A NEW SPECIES OF TROCHILOECETES (MALLOPHAGA: RICINIDAE) FROM THE SAW-BILLED HERMIT, RAMPHODON NAEVIUS (DUMONT) (APODIFORMES: TROCHILIDAE)

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(With 3 text-figures)

We herewith describe and illustrate a new species of Mallophaga, the first known, from the Saw-billed Hermit (Ramphodon naevius). We also provide comments on a species of Trochiloeetes described by Carricker who reviewed (1960) the 24 species then in the genus, and added three more species in 1962. Trochiloeetes is a mallophagan genus which contains bloosucking species found only on avian hosts of the family Trochilidae.

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RESULTS

Trochiloeetes naevius n.sp.
(Figures 1-3)

Male. External morphology and chaetotaxy as in Fig. 1. Genitalia, less sac, as in Fig. 3. Total length of 22 specimens, 2.00-2.16mm.

Female. External morphology and chaetotaxy as in Fig. 2. Total length of 43 specimens, 2.25-2.55mm.

Measurements (in mm)

<table>
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<tr>
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<th>(n=22)</th>
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<th>(n=43)</th>
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<tbody>
<tr>
<td></td>
<td>Length</td>
<td>Width</td>
<td>Length</td>
</tr>
<tr>
<td>Head</td>
<td>0.50-0.60</td>
<td>0.61-0.65</td>
<td>0.50-0.60</td>
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<tr>
<td>Prothorax</td>
<td>0.29-0.34</td>
<td>0.45-0.50</td>
<td>0.27-0.36</td>
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<tr>
<td>Metathorax</td>
<td>0.17-0.24</td>
<td>0.83-0.93</td>
<td>0.23-0.29</td>
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<tr>
<td>Abdomen</td>
<td>0.92-1.05</td>
<td>0.95-1.08</td>
<td>1.00-1.37</td>
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<tr>
<td>Genitalia</td>
<td>0.47-0.60</td>
<td>0.17-0.19</td>
<td>-</td>
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<tr>
<td>Total</td>
<td>2.00-2.16</td>
<td>-</td>
<td>2.25-2.55</td>
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</table>

Measurements are for cleared specimens mounted on microscope slides. When collected, all specimens were soft-bodied and with expanded abdomens full of blood. Therefore, variations in body measurements are greater after mounting than would be expected for mallophagan species which are not bloodsucking.

DISCUSSION

T. naevius is slightly smaller, in all measurements than T. rupununi Carricker, 1962 found on Phaethornis superciliosus (Linnaeus), the Long-tailed Hummingbird. Differences in chaetotaxy between males of the two species are insignificant. The male genitalia of T. naevius, as shown in Fig. 3, is unique and differs in all structures from that of T. rupununi. Chaetotaxy of the terminal abdominal segments of the female of T. naevius contains twice as many setae as are found on T. rupununi.

Carricker (1962) noted "the female (of T. rupununi) may be recognized at once by the

1 Received October, 27, 1980.
peculiar, tube-like projection from the tip of abdomen”. We have examined, before and after mounting, many specimens of *Trochiloecestes* and found that the “tube-like projection” in the female, mentioned by Carriker, occurs whenever too much pressure is applied to the specimen during preparation of the microscope slide. It results from forcing a portion of the lower part of the gut out the anus.

**Type material.** Holotype male, allotype female and 64 paratypes off *Ramphodon naevius* (Dumont) (host collection numbers 879, 902, 903, 909, 935, 944, 965, 979, 982, 996, 1021, 1034, 1053, and 1055), collected July 11-12-13-14-15-16-17 and 18, 1979, State Reserve of Sete Barras, São Paulo, Brazil. Holotype and allotype deposited in Museu de Zoologia, Universidade de São Paulo. Paratypes in collections of the authors, U.S. National Museum, and other leading museums. In addition to the type material mentioned above 50 immature specimens of all stages were collected from the same hosts.

**The Host**

In the State Reserve of Sete Barras, *Ramphodon naevius* were abundant, especially in an abandoned plantation of seeded bananas. Pollen was collected mainly on the under side of the lower mandible, sometimes from near the nostrils. This hummingbird was also seen visiting flowers of other species of bananas next to the main road and farm houses.

In this reserve, most hummingbirds captured in mist nets between 11 and 18 July 1979 had eggs and adults of *Trochiloecestes*. This large mallophaga was found attached to feathers from the back of the neck down to the upper part of the back; none was found elsewhere or wandering. Often there was an egg attached near the base of a feather and above it a female with a male on her. (Males are buff colored and females are whitish, conspicuously lighter than the male and larger). This may be the oviposition and copulation site for the species.

Of 7 individuals of *Ramphodon naevius* captured from 27 to 29 July 1979 at the Experimental Station of Ubatuba, only one individual had a few dried egg cases of mallophaga on the back of the neck but adults were not found; others did not have egg cases or adults.
RESUMO

A espécie *Trochiloecetes naevius* n.sp. (Mallophaga: Ricinidae) é descrita de espécimens provenientes do beija-flor *Ramphodon naevius* (Dumont) (Apodiformes: Trochilidae) coletados na Reserva Estadual de Sete Barras, São Paulo, Brasil. Esta é a primeira espécie de Mallophaga conhecida de *Ramphodon naevius*.

SUMMARY

*Trochiloecetes naevius* n.sp. (Mallophaga: Ricinidae) is described from specimens collected off *Ramphodon naevius* (Dumont) (Apodiformes: Trochilidae) taken at the State Reserve of Sete Barras, São Paulo, Brazil.

REFERENCES
