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A New Genus and New Species of Chewing Louse (Phthiraptera: Menoponidae) from the Lesser Melampitta (Aves: Passeriformes)

ROGER D. PRICE[1] AND RONALD A. HELLENTHAL[2]

ABSTRACT: The new genus ***Oculomenopon*** is described to include the single new species, ***O. melampittae***, with the type host being the Lesser Melampitta, *Melampitta lugubris* (Passeriformes: Genera Incertae Sedis), from New Guinea.

KEY WORDS: Chewing lice, *Oculomenopon*, Phthiraptera, Menoponidae, melampittas, New Guinea

In the course of studying the amblyceran chewing lice of the genus *Myrsidea* Waterston of various passeriform families, we came across a series of lice that had been labeled *Myrsidea* but that obviously represented a genus quite distinct from that one or from any others of which we are aware. It is our purpose here to describe and illustrate this new genus and new species.

In the following descriptions, all measurements are in millimeters. Tergal setal counts include the postspiracular setae and all setae between them. Host classification follows that of Dickinson (2003). The holotype of the new species is deposited in the K. C. Emerson Museum, Oklahoma State University, Stillwater; paratypes are in that collection and in the collections of R. E. Elbel, University of Utah, Salt Lake City, and Bernice P. Bishop Museum, Honolulu, Hawaii.

Systematics

Oculomenopon Price and Hellenthal, new genus

TYPE SPECIES: *Oculomenopon melampittae*, new species.

DIAGNOSIS: The combination of head chaetotaxy, shape, and structure; the absence of sternal or femoral ctenidia or any indication of an aster of a few heavy setae at each lateroposterior corner of sternite II; and the presence of an extremely unusual modification of the female abdominal tergites easily distinguish the members of this genus from those of all other menoponid genera.

DESCRIPTION: **Male.** As in Fig. 1. Head with anterior margin evenly rounded; without preocular slit or notch; without ventral spinous processes; with inner and outer occipital setae long, of equal length; alveoli of marginal temple setae 26 and 27 well separated; gula simple, with posteriormost seta stouter and longer than others; and unique well developed hypopharynx (Fig. 2). Pronotum with posterior margin having 3 long setae on each side, with short seta inserted between them; lacking median dorsal setae; prosternal plate well developed, with pair of short anterior setae. Mesothorax large, with single pair of minute setae posterior to postnotum and pair also at its posterior margin. Femur III with sparse ventral setal brush. Abdomen with tergites I–VIII undivided, having only single row of marginal setae; pleurites without anterior setae; sternite I small, lacking setae; II large;

[1] 4202 Stanard Circle, Fort Smith, Arkansas 72903-1906, USA. e-mail: rpricelice@aol.com

[2] Department of Biological Sciences, P.O. Box 369, University of Notre Dame, Notre Dame, Indiana 46556-0369, USA. e-mail: ronald.a.hellenthal.1@nd.edu

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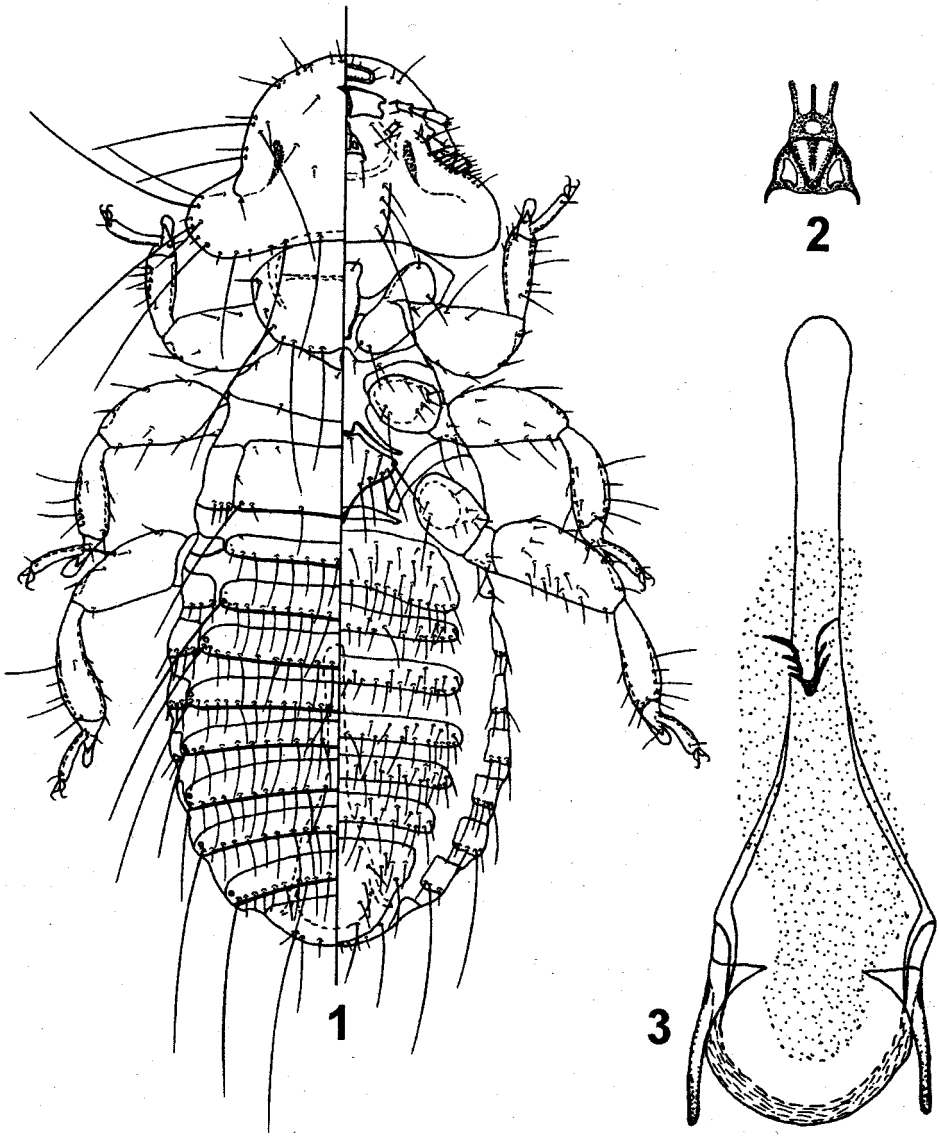

Figs. 1–3. *Oculomenopon melampittae* n. sp. 1. dorsoventral whole male. 2. male hypopharynx. 3. male genitalia.

III–VII smaller, with marginal and anterior setae; subgenital plate of fused sternites VIII–IX. Genitalia as in Fig. 3.

Female. Head and prothorax as for male. Thorax and abdomen as in Fig. 4. Mesothorax large, with median dorsal modification. Metathorax also large, with median metanotal division, without posterior marginal setae; unusual surface sculpturing on anterior latero-dorsal portion; metasternal plate with a disproportionately large number of setae. Abdomen with extremely unusual tergal modification. Tergites I–II laterally reduced but apparently fused medially to form pair of circular seta-bearing sclerites (Fig. 4). Tergites

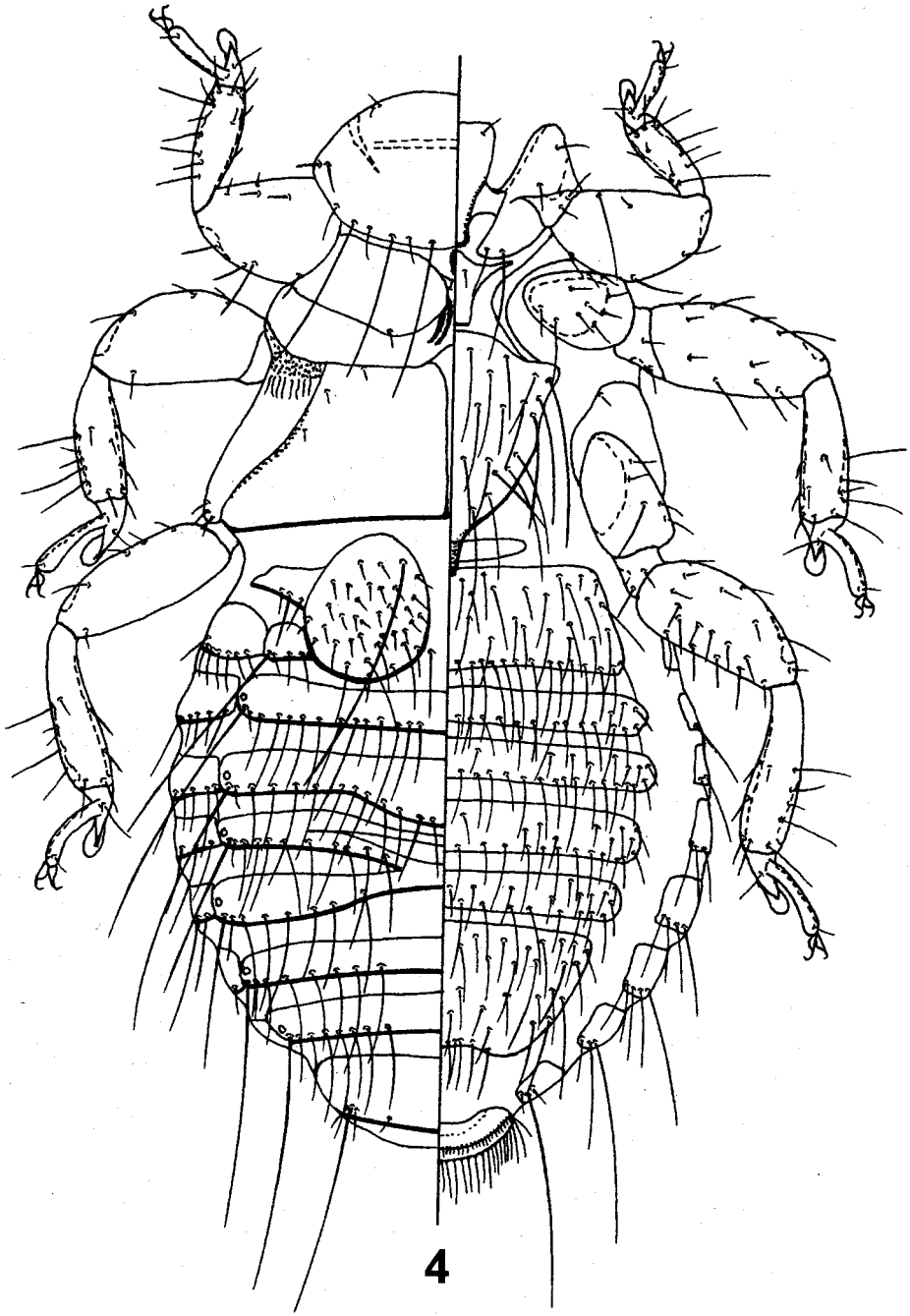

Fig. 4. *Oculomenopon melampittae* n. sp., dorsoventral female thorax and abdomen.

III, VII, and VIII normal in shape, IV with medioposterior convexity, V and VI medially fused with complex divisions. Sternites as for male, except subgenital plate of fused VII–IX. Anus oval, without inner setae; dorsal fringe with uniform short setae, ventral fringe of minute setae.

Oculomenopon melampittae Price and Hellenthal, new species
(Figs. 1–4)

TYPE HOST: *Melampitta lugubris* Schlegel, the Lesser Melampitta.

DIAGNOSIS: This species is recognized from all other known species by the same features discussed under the generic description.

DESCRIPTION: **Male.** As in Fig. 1. Metasternal plate with 14–16 setae. Tergal setae: I, 15–19; II, 19–23; III–VI, 21–25; VII, 20–23; VIII, 17–20. Postspiracular setae very short on I, very long on II–IV and VII–VIII, shorter on V–VI. Sternal setae: II, 42–53; III, 26–30; IV–V, 30–40; VI, 26–38; VII, 22–28; VIII, 11–20. Genitalia (Fig. 3) with straight slender parameres, lightly spiculate sac with sclerite shaped as shown. Dimensions: temple width, 0.42–0.44; head length, 0.27–0.28; prothorax width, 0.27–0.28; prosternal plate length, 0.11–0.12; metathorax width, 0.38–0.42; metasternal plate length, 0.15–0.16; abdomen width at IV, 0.45–0.50; total length, 1.18–1.29; genitalia length, 0.34–0.38.

Female. Thorax and abdomen as in Fig. 4. Metasternal plate with 29–40 setae. Tergal setae: I, each circle with 30–35 setae, including single very long seta, with 5–6 other setae on lateral portions; II laterally with total of 10–13 setae; III, 23–28; IV, 25–29; V, 18–22; VI–VII, 16–20; VIII, 15–16. Postspiracular setae as for male. Sternal setae: II, 65–80; III, 27–34; IV–V, 36–45; VI, 32–40; VII, 25–29; subgenital plate with 5–8 marginal, 16–22 anterior setae. Anus with 33–39 dorsal fringe setae, 46–55 ventral. Dimensions: temple width, 0.47–0.50; head length, 0.27–0.31; prothorax width, 0.31–0.33; prosternal plate length, 0.13–0.14; metathorax width, 0.55–0.63; metasternal plate length, 0.24–0.28; abdomen width at IV, 0.61–0.65; total length, 1.45–1.55; anus width, 0.23–0.25.

TYPE MATERIAL: Holotype female, ex *M. lugubris*, **NEW GUINEA**: Morobe Dist., SW Garaina, Moimo, 11 Dec. 1969, BBM-98065. Paratypes, all from *M. lugubris*: 1 female, 2 males, same as holotype; 3 females, 3 males, same except Wau, Mt. Kainde, 24 Aug. 1969, BBM-97691; 3 females, 1 male, Morobe Dist., Bulldog Rd., 6 mi. from Edie Creek, 4 Dec. 1970, A. B. Mirza, BBM-NG 99485; 3 females, 1 male, same except 5 Dec. 1970, BBM-NG 99498; 4 females, 6 males, same except 5–9 Dec. 1970, BBM 99552; 2 males, Morobe Dist., Bulldog Rd., 12 mi. S Edie Creek, 12 Jul. 1966, BBM-NG 52416.

ETYMOLOGY: The genus name *Oculomenopon* is a combination of the word denoting "ocular-appearing" in reference to the 2 large circular tergal sclerites on the anterior abdomen of the female coupled with the common louse suffix "menopon". The species name is derived from the genus of the type host.

Discussion

If an attempt is made to identify these lice in the key to the menoponid genera in Clay (1969), and if one overlooks a discrepancy of head seta 23 being present, then they will come out as *Myrsidea*. However, our extensive work with *Myrsidea* makes it evident that a number of features of *O. melampittae* are so divergent that it cannot be considered as *Myrsidea*. Additional distinguishing characters beyond those stated earlier are: (1) head with the outer occipital seta as long as the inner; (2) the presence of head seta 23; (3) the wide separation of the alveoli of head setae 26 and 27; (4) the unique hypopharyngeal sclerites (Fig. 2); (5) the female subgenital plate shape and setae; (6) the type of female anal ventral fringe setae; and (7) the thoracic structure and chaetotaxy, especially of the female.

In the key to the chewing louse genera from the Passeriformes in Price *et al.* (2003:21), the absence of abdominal ctenidia and ventral head spines leads directly to couplets 6 and 7

that contain *Myrsidea*, *Kaysius* Price and Clayton, and *Machaerilaemus* Harrison. Among other features, *Oculomenopon* has a distinctly different head shape from the last 2 genera. Its differences from *Myrsidea* have been previously discussed.

The family placement of the type host, *Melampitta lugubris*, within the Passeriformes is open to question. Dickinson (2003) places *Melampitta* Schlegel along with *Ifrita* Rothschild as "Genera Incertae Sedis" between the families Corcoracidae and Paradisaeidae. Earlier bird classifications have placed these genera in the Muscicapidae (Mayr and Paynter, 1964), Corvidae (Sibley and Monroe, 1990), and Orthonychidae (Howard and Moore, 1991), the last a family not recognized by Dickinson (2003). Unfortunately, this strange new louse genus shows few affinities to other menoponid genera on passerines and, therefore, provides little supporting evidence that can aid in the proper placement of its host. It is yet another example of the highly unusual louse fauna found on New Guinea birds.

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