

## The *Menacanthus eurysternus* Complex (Mallophaga: Menoponidae) of the Passeriformes and Piciformes (Aves)<sup>1</sup>

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### ABSTRACT

*Menacanthus eurysternus* and *M. merisuoi* are redescribed. The former is broadly distributed, with specimens studied from 20 families, 70 genera, and 118 species of Passeriformes; from 3 genera and 5 species of Pici-

formes; and questionably from 4 other host orders. The latter is morphologically very close to *M. eurysternus* and has been seen from 4 genera of Corvidae. 36 new synonymies are given for *M. eurysternus*.

The species of *Menacanthus* Neumann from the avian order Passeriformes tend to be restricted in their host distribution. There is, however, one notable exception to this, in which one species is widespread on many passerine families as well as on some hosts outside the Passeriformes. Since a review of the passerine *Menacanthus* can be handled most appropriately by considering morphologically related lice of limited host distribution, it has become apparent that the first step should be the consideration of the widely distributed *M. eurysternus* (Burmeister) and any closely related forms. I have found 41 of the 95 specific and subspecific names applied to date to passerine *Menacanthus* to be referable to *M. eurysternus*. The net result of this study is the redescription of the 2 species comprising this louse complex and the presentation of a long list of junior synonyms and host species. This action will enable the treatment of the remaining *Menacanthus* to proceed on a more sound and logical basis. Perhaps additional junior synonyms will be found, but I have concluded that all names applied prior to *M. eurysternus* clearly represent other species and there is a minimal chance of *M. eurysternus* itself falling into junior synonymy.

In the following descriptions, morphological terminology and numbers applied to certain head and prothoracic setae are much as given by Clay (1969). Measurements are in millimeters. For *M. eurysternus*, ranges are given to encompass all material examined; parenthetical values following these are ranges for the type-host specimens. Illustrations are for lice from the type-host, unless stated to the contrary. The host nomenclature follows that of J. L. Peters' "Check-list of the Birds of the World" for the volumes issued to date, and other sources for portions not covered therein.

*Menacanthus eurysternus* (Burmeister),  
sensu lato  
(Fig. 1-9)

*Pediculus pyrrhulae* Panzer, 1798 (nec Schrank, 1776): 24. Type-host: *Loxia Pyrrhula* = *Pyrrhula pyrrhula pyrrhula* (L.).

*Menopon eurysternum* Burmeister, 1838: 439. Type-host: *Corvus pica* = *Pica pica pica* (L.).

*Menopon fusco-cinctum* Denny, 1842: 199, 219. Type-host: *Lanius collurio* L. New Synonymy.

*Colpocephalum flavum* Rudow, 1866: 472. Type-host: *Carduelis granadensis* = *Cardinalis phoeniceus* Bonaparte. New Synonymy.

*Menopon sittae* Giebel, 1866: 390. Type-host: *Sitta europaea* L. New Synonymy.

*Menopon annulatum* Giebel, 1874: 285. Type-host: *Passer domesticus* (L.). New Synonymy.

*Menopon picae* Piaget, 1880: 433. Type-host: *Corvus pica* = *Pica pica pica*.

*Menopon parvulum* Piaget, 1880: 444. Type-host: *Cypselus apus* = *Apus apus apus* (L.)—questionable host. New Synonymy.

*Menopon meniscus* Piaget, 1880: 447. Type-host: *Emberiza lapponica* = *Calcarius lapponicus* (L.). New Synonymy.

*Menopon spinosum* Piaget, 1880: 449. Type-host: *Cardinalis virginianus* = *C. cardinalis* (L.). New Synonymy.

*Menopon germanum* Piaget, 1880: 450. Type-host: *Pogonorrhynchus Rolleti* = *Lybius rolleti* (Defilippi). New Synonymy.

*Menopon dubium* Piaget, 1880: 452. Type-host: *Edolius longus* = *Dicrurus macrocercus javanus* Kloss. New Synonymy.

*Menopon gracile* Piaget, 1880: 482. Type-host: *Porphyrio smaragdinus* Temminck—questionable host. New Synonymy.

*Colpocephalum parviceps* Piaget, 1880 (nec Piaget, 1880: 446): 531. Type-host: *Lamprotornis aenea* = *L. caudatus* (Müller). New Synonymy.

*Colpocephalum biseriatum* Piaget, 1880 (nec Piaget, 1880: 469): 532. Type-host: *Gracula javanensis* = *G. religiosa religiosa* L. New Synonymy.

*Menopon biaculeatum* Picaglia, 1885: 86. Type-host: *Astrilda* sp. = *Lonchura malabarica cantans* (Gmelin). New Synonymy.

*Menopon spiniferum* Piaget, 1885: 99. Type-host: *Cyanocorax pileatus* = *C. chrysops* (Vieillot). New Synonymy.

*Menopon tibiale* Piaget, 1885: 100. Type-host: *Cyanopoliis cooki* = *Cyanopica cyana cooki* Bonaparte. New Synonymy.

*Menopon tibiale* var. *minor* Piaget, 1885 (nec Piaget, 1880): 101. Type-host: *Lamprocolius auratus* = *Saroglossa aurata* (Müller). New Synonymy.

*Menopon translucidum* Piaget, 1885: 150. Type-host: *Amblyrhamphus holosericeus* (Scopoli). New Synonymy.

*Menopon persignatum* Kellogg and Chapman, 1899: 128. Type-host: *Aphelocoma coerulescens californica* (Vigors). New Synonymy.

*Menopon difficile* Carriker, 1903: 188. Type-host: *Buarremon brunneinucha* = *Atlapetes brunneinucha brunneinucha* (Lafresnaye). New Synonymy.

*Menopon monochromateum* Kellogg and Paine, 1914: 240.

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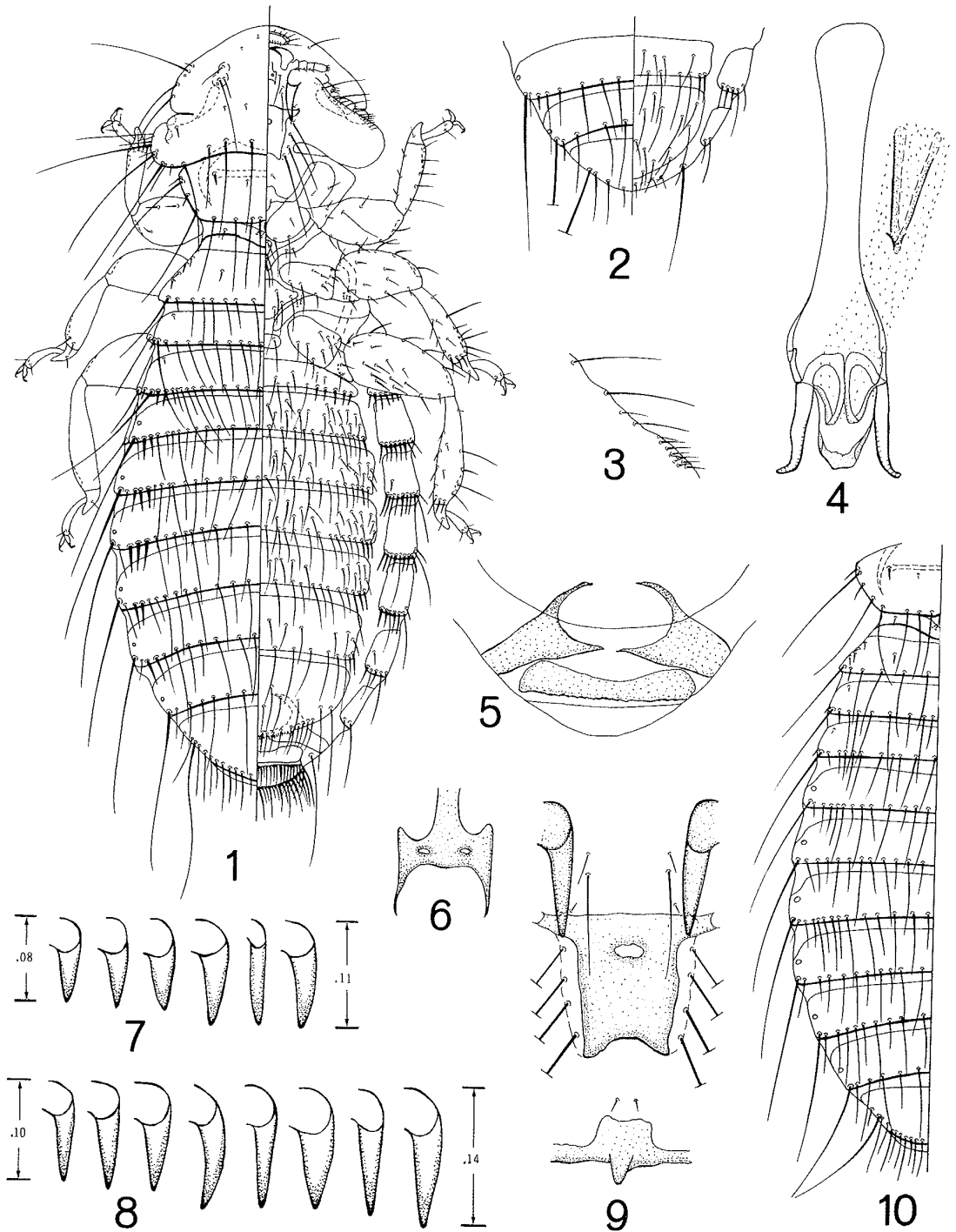


FIG. 1-9.—*M. eurysternus*. 1, ♀; 2, ♂ terminalia; 3, ♀ subocular setae; 4, ♂ genitalia (ex *Dicrurus leucophaeus*); 5, ♀ ventral preanal sclerites; 6, ♀ hypopharyngeal sclerites; 7, ♀ ventral spinous head processes (ex *Acridotheres tristis*); 8, ♀ ventral spinous head processes (ex *Turdus migratorius*); 9, ♀ medioventral head and prothorax.

FIG. 10.—*M. merisuoii*, ♀ dorsal thorax and abdomen.

- Type-host: *Garrulus lanceolatus* and *Graculus graculus* = *Garrulus glandarius lanceolatus* Vigors and *Pyrrocorax graculus* (L.). New Synonymy.
- Menacanthus microsceli* Uchida, 1926: 18. Type-host: *Microscelis amaurotis* (Temminck). New Synonymy.
- Menacanthus subspinosus* Uchida, 1926: 25. Type-host: *Passer rutilans rutilans* Temminck. New Synonymy.
- Menacanthus tristisi* Qadri, 1935: 226. Type-host: *Acridotheres tristis* (L.). New Synonymy.
- Menacanthus mutabilis* Blagoveshtchensky, 1940: 31. Type-host: *Sturnus vulgaris vulgaris* L. and *S. v. caucasicus* Lorenz. New Synonymy.
- Menacanthus minusculus* Blagoveshtchensky, 1940: 36. Type-host: *Turdus philomelos philomelos* Brehm. New Synonymy.
- Menacanthus dicruri* Eichler, 1947: 15. Type-host: *Dicrurus leucophaeus* Vieillot. New Synonymy.
- Menacanthus cornicis* Blagoveshtchensky, 1948: 263. Type-host: *Corvus corone sharpii* Oates. New Synonymy.
- Menacanthus spiniferus aplonis* Carriker, 1949: 20. Type-host: *Aplonis opaca guami* Moniyama. New Synonymy.
- Menacanthus safedgal* Ansari, 1951: 141. Type-host: *Molpustes l. leucogenys* = *Pycnonotus leucogenys leucogenys* (J. E. Gray). New Synonymy.
- Menacanthus gulabimaina* Ansari, 1951: 145. Type-host: *Pastor roseus* = *Sturnus roseus* (L.). New Synonymy.
- Menacanthus himalayicus* Ansari, 1951: 148. Type-host: *Sturnus vulgaris humii* Brooks.
- Menacanthus hopkinsi* Eichler, 1953: 172. *Nom. nov.* for *M. mutabilis* Blagoveshtchensky, 1940.
- Menacanthus pfelegeri* Eichler, 1953: 174. *Nom. nov.* for *M. spinosus* Piaget, 1880, from *Carduelis cucullata* = *Spinus cucullatus* (Swainson). New Synonymy.
- Menacanthus festinus* Eichler and Zlotorzycza, 1963: 367. Type-host: *Fringilla coelebs* L. New Synonymy.
- Menacanthus pius* Eichler and Zlotorzycza, 1963: 369. Type-host: *Turdus merula* L. New Synonymy.
- Menacanthus polonicus* Eichler and Zlotorzycza, 1963: 371. Type-host: *Turdus pilaris* L. New Synonymy.
- Menacanthus inscitus* Zlotorzycza, 1965: 48. *Nom. nov.* for *P. pyrrhulae* Panzer, 1798. New Synonymy.
- Menacanthus kevei* Sasvari-Schafer, 1966: 211. Type-host: *Turdus falklandii* = *Turdus falklandii* Quoy and Gaimard. New Synonymy.

*Female*.—As in Fig. 1. Head with preocular slit; nodi moderately developed, associated carinae weak. Occipital setae 21 and 22 very long, extending across prothorax; seta 23 shorter, 0.05–0.12 long, with alveoli of all 3 essentially in straight line each side. Seta 24 0.15–0.25 long, seta 25 0.015–0.020 long. Alveoli of marginal temple setae 26 and 27 closely associated, with 26 much finer and shorter than 27. Ocular seta 19 0.01–0.02 long, fine; inner middorsal seta 17 somewhat longer and slightly anterior to minute outer middorsal seta 18. Dorsal head seta 16 variably anterior to medioanterior to setae 14 and 15 and sensillum *c*; no evidence of sensillum *d*. Preocular setae 10 and 11 long, 9 very long, with adjacent seta 8 much shorter and finer. Antenna with slightly expanded pedicel and undivided terminal segment, mostly concealed beneath head. Gular plate (Fig. 9) typically with 4 + 4 setae inserted in transparent lateral area, posterior margin concave, and with small central unpigmented portion. Ventral spinous head process each side 0.07–0.14 (0.08–0.11) long, variable in shape

(Fig. 7, 8) but generally long and extending into gular area. Several widely spaced subocular setae preceding comb row (Fig. 3); hypopharyngeal sclerites weakly developed (Fig. 6). Pronotal margin with 12 long, 4 short setae; outer central pronotal seta 1 heavier and longer than inner seta 2; prosternal plate moderately developed, without setae other than usual 1 + 1 anteriorly (Fig. 9). Normal vertically oblong postnotum; mesothorax not as sclerotized ring; 4 medioanterior mesonotal setae, alveoli of pair each side close together; mesosternal plate with 8–13 (9–12) setae. Metanotum with 12–19 (12–17) marginal, 2 medioanterior, and each side with 3–5 lateral setae; metasternal plate with 7–11 (7–10) setae. Ventral femur III with sparse brush of setae. Abdominal tergites I and II with short seta lateral to postspiracular seta; tergites I–VIII of equal lengths, undivided, with very long postspiracular setae, and without anterior setae. Tergal setae: I, 18–27 (19–25); II–V, 23–40 (25–37); VI, 21–36 (26–30); VII, 18–33 (22–28); VIII, 10–17 (10–15); and most tergites with group of close-set heavier shorter setae laterally. Last tergite with ca. 20–25 short to very long marginal setae. Pleurites without prolonged ventroposterior corners or internal thickenings; with row of generally short heavy marginal setae and occasional short anterior seta. Sternal setae: I, 2–3; II, 20–35 (26–35); III–V, 35–75 (47–68); VI, 32–60 (41–50); VII, 22–43 (25–40); weakly developed lateral brushes on sternites III–VI; often few heavier short setae at lateroposterior corner of sternites. Subgenital plate (Fig. 1) separate from sternite VII, with serrated medioposterior margin, and with total of 22–41 (27–32) setae. Ventral pre-anal sclerites as in Fig. 5. Anus essentially oval, without inner setae, and with 33–50 (41–46) ventral, 37–59 (47–55) dorsal fringe setae.

*Male*.—Head and thorax as for female. Abdomen differing as follows. Tergal setae: I, 12–19 (12–15); II–V, 17–29 (18–22); VI, 15–24 (17–19); VII, 13–19 (14–18); VIII, 8–11 (10). Last tergite with 5–8 marginal setae (Fig. 2). Sternal setae: II, 19–27 (24–25); III–V, 24–50 (34–45); VI, 19–33 (28); VII, 11–23 (16–19); VIII, 6–10 (9–10); sternites VIII and IX fused, with portion of subgenital plate posterior to VIII with 7–17 (11–13) setae (Fig. 2). Genitalia (Fig. 4) essentially symmetrical, 0.35–0.46 (0.37–0.44) long, 0.08–0.11 (0.09–0.10) wide; with parameres distally flexed outwards and extending slightly beyond endomerale plate; sclerite of genital sac "V"-shaped, 0.10–0.13 long, with variable clarity of delineation of arms of "V," from neither to one or both arms strongly delineated.

*Dimensions*.—Preocular width, ♀ 0.37–0.48 (0.43–0.46), ♂ 0.35–0.43 (0.41–0.43); temple width, ♀ 0.47–0.62 (0.54–0.59), ♂ 0.41–0.51 (0.48–0.50); prothorax width, ♀ 0.36–0.46 (0.40–0.44), ♂ 0.32–0.40 (0.33–0.36); metathorax width, ♀ 0.44–0.58 (0.49–0.54), ♂ 0.36–0.46 (0.41–0.44); total length, ♀ 1.50–2.09 (1.76–2.08), ♂ 1.20–1.63 (1.49–1.57).

*Remarks*.—This species is best recognized from the other known *Menacanthus* by the long ventral spinous head processes, the shape of the pigmented gular area,

the short stout setae laterally on the abdominal tergites, pleurites, and sternites, the serrated medioposterior margin of the female subgenital plate, and the structure of the male genitalia, especially of the shape of the genital sac sclerite.

The distribution of *M. eurysternus* is a very broad one on hosts within the Passeriformes, with a representation of 20 families, 70 genera, and 118 species. This distribution is summarized as follows, where the louse is known from a single species in each host genus, unless parenthetically indicated otherwise. An asterisk (\*) indicates the 10 families with *M. eurysternus* as the only *Menacanthus* species.

Corvidae	<i>Toxostoma</i> (3)
<i>Aphelocoma</i>	Muscicapidae
<i>Corvus</i>	<i>Actinodura</i>
<i>Cyanocitta</i> (2)	<i>Brachypteryx</i>
<i>Cyanocorax</i> (2)	<i>Collyriocichla</i>
<i>Cyanopica</i>	<i>Garrulax</i> (2)
<i>Garrulus</i>	<i>Hylocichla</i>
<i>Nucifraga</i>	<i>Muscicapa</i> (2)
<i>Pica</i>	<i>Sialia</i>
<i>Ptilostomus</i>	<i>Timalia</i>
*Dicruridae	<i>Turdus</i> (6)
<i>Dicrurus</i> (6)	<i>Zoothera</i>
Emberizidae	*Nectariniidae
<i>Aimophila</i>	<i>Aethopyga</i>
<i>Atlapetes</i>	<i>Arachnothera</i> (3)
<i>Calcarius</i>	Oriolidae
<i>Cardinalis</i>	<i>Oriolus</i> (2)
<i>Emberiza</i>	Parulidae
<i>Junco</i>	<i>Seiurus</i>
<i>Pheucticus</i>	<i>Setophaga</i>
<i>Pipilo</i>	*Pipridae
<i>Zonotrichia</i> (3)	<i>Chiroxiphia</i>
*Estrilididae	Ploceidae
<i>Lonchura</i>	<i>Passer</i>
<i>Pytilia</i>	<i>Petronia</i>
*Formicariidae	<i>Ploceus</i>
<i>Grallaria</i> (2)	Pycnonotidae
Fringillidae	<i>Hypsipetes</i>
<i>Acanthis</i>	<i>Pycnonotus</i> (9)
<i>Carduelis</i>	<i>Spizixos</i>
<i>Pyrrhula</i>	*Sittidae
<i>Serinus</i> (2)	<i>Sitta</i>
Icteridae	*Sturnidae
<i>Agelaius</i>	<i>Acridotheres</i> (2)
<i>Amblyramphus</i>	<i>Aplonis</i> (4)
<i>Icterus</i>	<i>Creatophora</i>
<i>Molothrus</i> (2)	<i>Gracula</i>
<i>Quiscalus</i>	<i>Lamprotornis</i> (3)
*Irenidae	<i>Onychognathus</i>
<i>Chloropsis</i> (4)	<i>Sarcops</i>
<i>Irena</i>	<i>Saroglossa</i>
Laniidae	<i>Scissirostrum</i>
<i>Lanius</i> (2)	<i>Sturnus</i> (5)
*Mimidae	*Zosteropidae
<i>Mimus</i> (2)	<i>Zosterops</i> (2)

Further collecting will undoubtedly show this louse to occur on many more passerine host taxa. This apparent lack of much host specificity is reminiscent of

that found by Price and Beer (1963) for another widely distributed menoponid louse, *Colpocephalum turbinatum* Denny. Although some of the records of *M. eurysternus* from 5 other avian orders may be attributable to contamination or straggling, at least those from 3 species of *Lybius* (Piciformes) are correct and I would not be surprised to find other members of this as well as other orders occasionally infested.

The long list of junior synonyms for *M. eurysternus* is but an extreme example of what can happen when the same louse occurs across a wide spectrum of hosts and taxonomists are willing to chance descriptions of new species without an adequate review of the entire genus. These descriptions, almost without exception, fail to compare in any meaningful way the characters of the "new species" with those of morphologically closely related taxa. Although I did find certain features to be bothersome in variability (e.g., length and shape of the ventral spinous head process and certain setal counts and dimensions), none of these or any others have proven of value for separation and I choose to interpret them as an expression of the variability within *M. eurysternus*.

Dr. Theresa Clay has kindly confirmed the placement of all Piaget and Ansari names included here as junior synonyms. She also has designated the following lectotypes: *Menopon meniscus* Piaget, female on slide number 667b, and *Menopon fuscocinctum* Denny, female on slide number 761, with both specimens in the British Museum (Natural History).

*Material Examined* (ex Passeriformes).—33 ♀ (including type of *M. picae*), 8 ♂, *Pica pica*, England, Formosa, Ireland, U.S.A.; 3 ♀, 2 ♂, *Acanthis flammea* (L.), Canada; 2 ♀, 1 ♂, *Acridotheres ginginianus* (Latham), Nepal; 49 ♀, 10 ♂, *A. tristis*, Burma, Hawaii, India, Madagascar, Malaysia, Thailand; 1 ♀, *Actinodura morrisoniana* Ogilvie-Grant, Formosa; 2 ♀, *Aethopyga saturata* (Hodgson), W. Malaysia; 1 ♀, *Agelaius phoeniceus* (L.), U.S.A.; 1 ♂, *Aimophila carpalis* (Coes), U.S.A.; 8 ♀, 4 ♂, *Amblyramphus holosericeus*, types of *M. translucidum*; 15 ♀, 1 ♂, *Aphelocoma coerulescens* (Bosc), U.S.A.; 11 ♀, 6 ♂, *Aplonis panayensis* (Scopoli), Indonesia, North Borneo, Singapore, Thailand; 3 ♀, 1 ♂, *A. opaca* (Kittlitz), East Carolines, Marianas; 2 ♀, 1 ♂, *A. metallica* (Temminck), New Britain; 1 ♂, 1 ♀, *A. pelzelni* Finsch, East Carolines; 4 ♀, 2 ♂, *Arachnothera longirostra* (Latham), Malaya, Thailand; 2 ♀, 1 ♂, *A. magna* Hodgson, India Malaya; 1 ♀, *A. robusta* Müller and Schlegel, Sarawak; 3 ♀, *Atlapetes brunneimucha*, Costa Rica; 1 ♂, *Brachypteryx major* (Jerdon), India; 2 ♀, *Calcarius lapponicus*, types of *M. meniscus*; 14 ♀, 4 ♂, (including 7 ♀, 2 ♂, types of *M. spinosum*), *Cardinalis cardinalis*, U.S.A.; 2 ♀, 1 ♂, *Carduelis cucullata*, types of *M. pfliegeri*; 2 ♀, *Chiroxiphia lanceolata* (Wagler), Colombia; 5 ♀, 1 ♂, *Chloropsis aurifrons* (Temminck), Thailand; 6 ♀, 1 ♂, *C. cochinchinensis* (Gmelin), Thailand; 2 ♀, *C. palawanensis* (Sharpe), Philippine Islands; 5 ♀, *C. sonnerati* Jardine and Selby, Thailand; 2 ♀, 2 ♂, *Collyriocichla harmonica*



(Latham), Tasmania; 13 ♀, 2 ♂, *Corvus monedula* L., England, Ireland; 4 ♀, *Creatophora cinerea* (Meuschen), Kenya; 5 ♀, *Cyanocitta cristata* (L.), U.S.A.; 3 ♀, *C. stelleri* (Gmelin), U.S.A.; 7 ♀, 1 ♂, *Cyanocorax chrysops*, types of *M. spiniferum*; 1 ♀, *C. yncas* (Boddaert), U.S.A.; 7 ♀ (including 5 ♀, types of *M. tibiale*), 2 ♂, *Cyanopica cyana* (Pallas), Korea; 4 ♀, *Dicrurus caerulescens* (L.), India; 22 ♀, 9 ♂, *D. hottentottus* (L.), Nepal, Thailand; 28 ♀, 9 ♂, *D. leucophaeus* Vieillot, Philippine Islands, Thailand; 45 ♀ (including 4 ♀, types of *M. dubium*), 11 ♂, *D. macrocercus* (Vieillot), Indonesia, Rajputana, Thailand; 8 ♀, 3 ♂, *D. paradiseus* (L.), Burma, Thailand; 1 ♀, *D. remifer* (Temminck), Thailand; 1 ♀, *Emberiza spodocephala* Pallas, Hong Kong; 1 ♀, *Garrulax cachinnans* Jerdon, India; 2 ♀, 1 ♂, *G. erythrocephalus* (Vigors), Sikkim, Thailand; 3 ♀, 2 ♂, *Garrulus glandarius* (L.), Jugoslavia, Palestine, Thailand; 1 ♂, *Gracula religiosa*, type of *C. biserialis*; 1 ♀, *Grallaria quitensis* Lesson, Colombia; 16 ♀, *G. ruficapilla* Lafresnaye, Peru; 2 ♀, 2 ♂, *Hylodichia mustelina* (Gmelin), U.S.A.; 8 ♀, 3 ♂, *Hypsipetes amairotis* (Temminck), Korea, Taiwan; 1 ♀, *Icterus galbula* (L.), U.S.A.; 6 ♀, 1 ♂, *Irena puella* (Latham), Thailand; 1 ♂, *Junco hyemalis* (L.), U.S.A.; 3 ♀, 2 ♂, *Lamprotornis caudatus*, types of *C. parviceps*; 1 ♀, *L. chalybaeus* Ehrenberg, Somaliland; 1 ♀, *L. nitens* (L.), Transvaal; 1 ♂, *Lanius cristatus* L., Philippine Islands; 89 ♀, 35 ♂, *L. schach* (L.), Philippine Islands; 1 ♀, *Lonchura punctulata* (L.), Hong Kong; 8 ♀, *Mimus gilvus* (Vieillot), Venezuela; 47 ♀, 19 ♂, *M. polyglottos* (L.), Cayman Islands, Cuba, U.S.A.; 1 ♀, *Molothrus aeneus* (Wagler), U.S.A.; 3 ♀, 2 ♂, *M. ater* (Boddaert), U.S.A.; 1 ♀, 2 ♂, *Muscicapa grandis* (Blyth), Malaya; 1 ♀, *M. narcissina* Temminck, Malaya; 2 ♀, *Nucifraga columbiana* (Wilson), U.S.A.; 3 ♀, *Onychognathus tenuirostris* (Rüppell), Kenya; 7 ♀, 2 ♂, *Oriolus chinensis* L., Taiwan; 1 ♂, *O. xanthornus* (L.), Nepal; 26 ♀, 14 ♂, *Passer domesticus*, England, New Zealand, U.S.A.; 1 ♀, *Petronia xanthocollis* (Burton), India; 4 ♀, *Pheucticus ludovicianus* (L.), U.S.A.; 27 ♀, 16 ♂, *Pipilo chlorurus* (Audubon), U.S.A.; 3 ♀, *Ploceus philippinus* (L.), Thailand; 1 ♀, 1 ♂, *Ptilostomus afer* (L.), Senegal; 2 ♀, 1 ♂, *Pycnonotus aurigaster* (Vieillot), Hong Kong, Thailand; 1 ♀, *P. barbatus* (Desfontaine), Egypt; 3 ♀, 2 ♂, *P. blanfordi* Jerdon, Thailand; 1 ♀, 1 ♂, *P. cafer* (L.), Java; 16 ♀, 6 ♂, *P. goiavier* (Scopoli), British North Borneo, Malaya, Philippine Islands, Thailand; 7 ♀, 5 ♂, *P. leucogenys*, India; 1 ♀, *P. sinensis* (Gmelin), Hong Kong; 3 ♀, *P. taiwanus* Stylian, Taiwan; 3 ♀, *P. xanthopygos* (Ehrenberg), Mozambique; 3 ♀, 1 ♂, *Pyrrhula pyrrhula*, England; 2 ♀, *Pytilia melba* (L.), Bechuanaland; 18 ♀, 1 ♂, *Quiscalus quiscula* (L.), U.S.A.; 2 ♀, *Sarcops calvus* (L.), Philippine Islands; 5 ♀, *Saroglossa aurata*, types of *M. tibiale* var. *minor*; 1 ♀, 1 ♂, *Scissirostrum dubium* (Latham), Celebes; 1 ♀, *Seiurus aurocapillus* (L.), U.S.A.; 4 ♀, 4 ♂, *Serinus canaria* (L.), England; 1 ♀, *S. striolatus* (Rüppell), Kenya; 1 ♀, *Steophaga ruticilla* (L.), U.S.A.; 1 ♀, 1 ♂, *Sialia*

*mexicana* Swainson, U.S.A.; 15 ♀, 4 ♂, *Sitta europaea* L., Estonia; 2 ♀, 1 ♂, *Spizixos canifrons* Blyth, Thailand; 4 ♀, *Sturnus contra* L., Thailand; 2 ♂, *S. nigricollis* (Paykull), Thailand; 2 ♀, 1 ♂, *S. pagodarum* (Gmelin), India; 2 ♀, *S. sturminus* (Pallas), Japan; 37 ♀, 14 ♂, *S. vulgaris*, Canada, England, New Zealand, U.S.A.; 3 ♀, 1 ♂, *Timalia pileata* Horsfield, Thailand; 1 ♀, 1 ♂, *Toxostoma bendirei* (Coues), U.S.A.; 2 ♀, *T. redivivum* (Gambel), U.S.A.; 22 ♀, 14 ♂, *T. rufum* (L.), U.S.A.; 5 ♀, 6 ♂, *Turdus amaurochalinus* Cabanis, Bolivia; 1 ♀, *T. chrysolaus* Temminck, Formosa; 13 ♀, 3 ♂, *T. merula*, England, India, New Zealand; 52 ♀, 5 ♂, *T. migratorius* L., Canada, U.S.A.; 1 ♀, *T. obscurus* Gmelin, Malaya; 12 ♀, 4 ♂, *T. philomelos*, Egypt, England, New Zealand; 1 ♀, *Zonotrichia iliaca* (Merrem), U.S.A.; 3 ♀, *Z. leucophrys* (Forster), U.S.A.; 1 ♀, *Z. querula* (Nuttall), U.S.A.; 1 ♂, *Zoothera sibirica* (Pallas), Indonesia; 1 ♂, *Zosterops japonica* Temminck and Schlegel, Hong Kong; 14 ♀, 8 ♂, *Z. lateralis* (Latham), Australia, New Zealand.

*Other material* (ex Piciformes).—1 ♀, *Dendrocopos pubescens* (L.), U.S.A.; 1 ♂, *Dinopium javanense* (Ljungh), Malaya; 1 ♀, *Lybius leucocephalus* Reichenow, North Cameroon; 1 ♀, *L. rolleti*, type of *M. germanum*; 10 ♀, 5 ♂, *L. torquatus* (Dumont), Mozambique, Southern Rhodesia, Transvaal.

*Questionable records* (ex Apodiformes).—1 ♂, *Apus apus*, type of *M. parvulum*. (ex Coraciiformes)—1 ♀, *Nyctornis amicta* (Temminck), North Borneo. (ex Cuculiformes)—7 ♀, *Tapera naevia* (L.), Peru. (ex Gruiformes)—2 ♀, 3 ♂, *Porphyrio smaragdinus*, types of *M. gracile*.

#### *Menacanthus merisui* Eichler

(Fig. 10)

*Menacanthus merisui* Eichler, 1953: 171. Type-host: *Nucifraga caryocatactes* L.

*Female*.—All counts and measurements essentially within ranges given for *M. eurysternus*. Abdominal tergites lacking pronounced shorter stouter setae laterally (Fig. 10).

*Male*.—Likewise, essentially as for *M. eurysternus*, except for not having shorter stouter setae laterally on abdominal tergites.

*Remarks*.—The individuals placed within *M. merisui* are so close to those of *M. eurysternus* that I initially had included them as being conspecific. However, the difference associated with the presence or absence of groups of short stout setae laterally on the abdominal tergites appears to justify their separate recognition at least for the present.

All hosts from which I have seen *M. merisui* are members of the passerine family Corvidae.

*Material Examined*.—1 ♀, 1 ♂, *Nucifraga caryocatactes*, Yugoslavia; 3 ♀, *Corvus splendens* Vieillot, Nepal; 15 ♀, 12 ♂, *Dendrocitta formosae* Swinhoe, Taiwan, Thailand; 5 ♀, 1 ♂, *Urocissa flavirostris* (Blyth), Nepal.

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