

## Two new species of the genus *Myrsidea* Waterston (Phthiraptera: Menoponidae) from cotingas (Passeriformes: Cotingidae)

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### Abstract

Two new species of chewing lice of the genus *Myrsidea* Waterston from the passerine family Cotingidae are described and illustrated. They and their type host are: *M. cinnamomei* ex *Pachyrampus cinnamomeus* and *M. blattae* ex *Schiffornis turdina*. These are the first species of *Myrsidea* recorded from the Cotingidae.

**Key words:** chewing lice, *Myrsidea*, Phthiraptera, Menoponidae, Passeriformes, cotingas, Cotingidae

### Introduction

There are over 200 recognized species of *Myrsidea* Waterston, with the vast majority of these from hosts in the avian order Passeriformes (Price et al. 2003). However, no species of this genus is known from the passerine family Cotingidae. It is our purpose here to describe and illustrate 2 new species.

In the following descriptions, all measurements are in millimeters. Abbreviations are TW, temple width; HL, head length; PW, prothorax width; MW, metathorax width; AWIV, abdomen width at segment IV; ANW, female anus width; TL, total length; GL, male genitalia length. Tergal setal counts include the postspiracular setae and all setae between them; sternal setae on segment II do not include the aster setae. Host classification and names follow Dickinson (2003). Holotypes are deposited in the National Museum of Natural History, Smithsonian Institution, Washington, DC; paratypes are distributed between that collection and that of the senior author.

**Genus *Myrsidea* Waterston**

*Myrsidea* Waterston 1915: 12. Type species: *Myrsidea victrix* Waterston by original designation.

Because a thorough characterization of this genus is available in Clay (1966), we will provide here only the features that are significant in defining the genus as it pertains to coitinga lice.

Head (Fig. 1) anteriorly rounded; without lateral notch or slit; inner occipital setae long, outer minute; without ventral sclerotized processes; each side of gula with heavier longer posterior seta; hypopharyngeal sclerites well developed.

Thorax (Figs. 1, 5) with pronotum having 6 posterior setae; without central setae; with 3 short setae at each lateral angle. Mesonotum with 2 minute medioanterior setae adjacent to postnotum and 2 at posterior margin. Metanotum without central setae. Prosternal plate well developed, elongate, with 2 short anterior setae; metasternal plate large, diamond shaped, usually with 6 setae, much less often 5 or 7; venter of femur III with setal brush. Abdomen (Figs. 1, 4–6) with undivided tergites, without anterior setae except for very small corner seta on each side of tergite I; sternite I small, without setae; sternite II enlarged, with aster of 4 heavy setae at each lateroposterior corner. Pleurites without anterior setae. Female anus oval, without inner setae; subgenital plate of fused sternites VII–IX, with lightly serrated posterior margin. Male subgenital plate of fused sternites VIII–IX; genitalia of characteristic shape (Fig. 2), with spinous sac having associated sclerites (Fig. 3). Sexual dimorphism limited to male with smaller dimensions, sparser abdominal chaetotaxy, and differences associated with genitalic features of posterior abdomen. Female with either gross enlargement of anterior abdominal tergites (Fig. 4) or with essentially unmodified tergites (Fig. 6). Male tergal segments unmodified (Figs. 1, 5). For brevity, we will not repeat these generic characters in discussing each species.

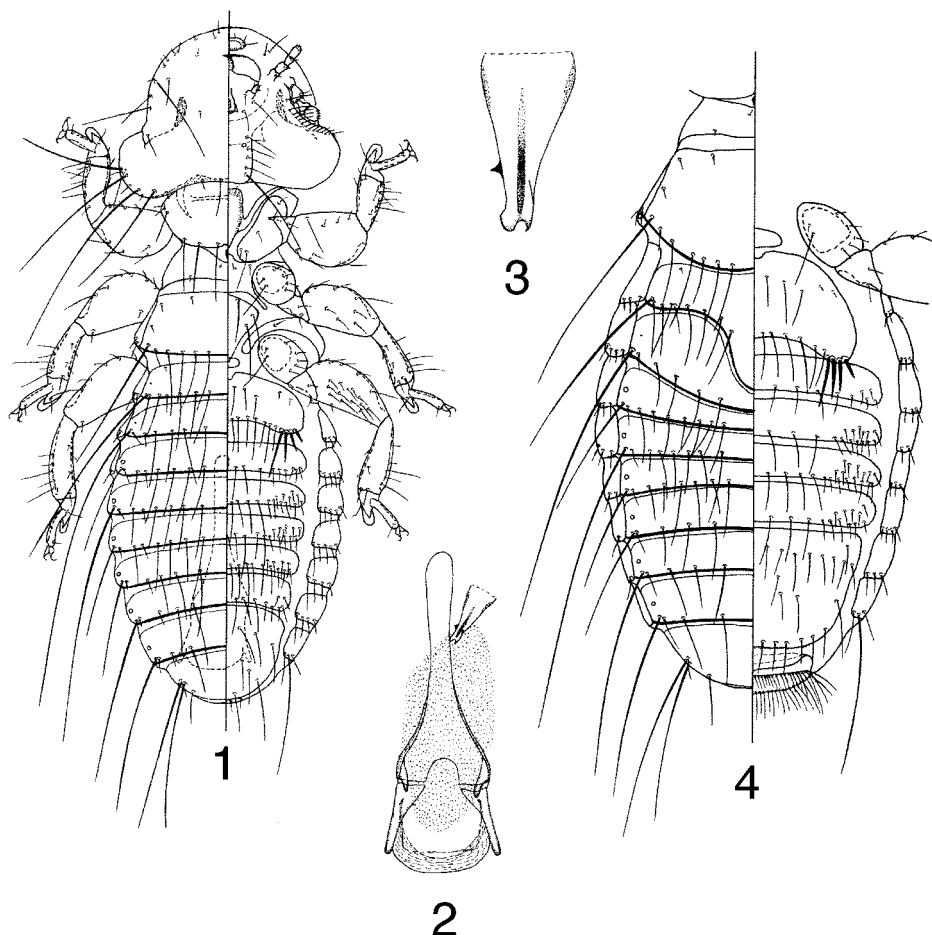
***Myrsidea cinnamomei* Dalglish and Price, new species (Figs. 1–4)**

**Type host.** *Pachyramphus cinnamomeus* Lawrence, Cinnamon Becard.

**Male.** As in Fig. 1. Metanotal margin with 12–13 setae. Tergal setae: I–V, 15–16; VI, 11–13; VII, 10–11; VIII, 7–8. Postspiracular setae very long on I–II, IV, and VII–VIII, much shorter on III and V–VI. Sternal setae: II, 22–24; III, 17–19; IV–V, 30–35; VI, 26–30; VII, 18; VIII of subgenital plate, 6; remainder of plate as in Fig. 1. Genital sac sclerites as in Fig. 3. Dimensions: TW, 0.42–0.43; HL, 0.29–0.30; PW, 0.27; MW, 0.37–0.38; AWIV, 0.45; GL, 0.42–0.46; TL, 1.25–1.31.

**Female.** Head as for male (Fig. 1), thorax and abdomen as in Fig. 4. Metanotal margin with 12–15 setae. Tergite I with medioposterior broadly rounded prolongation, compressing tergites II–III. Tergal setae: I, 15–19; II, 16–18; III–IV, 14–18; V, 12–16; VI, 9–13; VII, 8–10; VIII, 7–8. Postspiracular setae as for male. Posterior marginal setae on IX as in

Fig. 4. Sternal setae on II, 21–26; III, 16–22; IV, 30–38; V, 37–44; VI, 25–35; VII of subgenital plate, 14–19; remainder of plate with 11–14 marginal, 8–13 anterior setae. Anus with 32–38 ventral fringe setae, 33–41 dorsal. Dimensions: TW, 0.46–0.47; HL, 0.30–0.32; PW, 0.28–0.30; MW, 0.43–0.46; AWIV, 0.55–0.59; ANW, 0.22–0.25; TL, 1.48–1.55.



**FIGURES 1–4.** *Myrsidea cinnamomei*. 1, Dorsoventral male. 2, Male genitalia. 3, Male genital sac sclerites. 4, Female meso-metanotum and dorsoventral abdomen.

**Type material.** Female holotype, ex *P. cinnamomeus*, **COSTA RICA**: Limon, 10 km. E Puerto Viego, Punta Cocles Hotel, 24–25 April 1992, R. L. Fisher-214. Paratypes, 4 females, 2 males, same data as holotype; 1 female paratype, same except La Selva Biological Station, 11–14 June 1993, R. L. Fisher-388.

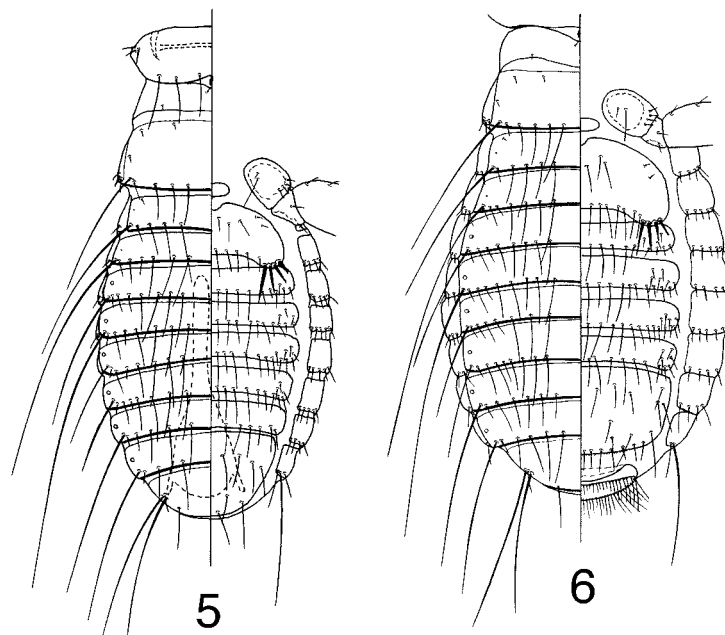
**Remarks.** This species is characterized by the smaller dimensions of the head and thorax, the smaller number of setae on the abdomen of both sexes, and the female with the highly modified anterior abdominal tergites.

**Etymology.** The specific name is derived from the species of the type host.

*Myrsidea blattae* Dalglish and Price, new species (Figs. 5–6)

**Type host.** *Schiffornis turdina* Lawrence, Thrush-like Schiffornis.

**Male.** Head as in Fig. 1, thorax and abdomen as in Fig. 5. Metanotal margin with 10 setae. Tergal setae: I, 11; II–VI, 15–17; VII, 14; VIII, 10. Postspiracular setae extremely long on II and IV, shorter on I, III, VII, and VIII, shortest on V and VI. Sternal setae: II, 21; III, 19; IV–VI, 25–26; VII, 13; VIII of subgenital plate, 8; remainder of plate as in Fig. 5. Genital sac somewhat obscured, but apparently close to Fig. 3. Dimensions: TW, 0.47; HL, 0.32; PW, 0.28; MW, 0.37; AWIV, 0.46; GL, 0.40; TL, 1.29.



**FIGURES 5–6.** *Myrsidea blattae*. 5, Male dorsal thorax and dorsoventral abdomen. 6, Female meso-metanotum and dorsoventral abdomen.

**Female.** Head as in Fig. 1, thorax and abdomen as in Fig. 6. Metanotal margin with 10–12 setae. Abdominal tergites not enlarged. Tergal setae: I, 12; II, 14–16; III–IV, 17–20; V–VI, 16–19; VII, 14–17; VIII, 12. Postspiracular setae as for male. Posterior marginal setae on IX as in Fig. 6. Sternal setae on II, 22–25; III, 21–26; IV, 27–32; V, 33–34; VI, 25–34; VII of subgenital plate, 11–12; remainder of plate with 11–13 marginal, 8–9 anterior setae. Anus with 33–34 ventral fringe setae, 31–34 dorsal. Dimensions: TW, 0.50–0.51; HL, 0.35–0.36; PW, 0.30–0.31; MW, 0.43–0.44; AWIV, 0.56–0.63; ANW, 0.22–0.23; TL, 1.40–1.47.

**Type material.** Female holotype, ex *S. blattae*, NE PERU: SE Inquitos, Rio Napa, Explor Napa Camp, 13 June 1989, R. C. Dalglish-6927. Paratypes, 3 females, 1 male, same data as holotype.

**Remarks.** This species is characterized by its larger dimensions, both sexes with more setae on tergites VI–VIII and fewer setae on metanotal margin and sternites IV–V, and the female without any highly modified abdominal tergites.

**Etymology.** Named after Elizabeth K. Blatt, of Princeton, West Virginia, USA., who assisted and supported the field work in Peru.

## Discussion

Hosts of the two *Myrsidea* species described herein are placed in the subfamily Tityrinae (Passeriformes: Cotingidae) by Dickinson (2003:343). *Schiffornis turdina* was previously considered by most ornithologists to be a manakin (Passeriformes: Pipridae) and *Pachyramphus cinnamomeus* was commonly included within the tyrant-flycatchers (Passeriformes: Tyrannidae). Sibley and Monroe (1990) place both of these hosts within the Tyrannidae. The *Myrsidea* of the Pipridae have been recently reviewed (Dalglish and Price 2003). *Myrsidea* of the Tyrannidae are currently being studied and they have been found to share many characters in common with those from the Cotingidae. Though *Myrsidea* are known only from a small number of hosts within these families they do support the widely held view that these families are closely related.

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- Figure Legends