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Ricinus ruficapillus n. sp. (Insecta, Phthiraptera, Amblycera, Ricinidae) - a second *Ricinus* species on the Rufous-capped Spinetail *Synallaxis ruficapilla* (Aves, Passeriformes, Furnariidae)

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With 7 figures and 1 table

Zusammenfassung

***Ricinus ruficapillus* n. sp. (Insecta, Phthiraptera, Amblycera, Ricinidae) - eine zweite *Ricinus*-Art auf dem Rotkappenschlüpfer *Synallaxis ruficapilla* (Aves, Passeriformes, Furnariidae)**

Ricinus ruficapillus n. sp. wird nach einer Aufsammlung von einem lebenden Rotkappenschlüpfer im Bundesstaat São Paulo, Brasilien, beschrieben. Nach *Ricinus butleri* ONIKI, 2000 ist es der bemerkenswerte Nachweis einer zweiten, auf dieser Wirtsart lebenden *Ricinus*-Art. Es wird ausgeschlossen, daß es sich dabei um Irrläufer handelt.

Summary

Off a live Rufous-capped Spinetail from São Paulo State, Brazil, *Ricinus ruficapillus* n. sp. is described and illustrated. Besides *Ricinus butleri* ONIKI, 2000 it is a remarkable record of a second *Ricinus* species occurred on this host. It is excluded that this is a case of straggling.

Keywords: Brazil, *Ricinus ruficapillus* n. sp., ovenbirds.

Introduction

CARRIKER (1964) described and NELSON (1972) revised the genus *Ricinus* (Phthiraptera, Ricinidae), with 38 species in the New World Passeriformes (Aves). They did not have specimens from birds of the large family Furnariidae (ovenbirds). ONIKI (2000) examined *Ricinus* of *Synallaxis ruficapilla* from the State of São Paulo (Brazil) (Fazenda Niágara, near Óleo), but specimens from one host of the same species from Reserva Estadual Carlos Botelho were conspicuously different. As there are not two subspecies of *Synallaxis ruficapilla* in São Paulo State, we were puzzled by this finding. However, as observed by CARRIKER (1964) and ONIKI (pers. obser.), representatives of *Ricinus* do not leave a dead host or transfer to other birds. Specimens for this study were collected from live birds. Considering the relatively large number of specimens obtained from this one host, they were not likely to be stragglers. Furthermore, as NELSON l. c. considered that the same taxon of host can harbor more than one member of the *Ricinus* group, we decided to describe it as a new species.

Material and Methods

Six female and 5 male specimens of *Ricinus* from one individual of *Synallaxis ruficapilla* (Furnariidae, Aves) were obtained at the Reserva Carlos Botelho (700-800 m a. s. l.), São Paulo State, Brazil, on 7 July 1979. After collection, they were placed in alcohol 70% and prepared in the laboratory in permanent slides mounted in Entellan. Methods of collection and measurement of specimens are described in ONIKI (2000), and measurements were taken in mm.

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Results

Ricinus ruficapillus new species

Figs. 1–7, table 1

T y p e h o s t : *Synallaxis ruficapilla* VIEILLOT, 1819 (Furnariidae, Aves)

M a t e r i a l : Holotype (female) and allotype (in the same slide) in the Museu de Ciências da Natureza, (collection slide no. 430) from Reserva Estadual Carlos Botelho (24° 04'S, 47° 58'W), São Paulo State, Brazil; collected by Y. Oniki on 7 July 1979. Paratypes from the same host: 4 females and 4 males in the same institution and 1 male and 1 female in Museum of Natural History Rudolstadt (Thüringen), Germany.

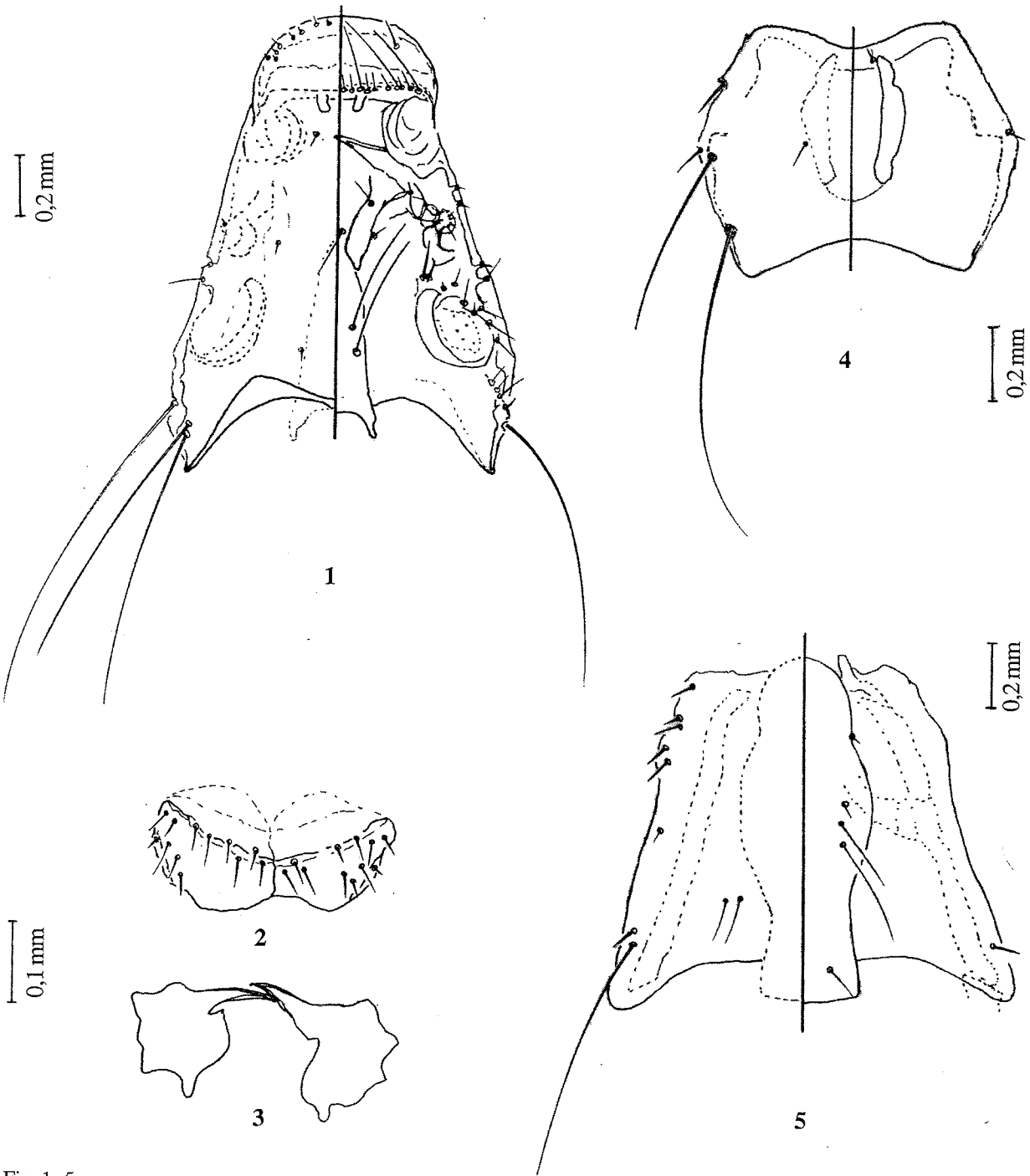

Fig. 1–5.
Details of the male head (1), labium (2), mandible (3), prothorax (4) and mesometathorax (5) of *Ricinus ruficapillus* n. sp. Drawing with a line in the middle shows at the left, deatails of dorsal side, and right, details of ventral side.

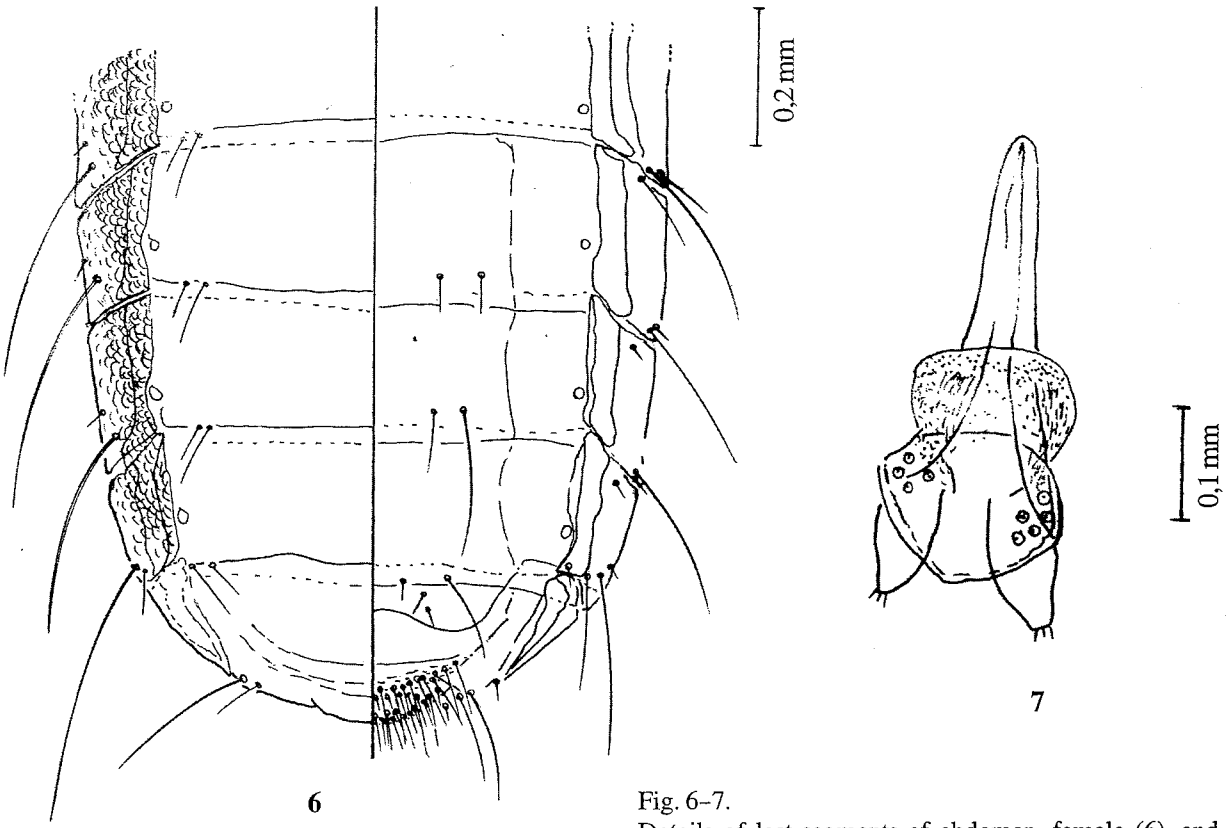

Fig. 6–7.
Details of last segments of abdomen, female (6), and male genitalia (7) of *Ricinus ruficapillus* n. sp.

D e s c r i p t i o n : **1.** Average total length of female is 2.69 mm (n = 6, range 2.65–2.74). Male is smaller than female. Average total length of male is 2.42 mm (n =5, range 2.32–2.48). **2.** Pale specimens except for bright brown on the inner projections of the exoskeleton, turning yellow toward the margins of sclerites. **3.** Antennal, lunar and tentorial nodi present but antennal nodi much darker and heavily sclerotized. **4.** Light, almost transparent, in frons and clypeal region. **5.** Very conspicuous labium with 9 x 9 setae. Below, one can with difficulty see a light ovoid sclerite with no ornamentation. **6.** Head conical with very slight postfrontal constriction; frons slightly roun-

Table 1.
Measurements (in mm) and head index of *Ricinus ruficapillus* n. sp.

	Females (n = 6)						Males (n = 5)				
	Holotype	Paratypes					Allotype	Paratypes			
Character\slide no.	430	431	432	433	434	435	430	431	432	433	434
Total length	2.65	2.65	2.74	2.70	2.68	2.72	2.44	2.32	2.41	2.47	2.48
Body width	0.75	0.71	0.75	0.75	0.75	0.77	0.63	0.63	0.64	0.63	0.66
Head length	0.63	0.63	0.63	0.66	0.64	0.66	0.63	0.60	0.60	0.57	0.63
Head width	0.48	0.48	0.50	0.50	0.50	0.49	0.45	0.45	0.45	0.45	0.44
Head index	0.76	0.76	0.79	0.76	0.78	0.74	0.71	0.75	0.75	0.79	0.70
Prothoracic length	0.30	0.24	0.27	0.22	0.27	0.24	0.24	0.24	0.21	0.22	0.21
Prothoracic width	0.42	0.42	0.42	0.42	0.42	0.43	0.38	0.39	0.39	0.39	0.39
Distance between prosternals	0.057	0.058	0.058	0.057	0.046	0.065	0.057	0.058	0.051	0.046	0.051
Length of male genitalia							0.41	0.43	0.38	0.38	0.38
Width of male genitalia							0.16	0.16	0.16	0.16	0.16

ded with lateral margins straight (Fig. 1). **7.** Head longer than wide at the posterior end. **8.** Mandibles monomorphic with very thin pointed tips and heavily sclerotized margins (Fig. 3). **9.** Head setae a1 present with 1 sensillum; a2 and a4 present but a3 absent. **10.** Head setae d1, d2, and d3 present. **11.** Labium shaped as in Fig. 2 with 12 small setae. **12.** Occipital margin concave. **13.** Gular plate not strongly sclerotized with round tip and with 1 long, 1 medium setae and long straight posterior projections, more sclerotized than the rest. **14.** Pleurites not pigmented and terminal segment transparent while edges of other segments are dark yellow with sclerotization. **15.** Transverse carina light, almost transparent and concave medially. **16.** Plate of maxillary palpi is thin with this sclerotization at inner edge and genticuloid with palpi barely reaching the margin of head. **17.** Temples slightly convex with tip pointed outward. **18.** Antennal lappets with 4 well spaced setae, the first two shorter and small (more frontal), the third longer and thicker, and the fourth longer than the third. **19.** The 2 preantennal setae are strong and the lower one about twice as long as the upper. **20.** Setae pa1 and pa2 are short, not reaching the margin of the head. **21.** Prothorax hexagonal with conspicuously dented upper margins, conspicuously convex on the sides (Fig. 4). **22.** Prosternals sclerotized and more accentuated at the base. **23.** Pleurites to margin with well accentuated mesh of line drawings but not on the last abdominal segment (Fig. 6). **24.** Mesometathorax is bell shaped as in Fig. 5.

Diagnosis: Small-sized species, smaller than *Ricinus butleri* Oniki, 2000; light yellow in color with inner projections of the exoskeleton bright brown. Gular plate with 2-3 setae instead of 3-4 of *R. butleri.*

Derivatio nominis: The name *ruficapillus* is derived from the host's specific name.

Notes on the host *Synallaxis ruficapilla* (Furnariidae)

It is a small (average 14.2 g, min. 12 g, max. 16 g, n = 94, Oniki & Willis 2001), shy bird which hops in the undergrowth or on the ground in forest or second growth. The species occurs in eastern Brazil from Pernambuco and Alagoas west to Goiás and south to Rio Grande do Sul (Meyer de Schauensee 1970). Although the bird was captured in several localities, this species of lice was only found at the Reserva Estadual Carlos Botelho, SP. Although captured in large numbers (58 individuals) at Fazenda São José (22° 21'S, 47° 29'W, 675 m), Rio Claro, São Paulo State, Brazil, none had lice of either type. This occurrence affords a very interesting puzzle to be solved with more captures and a larger collection of lice at several localities.

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