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Morphological and vocal evidence for the split of eastern Sittasomus griseicapillus (Aves, Dendrocolaptidae) subspecies

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INTRODUCTION

Sittasomus griseicapillus, popularly known as Olivaceous Woodcreeper, is quite common and widely distributed (Figure 1). Even without any taxonomic revision carried out to date, fifteen subspecies are currently recognized and divided into five groups, which differ in plumage color, body size and beak.

Figure 1. Comparison between *S. g. griseicapillus* from Campo Grande, MS (A - WA6054929), and *S. g. sylviellus*, from Ilhabela (B - WA6104308). (C) Distribution of the species.

METHOD

The recordings were obtained from online databases (Wikiaves and Xeno-Canto) and analyzed based on five acoustic parameters. Corner selection was done with Raven Pro 1.6.5. Morphology was compared through body color coding and morphometric analysis of specimens from Museu de Zoologia da Universidade de São Paulo. Using a caliper (0.01 mm), we measured culmen length, width, and height, and tarsus, remiges, and rectrices length. Multivariate analysis of variance was used to verify differences in vocal characters between populations, and then Student's t-test to verify distinctions between them.

RESULTS & DISCUSSION

Some 38 recordings were examined (*griseicapillus* – 15; *sylviellus* – 23), revealing a statistically significant difference ($F_{1,2}$ = 3.4; p = 0.013) between populations. Song duration-related traits differed significantly (p = 0.017), with mean loudsong duration being shorter in *griseicapillus* (4.2 ± 0.9 s) than in *sylviellus* (5.5 ± 2.1 s), while note number was higher in the former (16.4 ± 5.1) compared to the latter (11.9 ± 5.9). The mean pace of *griseicapillus* was faster (3.9 ± 1.1) than that of the Atlantic population (2.5 ± 1.7). (Figure 2). Some 40 specimens were analyzed (*griseicapillus* – 10; *sylviellus* – 28; *olivaceus* – 2). No morphometric differences were found ($F_{1,3}$ = 0.98; p > 0.05) among the three populations, but body coloration greatly differed. The upperpart and underpart of *griseicapillus* is grayish (2.5Y 4/2) whereas in *sylviellus* and *obsoletus*, these regions are olive-green (5Y 5/6). All populations are reddish brown (2.5 YR4/6 – *griseicapillus*; 2.5YR 3/4 – *sylviellus*) in remiges, rectrices, and uropygium.

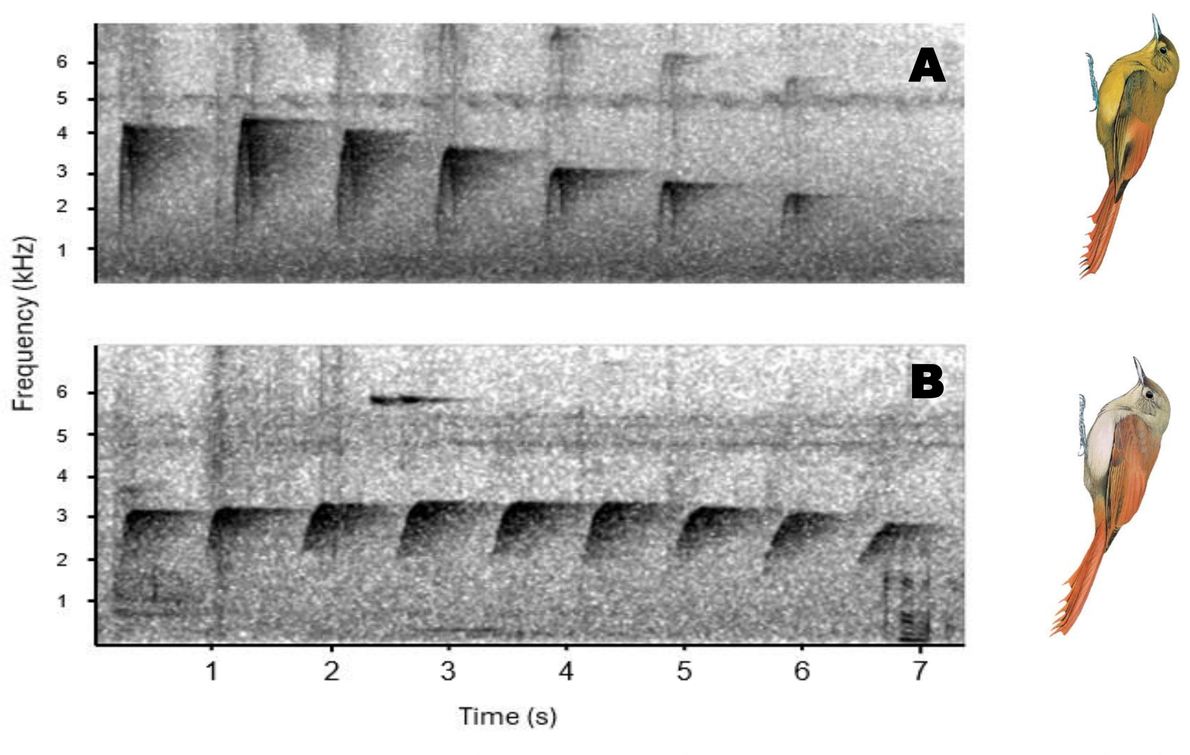

Figure 2. Comparison between the spectrograms and the external morphology of *S. g. sylviellus*, from Cachoeiras de Macacu, RJ (A - XC297862), and *S. g. griseicapillus* from Ribas do Rio Pardo, MS (B – XC838379). Images: Birds of the World.

CONCLUSION & REFERENCES

Although this preliminary study suggests vocal distinctions between populations, a larger number of recordings from the databases used, as well as from the Macaulay Library, will still be analyzed.

BIBLIOGRAPHIC REFERENCES: