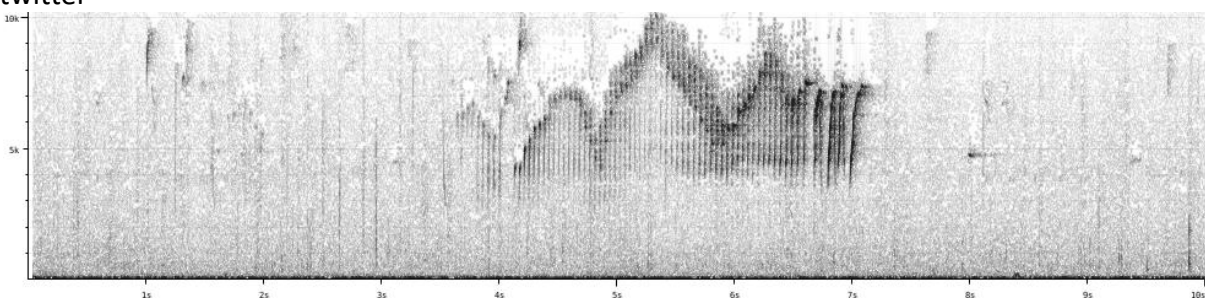
duet (song and twitter)



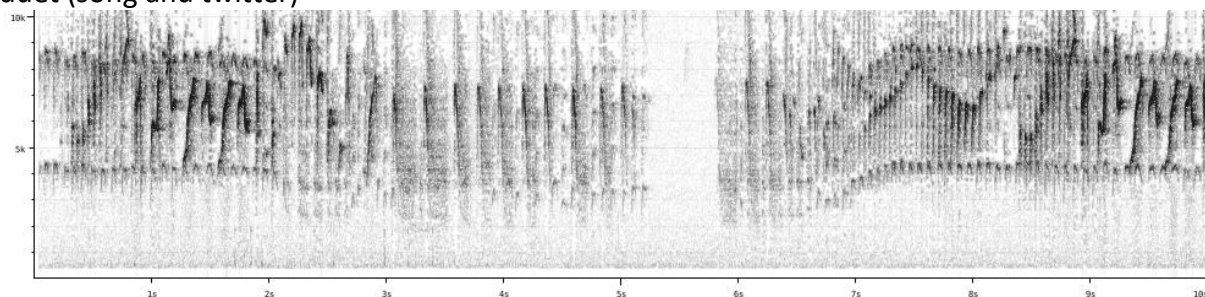
euophrys
song



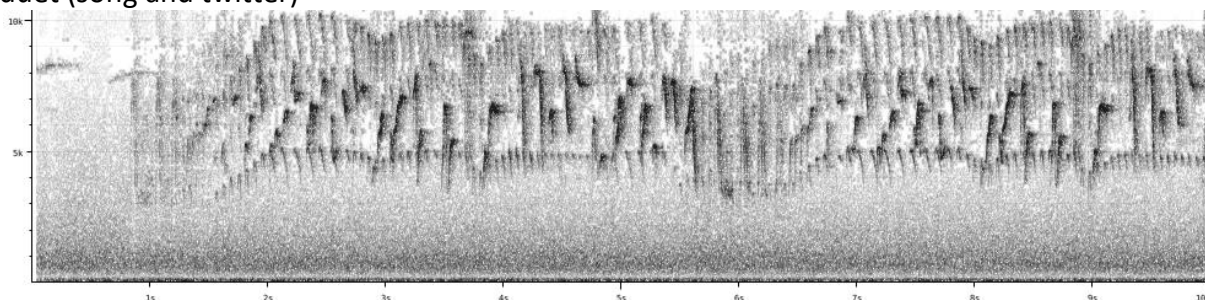
twitter



duet (song and twitter)



duet (song and twitter)



Songs are quite variable, and further complicated by song either given alone or as a duet. There is also a possible identification pitfall with Superciliaried Hemispingus in some regions. A few trends become however apparent:

Song of *striaticiceps* is most characteristic, a fairly long series of well-separated melodious whistles at fairly low pitch (down to c 2.5kHz), gradually increasing in volume (not unlike some Whitestarts *Myioborus*). In duet, second bird adds a fast higher-pitched twittering with a clear rhythmic pattern (trrrrwhit-tit-tit- trrrrwhit-tit-tit-...).

Song of *euophrys* somewhat similar in structure, but notes much higher pitched (down to c3.5-4kHz), pace slightly faster and song phrases shorter. In duet, second bird adds a fast long high-pitched twitter going up and down in pitch (also very different from previous).

Song of nominate apparently a fairly short phrase starting with some stuttering and with notes delivered at fast pace, often slightly descending in pitch towards the end and increasing in volume. Duet apparently an entirely different vocalization, a very fast high-pitched twittering with some more melodious high-pitched notes mixed in.

Song of *richardsoni* and *quindianus* quite similar to nominate, but apparently song phrases somewhat longer in length, with longer stuttering series. Probably not always safely told apart from nominate.

Vocally there is thus a significant difference between *striaticiceps/euophrys* and other races. Main differences being that the former group has a longer song phrase length (2), lack of stuttering start in song (1-2), up and down pattern in pitch of duet twitter (1). Total vocal score about 3-4.

Furthermore *striaticiceps* can easily be told apart from *euophrys* based on min. frequency of notes in song (2) and repetitive pattern of duet twittering (1-2). Total vocal score about 3.

Nominate may differ from *richardsoni* and *quindianus* in shorter song phrase (1-2) and possibly different duet.

A more in depth vocal analysis of this fairly complicated case is highly recommended, and should also include evaluation of the vocal transition of *striaticiceps/euophrys* around Cuzco.

This note was finalized on 7th October 2016, using sound recordings available on-line at that moment. We would like to thank in particular the sound recordists who placed their song recordings for this species on XC and ML: Nick Athanas, Peter Boesman, Thomas Donegan, Ross Gallardy, David Geale, Bennett Hennessey, Sebastian Herzog, Charles Hesse, Olaf Jahn, Niels Krabbe, Phyllis Isler, Frank Lambert, Dan Lane, Mitch Lysinger, Oscar Marin Gomez, Sjoerd Mayer, John V Moore, Ted Parker, Bob Planqué, Mark Robbins, Fabrice Schmitt, Thomas Schulenberg, Paul Schwartz, Andrew Spencer, Joseph Tobias and Charlie Vogt.

References

Tobias, J.A., Seddon, N., Spottiswoode, C.N., Pilgrim, J.D., Fishpool, L.D.C. & Collar, N.J. (2010). Quantitative criteria for species delimitation. *Ibis* 152(4): 724–746.

Recommended citation

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