

V. New Species of *Colinicola*, *Passonomedeia*, *Eiconolipeurus*,  
and *Oxylipeurus* (Mallophaga: Philopteridae) From Neo-  
tropical Gallinaceous Birds

Since my review of these genera, additional material was sent to me for study by Dr. K. C. Emerson. The new species contained in the material are herein described and illustrated.

**Genus *Colinicola* Carriker**

*Colinicola* Carriker, 1945, Rev. Acad. Colombiana Cienc., vol. 6, p. 360.—Type species: *Goniodes numidianus* Denny.

The genus may be briefly characterized as follows: Medium sized; head large, longer than wide and front more or less circumfasciate; temples rounded or slightly flattened; highly dimorphic antennae; pronounced clavi in both sexes; antennal, preantennal, and occipital carinae well developed, but the last not reaching to the occiput; clypeal and post-antennary sutures absent.

Prothorax well developed, with rounded sides; pterothorax small, wider posteriorly but no longer than prothorax. Abdomen short and oval in both sexes; pleurites normal, with well-developed "heads"; tergites separated medially, slightly in male, more so in female.

Male genitalia massive, basal plate large; both parameres and endomeral sclerites large, strongly chitinized and deeply pigmented, the latter as wide and nearly as long as the former; penis small and short, lying at base of endomeral sclerites.

*Colinicola philortyx*, new species

FIGURES v:1-3

Holotype female, allotype male, and 4 paratypes from *Philortyx fasciatus* Gould collected in SW. Mexico, Nov. 7, 1954 (in USNM).

Diagnosis: Shape of preantennary portion of head is nearest to that of *subtenuis*, but with frons slightly less attenuated; first and third segments of male antennae are much smaller; shape of abdomen in both sexes is closer to that of *opima*.

The allotype, and only male, is in good condition except the genitalia. With only the basal plate remaining, the genitalia are similar to that of *opima*. On one slide are 5 females, one in fair condition but with many details invisible but the others are more or less reduced to fragments. Except for the antennae, the female head closely resembles that of the male. There is a greater difference in size between the sexes than in any

other known species of the genus; the male is smaller and the female larger than in any previously known species.

Measurements are as follows:

	C. philortyx ♂		C. philortyx ♀		P. emersoni ♀	
	length	width	length	width	length	width
Body	1.58	—	2.60	—	1.63	—
Temples	.52	.456	.61	.52	.456	.716
Frons	—	.40	—	.436	—	.43
Prothorax	.16	.303	.25	.35	.11	.41
Pterothorax	.175	.445	.20	.586	.15	.62
Abdomen	1.34	.716	2.23	.89	1.00	.90
Basal Plate	.39	.11	—	—	—	—

### Genus *Passonomedeia* Carriker

*Passonomedeia* Carriker, 1944, Bol. Ent. Venezolana, vol. 3, p. 79.—Type species: *P. hopkinsi* Carriker.

The genus can be separated from *Goniodes* by the shape of the head in both sexes, structure of the male antennae, unusual sexual demorphism, and the male genitalia. The male is larger than the female, a most unusual feature, and the male genitalia are absolutely unique.

A second species has been found and is described below. Apparently the genus is found only on hosts of the avian genus *Odontophorus*.

#### *Passonomedeia emersoni*, new species

FIGURE V:4

Holotype female from *Odontophorus stellatus* (Gould) collected in NE. Peru (type in USNM).

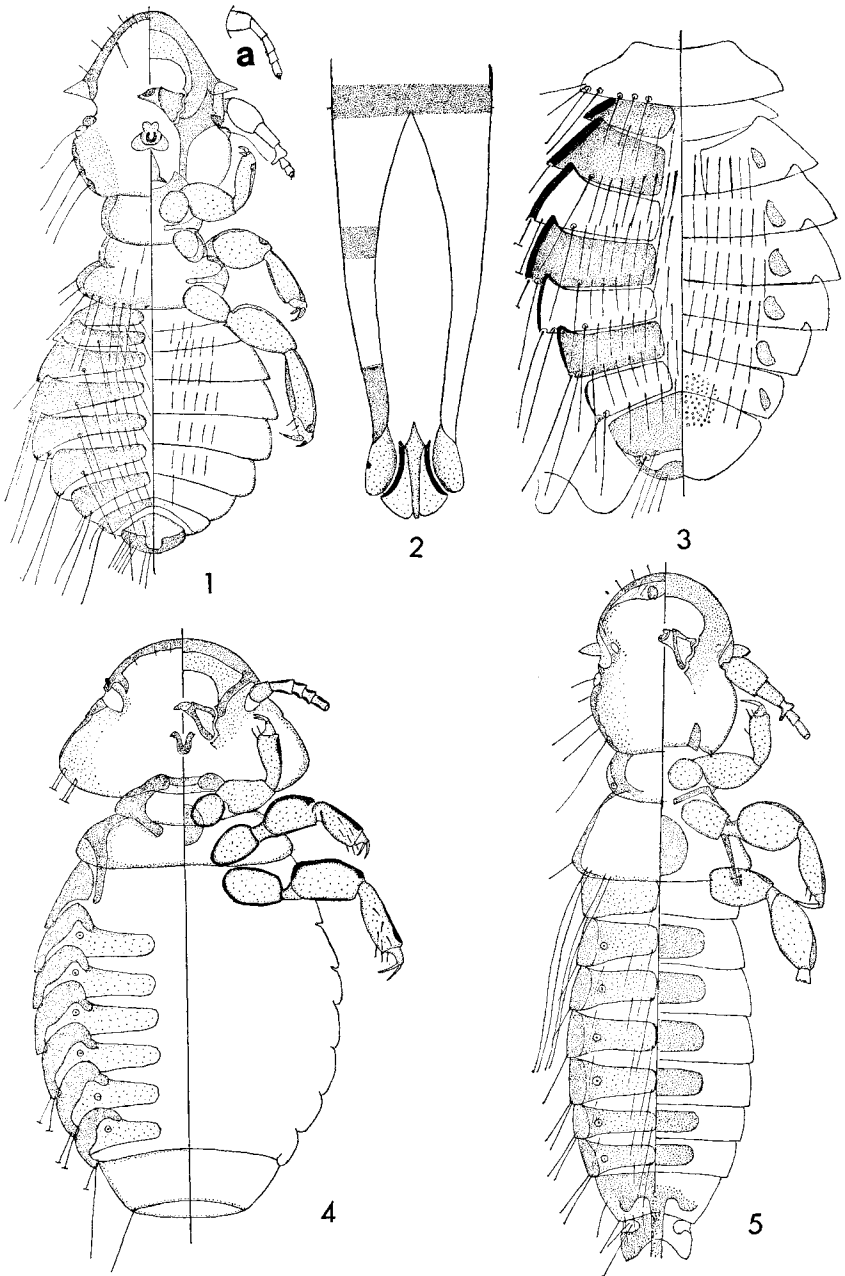
Diagnosis: The holotype has the thoracic area and tip of abdomen partially obscured by foreign matter, some details are invisible but all of those shown in figure are correct. Most of the setae are missing but the alveoli are visible.

This female strongly resembles some of the females of *Heptarthrogaster*, found on the genus *Odontophorus*, especially in the shape of the head, but the abdominal sclerites are very different from those of *Heptarthrogaster* and also differ strongly from the type of *Passonomedeia hopkinsi*. It is most unfortunate that the male was not secured.

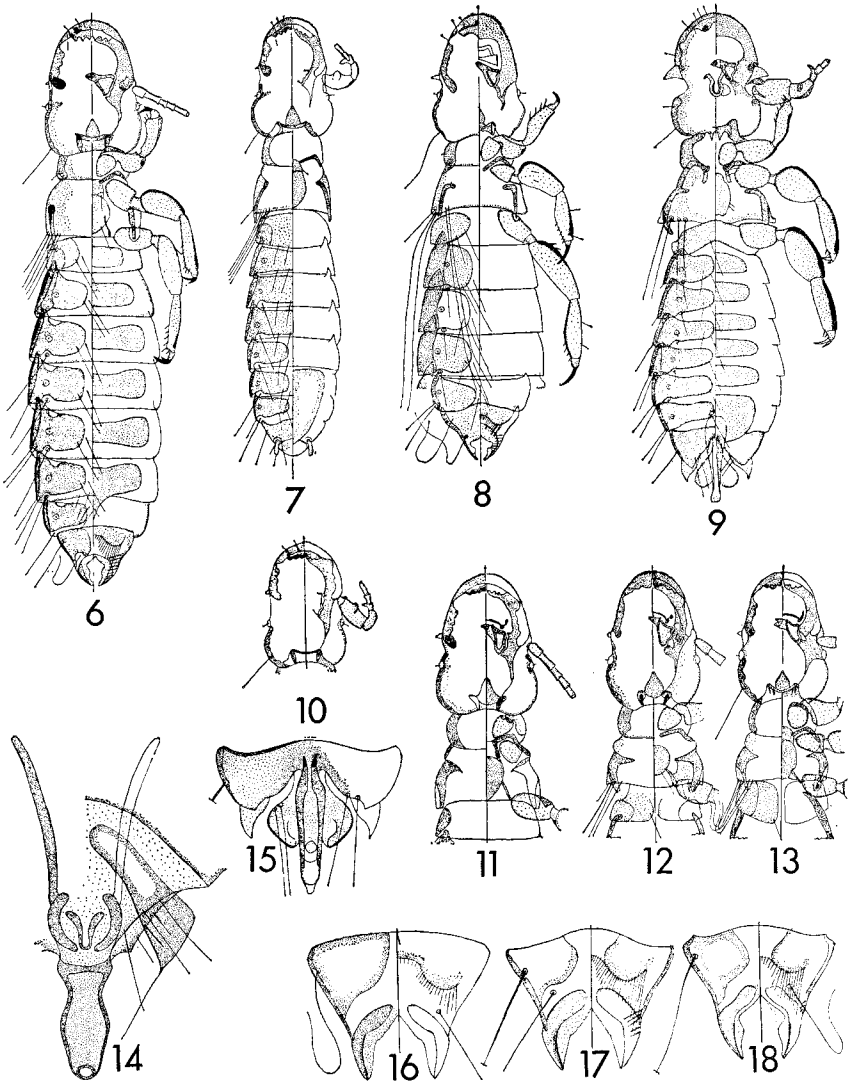
The thoracic segments are extremely short and wide; the abdomen is almost circular; and the posterolateral angles of the temples are strongly rounded, not angulated as in *P. hopkinsi*. The structure of the distal portion of the abdomen cannot be clearly seen and no attempt has been made to show the details.

However, I am convinced that it represents an undescribed species of the genus *Passonomedeia*, a genus unique and apparently very rarely met with.

Measurements are given in tabulation above.



FIGURES v:1-5.—1, *Colinicola philortyx*, new species, ♂; a, ♀, antenna. 2, *C. philortyx*, new species, ♂, genitalia (less parameres). 3, *C. philortyx*, new species, ♀, pterothorax and abdomen. 4, *Passonomedeia emersoni*, new species, ♀ (less chaetotaxy). 5, *Eiconolipeurus laticapitis*, new species, ♂.



FIGURES v:6-18.—6, *Oxylipeurus huilensis*, new species, ♀; 7, same, ♂. 8, *O. caquetae*, new species, ♀. 9, *Eiconolipeurus inexpectatus*, new species, ♂. 10-13.—Head (less chaetotaxy): 10, *O. araucanus*, new species, ♂; 11, same, ♀; 12, *O. ruficaudatus*, new species, ♀; 13, *O. paraguayensis*, new species, ♀. 14-15.—Genitalia, ♂: 14, *O. huilensis*, new species; 15, *E. inexpectatus*, new species. 16-18.—Distal abdominal segments, ♀: 16, *O. araucanus*, new species; 17, *O. ruficaudatus*, new species; 18, *O. paraguayensis*, new species.

### Genus *Eiconolipeurus* Carriker

*Eiconolipeurus* Carriker, 1945, Rev. Brasileira Biol., vol. 5, p. 91.—Type species *E. importunus* Carriker.

The genus is closely related to *Oxylipeurus*, but can be distinguished from it by the structure of the preantennal portion of the head, the genitalia, distal abdominal segments of both sexes, and the transverse carina of the frons replaced by two small, circular incassations.

Previously I considered the genus to be parasitic only on the avian genus *Odontophorus*, it having been recorded from nine species of that genus. However, it has now been taken on two other genera of the Phasianidae: *Dactylortyx t. thoracicus* and *Dendrotyx macroura dilutus*. Both of these genera are closely related to *Odontophorus* and possibly the parasite eventually may be found on other genera of the Phasianidae. Apparently *Oxylipeurus* in the Western Hemisphere is confined to the family Cracidae, and *Eiconolipeurus* replaces it on the family Phasianidae.

#### *Eiconolipeurus laticapitis*, new species

FIGURE V:5

Holotype male from *Dendrotyx macroura dilutus* Nelson collected by E. P. Edwards at Patzcuaro, Michoacan, Mexico, February 1948 (in USNM).

Diagnosis: In the shape of the head this is the most aberrant species of the genus now known; the preantennary portion is very wide and with circular margin, the antennary sinus is obsolete, and the first and second segments of the antennae are unusually small. There is no indication of the meso- or metathoracic suture on lateral margins, while the acetabular carinae are submarginal. The distal abdominal segment differs strongly in structure from the other males of the genus. Unfortunately the distal portion of the male genitalia is missing, but its supporting sclerites are very distinct; it is easily distinguished by the figure presented.

Measurements are as follows:

	<i>E. laticapitis</i> ♂		<i>E. inexpectatus</i> ♂	
	<i>length</i>	<i>width</i>	<i>length</i>	<i>width</i>
Body	1.86	—	1.91	—
Frons	—	.326	—	.39
Temples	.475	.35	.51	.412
Prothorax	.15	.29	.16	.315
Pterothorax	.26	.445	.28	.51
Abdomen	1.06	.51	1.09	.52
Genitalia	.24	.054	—	—

*Eiconolipeurus inexpectatus*, new species

FIGURES v:9,15

Holotype male and 3 paratypes from *Dactylortyx thoracicus* (Gambel) collected by E. K. Miller and J. H. Poppy at Rancho del Cielo, Tamulipas, Mexico, July 1948 (in USNM).

Diagnosis: It is much closer to a typical species of the genus than to *laticapitis*, but the preantennary portion of the head is wider and more circular than all other known species. Segments 1 and 2 of antennae are swollen more than normal, the former without the usual projection on posterior margin (position of antenna reversed in fig. 9). Meso- and metathoracic sutures are clearly indicated on lateral margins of thorax and distal portion of abdomen (segments VIII-IX), similar to those of *melanotis* and *sanctaemartae*, but still differing in details (fig. 15). Female is unknown.

Measurements are given in the tabulation above.

Genus *Oxylipeurus* Mjoberg

*Oxylipeurus* Mjoberg, 1910, Ark. Zool., vol. 6, p. 91.—Type species: *Lipeurus inaequalis* Piaget.

This is a very large genus and has been recorded from many Galliformes hosts from all parts of the world. My opinion is that the genus needs some further revision, and that possibly those species parasitic on the family Cracidae (New World) and Phasianidae (New World) should be removed from it, but I do not have the necessary Old World material to attempt such a revision.

The species of *Oxylipeurus*, parasitic on the avian genus *Ortalis*, are an extremely homogenous group, superficially similar, and with few strikingly outstanding differences between the species. They are easily recognized by the transverse, corrugated carina of the frons, instead of a varying number of papillae along the posterior margin of the carina encircling the frons.

Many small morphological differences may be used for their separation. Certain characters will differ in some species that do not differ in others, but a careful check will show that a combination of these small differences will almost always be of specific value whenever the hosts in question are specifically distinct. Small differences will also be found between parasites from conspecific hosts and such differences may sometimes be of subspecific value. If two subspecies of hosts are closely related their ectoparasites may be so nearly alike that to attempt their separation would be pointless.

The characters that may be safely used for specific separation are the following: Relative size of body; size and shape of head and prothorax; type of transverse carina on frons; width and structure of preantennary

and postocular carinae; size and shape of segments 1 and 2 of antennae in males; carinae of prothorax and acetabular bars of pterothorax; attachment of head with prothorax; and to a certain extent the shape and pigmentation of the abdominal sclerites.

The male genitalia are very small (except basal plate) and do not always show differences of value; in many cases the parameres and endomera are invisible. The chaetotaxy of the male is practically the same in all species, except slight differences in length of certain setae.

The females may be separated by most of the characters listed above, but the most dependable characters are: Shape of head and shape and chaetotaxy of abdominal segments VIII-IX (IX is the "claspers"). The fringe of setae on posterior margin of sternite VIII and the short, transverse setae along the lateral margins of the "claspers" are excellent characters, especially the number and length of those along the outer margin of the "claspers."

Enlarged figures of these structures for all females discussed will fully illustrate these differences.

For example: In *araucuanus*, new species, most of the setae on sternite VIII are very short but the transverse setae of the "claspers" (most always present) are entirely absent. These short, thickened setae of the "claspers" range in number from 2 to 8. Except for size of body, antennal structure, and abdominal segments VIII and IX, very little sexual dimorphism is present.

*Oxylipurus araucuanus*, new species

FIGURES v:10,11,16

Holotype female, allotype male, and 2 paratypes from *Ortalis araucuan* (Spix) collected in eastern Brazil (in Emerson collection).

Diagnosis: This is one of the larger species from the avian genus *Ortalis*, the male is equal in size to *variegatus*, the female is larger (body, 2.34 against 2.22), and slightly larger than the female of *garrulae*. The male head is longer than that of *postmarginatus* but the same width at frons and temples; the head of female is longer and narrower at both frons and temples.

Unfortunately the male genitalia are not clearly visible. They seem to resemble those of *huilensis*, but the parameres are narrower and less curving; and the endomera, while of the same type, apparently differs.

The genital claspers of the female resemble those of *variegatus*, no transverse setae are along their outer margins, and the shape of segment VIII, as a whole, is quite different (see figures).

Measurements are as follows:

	<i>O. araucuanus</i> ♂		<i>O. araucuanus</i> ♀	
	<i>length</i>	<i>width</i>	<i>length</i>	<i>width</i>
Body	1.78	—	2.34	—
Frons	—	.29	—	.358
Temples	.47	.326	.553	.40
Prothorax	.174	.26	.14	.306
Pterothorax	.24	.326	.283	.425
Abdomen	.91	.39	1.41	.630

*Oxylipaurus ruficaudatus*, new species

FIGURES v:12,17

Holotype female from *Ortalis ruficauda* Jardine from Venezuela (in USNM).

Diagnosis: With the exception of *angustifrons* (1.82), it is the smallest known species of the genus (length 1.96) but near *chiniri* (1.99), all females. All other species are more than 2.00 in length. However, the shape and proportions of the head differ considerably from both, all measurements are greater than in *chiniri*, and temples narrower than in *angustifrons* (.37 against .40).

It most closely resembles the female of *chiniri* but the corrugations of the transverse carina of the frons are much coarser, and the preantennary carinae much narrower; there are four small hyaline pustules along the inner margin of the postocular carinae, absent in *chiniri*, and 3 long and 2 short transverse setae are on each clasper, with 6 short setae on claspers of *chiniri*.

Measurements are as follows:

	<i>O. ruficaudatus</i> ♀		<i>O. paraguayensis</i> ♂	
	<i>length</i>	<i>width</i>	<i>length</i>	<i>width</i>
Body	1.96	—	2.06	—
Frons	—	.326	—	.303
Temples	.535	.37	.50	.358
Prothorax	.152	.285	.14	.28
Pterothorax	.293	.391	.26	.37
Abdomen	1.12	.45	1.27	.51

*Oxylipaurus paraguayensis*, new species

FIGURES v:13,18

Holotype female from *Ortalis canicollis* (Wagler) collected in Venezuela (in USNM).



Diagnosis: One of the smaller species, it is slightly larger than *costaricensis* and *vetulae* (2.06 against 2.01 and 2.03). Shape of head is similar to that of *ruficaudatus* but smaller in all measurements; the preantennary and postocular carinae are wider and strongly corrugated along inner margin and much more strongly pigmented; attachment of prothorax with head is quite distinct; claspers and segment VIII differ in shape; and only 3 very short spinelike setae are at anterior end of clasper.

Measurements are given in the tabulation above.

*Oxylipeurus huilensis*, new species

FIGURES v:6,7,14

Holotype female, allotype male, and 6 paratypes from *Ortalis guttata columbiana* Hellmayr collected by the author at Belen, Dept. of Huila, Colombia, March 19, 1952 (type in USNM).

Diagnosis: Differs from *chiniri* in possessing short setae on posterior margin of pterothorax to end of abdominal segment II, but in *chiniri* they extend to the middle of V in the female and to middle of VI in the male, same as *variegatus* in this character.

There are 8 setae on claspers instead of 6, ranging from long to medium. This species more closely resembles *variegatus* than *chiniri*, and differs from *variegatus* as follows: Male smaller (1.71 against 1.78); female equal to shortest length for *variegatus* (2.17 against 2.17 to 2.26); head narrower at both frons and temples; prothorax much shorter and slightly narrower (male  $.12 \times .24$  against  $.19 \times .26$ ; female  $.14 \times .29$  against  $.20 \times .30$ ); pterothorax (male  $.24 \times .30$  against  $.13 \times .33$ ; female  $.29 \times .38$  against  $.30 \times .40$ ).

Postocular carinae are narrower, with inner margin less corrugated. Shape of female claspers is entirely different, the inner margin in *variegatus* forms a perfect rectangle, with the patches of setae on each side of VIII much shorter and the setae on claspers distinct. In *variegatus* there are 7 rather short setae, thickened basally, and 2 extremely short ones distally, instead of 8 rather long setae decreasing in length distally.

Male genitalia are very different, with parameres shorter and more curving and endomera of distinct shape in *huilensis*, and with the elongated distal process longer and more slender in *variegatus*.

Measurements follow the next species.

*Oxylipeurus caquetae*, new species

FIGURE v:8

Holotype female from *Ortalis guttata caquetae* Chapman collected by the author at Puerto Venecia, Dept. of Caqueta, Colombia, June 16, 1952 (type in USNM).

Diagnosis: Shape of head is very different from the *chiniri* complex, resembling that of *tenuicapitis*, widest at middle of temples, then tapering

gradually to frons, frons broadly conical in shape, with convex sides and rounded tip. Prothorax much longer and slightly narrower than in *huilensis*; pterothorax shorter and of different shape; attachment of head to prothorax different from *huilensis*; combined segments VIII and IX much wider anteriorly. Claspers much shorter than in *tenuicapitis* and bear 6 long and 2 very short setae distally, instead of 7 long ones.

Setae on posterior margin of pterothorax extend to middle of V; in *tenuicapitis* these setae are very slender and do not reach posterior margin of segment II.

Measurements are given in the tabulation below:

	<i>O. huilensis</i> ♂		<i>O. huilensis</i> ♀		<i>O. caquetae</i> ♀	
	<i>length</i>	<i>width</i>	<i>length</i>	<i>width</i>	<i>length</i>	<i>width</i>
Body	1.71	—	2.17	—	2.04	—
Frons	—	.27	—	.326	—	.295
Temples	.47	.30	.54	.38	.50	.56
Prothorax	.12	.24	.14	.29	.13	.27
Pterothorax	.24	.30	.29	.38	.26	.37
Abdomen	.98	.37	1.37	.54	1.24	.49

## References

CARRIKER, M. A.

1944. Studies in Neotropical Mallophaga (V). The lipeuroid forms of the New World "Galliformes." Part 1. Rev. Brasileira Biol., vol. 4, pp. 557-585.
1944. Studies in Neotropical Mallophaga (IV). New genera and species. Bol. Ent. Venezolana, vol. 3, pp. 65-104.
1945. Studies in Neotropical Mallophaga (V). The lipeuroid forms of the New World "Galliformes." Part 2. Rev. Brasileira Biol., vol. 5, pp. 91-112.
1945. Studies in Neotropical Mallophaga (VII). *Goniodes* and allied genera from gallinaceous hosts. Rev. Acad. Colombiana Cienc., vol. 6, pp. 355-399.

MJÖBERG, E.

1910. Studien über Mallophagen und Anopluren. Ark. Zool., vol. 6, pp. 1-296.