

A NEW SPECIES OF *BRUEELIA* (MALLOPHAGA: PHILOPTERIDAE) FROM THE RUFIOUS MOTMOT *BARYPHTHENGUS RUFICAPILLUS* (VIEILLOT) (CORACIIFORMES: MOMOTIDAE)¹

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(With 3 text-figures)

INTRODUCTION

We herewith describe and illustrate a new species of *Brueelia* (Mallophaga: Philopteridae) found on the Rufous Motmot in Panama, and review the status of the two other species of *Brueelia* described earlier from the Blue-crowned Motmot.

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RESULTS

Brueelia humphreyi n. sp.

Male - External morphology and chaetotaxy as shown in fig. 1. Genitalia less sac, as in fig. 3. Total length of four specimens 1.88 - 1.95mm.

Female - External morphology and chaetotaxy as shown in fig. 2. Total length of 16 specimens 2.01 - 2.25mm.

Measurements (in mm)

	♂ (n=4)		♀ (n=16)	
	Length	Width	Length	Width
Head	0.54-0.55	0.56-0.58	0.54-0.58	0.57-0.63
Prothorax	0.14-0.16	0.33-0.33	0.14-0.17	0.34-0.38
Pterothorax	0.15-0.18	0.52-0.55	0.15-0.20	0.53-0.59
Abdomen	1.05-1.10	0.68-0.72	1.10-1.38	0.71-0.85
Genitalia	0.28-0.30	0.08-0.10	-	-
Total	1.88-1.95	-	2.01-2.25	-

DISCUSSION

Brueelia humphreyi is closely related to *B. marginella* (Nitzsch, 1866) found on *Momotus momota* (Linnaeus), the Blue-crowned Motmot which is found from northeastern Mexico to northwestern Argentina. *B. humphreyi* is smaller than *B. Marginella*, in both sexes. The total length

of *B. marginella* average 1.92 mm for the males, and 2.45 mm for the females. The external morphology of the two species are similar. The chaetotaxy of the head and thorax are similar in the two species. In *B. humphreyi* abdominal segments III-VI each have one more median sternal setae per segment; and abdominal segments VII-VIII each have one more median tergal setae per segment than does *B. marginella*. The genital plate of the female and the male genitalia are of the same type as those found on *B. marginella*,

¹ Received February 10, 1981.

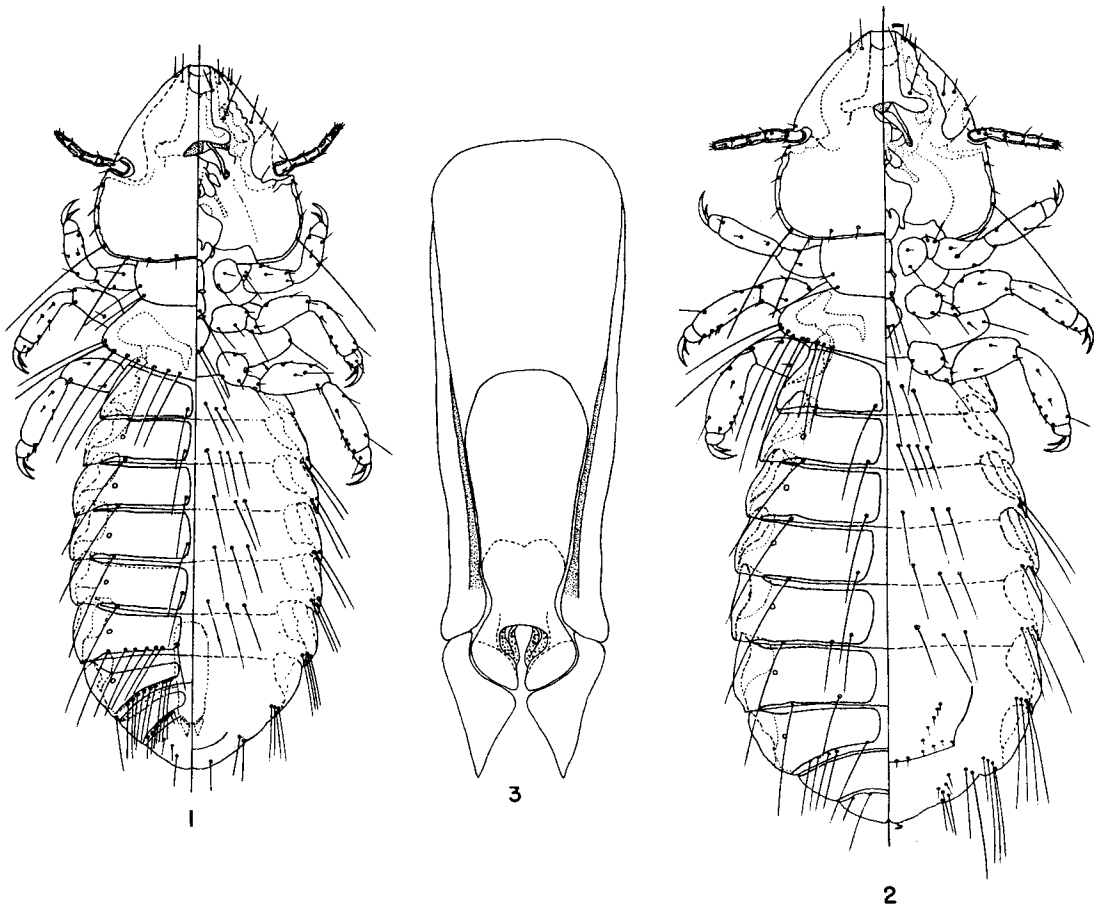


Fig. 1 – Dorsal-ventral view of male; fig. 2 – Dorsal-ventral view of female; fig. 3 – Male genitalia.

but they differ in the chaetotaxy of the female genital plate and the shape of the parameres in the male genitalia.

Carriker (1954) illustrated *B. marginella* when he described and illustrated *B. marginella xilitla* Carriker, 1954, found on *Momotus momota caeruleiceps* (Gould) in San Luis Potosi, Mexico. At that time he noted that *Brueelia* sp. found on *Baryphthengus ruficapillus* (which he did not describe) differed by the shape of the head and the pattern of the incrustations on the pleurites. We have found the shape of the head of *B. humphreyi* to be almost identical with of *B. marginella*, but that the pattern of “the incrustations on the pleurites to be different in the two species.”

We have examined the types: *Brueelia marginella xilitla* Carriker, 1954 and compared them with specimens of *Brueelia marginella* (Nitzsch, 1866) from several localities in South

America and can find no significant differences which cannot be attributed to age or maturity of the specimens or how they were mounted. Therefore we consider *Brueelia marginella xilitla* Carriker, 1954 to be a synonym of *Brueelia marginella* (Nitzsch, 1866).

Type material – Holotype male, allotype female and 18 paratypes of *Baryphthengus ruficapillus* (Vieillot) (host collection number 1153), 12 January 1971, Barro Colorado Island, Panama, Central America. Holotype and allotype deposited in Museu de Zoologia, Universidade de São Paulo, Brazil. Paratypes in collections of the authors.

Dr. Philip S. Humphrey has been helpful in advancement of ornithology in the neotropics; and in doing so has assisted many students, conducting field studies of birds in the Amazon and South America. He started the senior author's interest in Mallophaga while directing her studies in the Amazon.

The host

The Rufous Motmot, *Baryphthengus ruficapillus*, is a large brightly colored and solitary inhabitant of tropical forest undergrowth from Nicaragua to Colombia, Brazil, Paraguay, and Argentina in Misiones. It is most often observed sitting on horizontal branches at midlevels, wagging its long pendulum-like tail and calling lowpitched hooting sounds. It nests in holes in banks of small gullies, roads, etc.

SUMMARY

Brueelia humphreyi n. sp. (Mallophaga: Philopteridae) is described from specimens off

Baryphthengus ruficapillus (Vieillot) taken on Barro Colorado Island, Panama, Central America.

RESUMO

O presente trabalho apresenta a descrição de *Brueelia humphreyi* n. sp. (Mallophaga: Philopteridae) com base em espécimens provenientes do udu, *Baryphthengus ruficapillus* (Vieillot) (Coraciiformes: Momotidae) apanhado em rede de neblina na Ilha de Barro Colorado, Panama, America Central.

REFERENCES

- CARRIKER, M.A., 1954, Report on a collection of Mallophaga, largely Mexican (Part I). *Fla. Ent.*, 37:139-146 and 191-207.