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Three new species of the genus *Myrsidea* Waterston (Mallophaga, Menoponidae) parasitic on African shrikes (Aves, Laniidae)

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Abstract. Three new species of chewing lice of the genus *Myrsidea* parasiting on African shrikes are named and described: *Nyrsidea eurocephali* (from *Eurocephalus anguitimens*), *M. prionopsis* (from *Prionops plumata*) and *M. tchagrae* (from *Tchagra senegala*).

Key words. Mallophaga, Menoponidae, *Myrsidea*, taxonomy, new species, Aves, Laniidae, Africa.

Introduction

The parasites described in this report were studied and recognized as new by Heinrich F. Klockenhoff of the Alexander Koenig Institute and Museum of Zoology, Bonn. He had prepared drawings of the species and was working on their description (as documented by several letters exchanged with J. Tendeiro about this subject) when he suddenly suffered a heart attack and died on the 18th February 1984 (see Rheinwald 1984 for an obituary). Later the original material as well as the drawings of the new species were restudied by J. Tendeiro, who then wrote the text and prepared the final manuscript. The material on which this study is based is deposited in the British Museum (Natural History), London (BMNH) and in the South African Institute for Medical Research, Johannesburg (SAIMR).

Descriptions of new taxa

Myrsidea eurocephali n. sp.

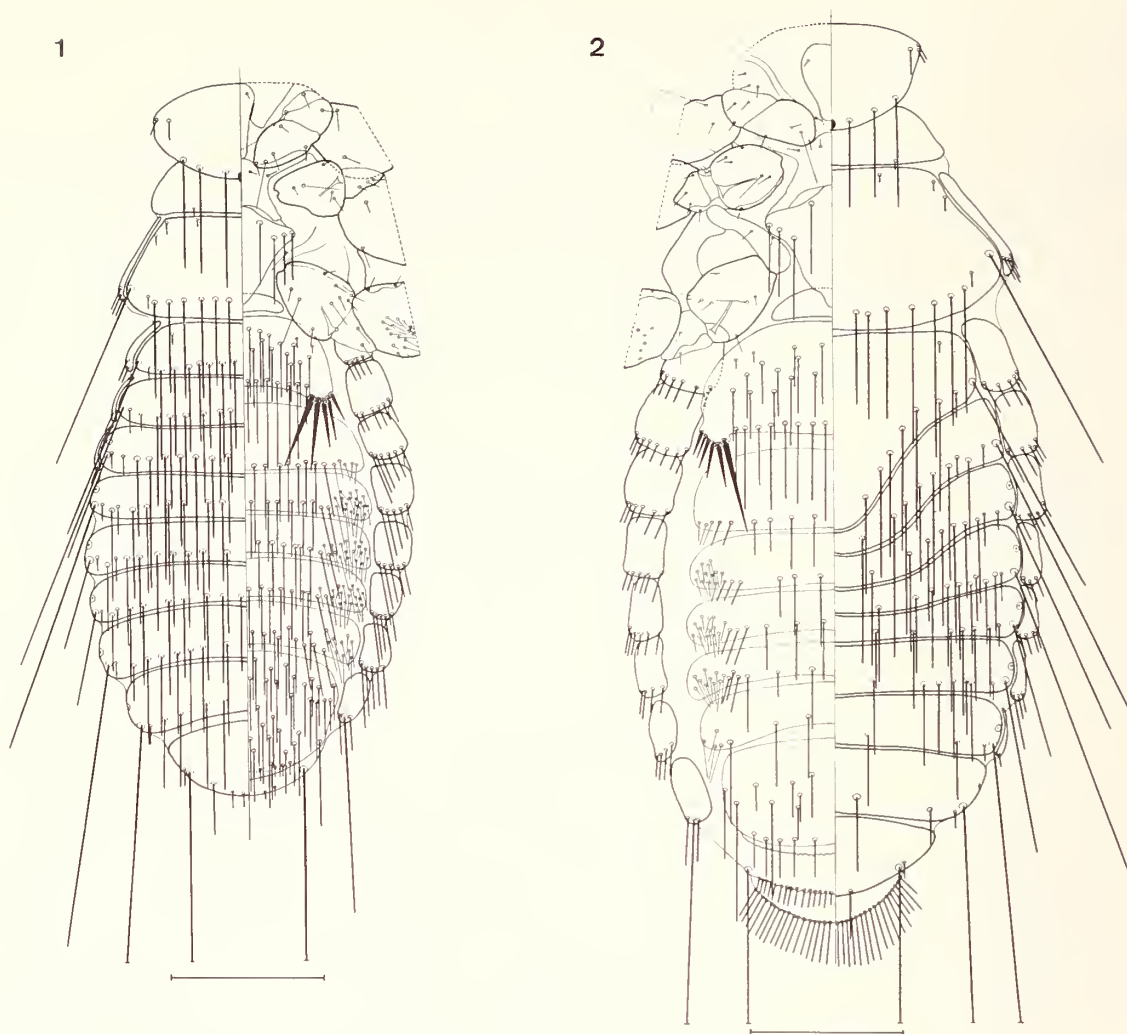
(Figs. 1, 2, 7, 10, 11, 16 and 20)

Material examined. BMNH 2 ♂, 2 ♀, from *Eurocephalus anguitimens* Smith (leg. F. Zumpt, Gravelotte, N. Transvaal, 12. 7. 1958, B. M. 1959—273; 2 larvae, from “*E. anguitimens rüppelli*” [= *E. rueppelli* Bonaparte]. SAIMR: 1 ♂, from *E. anguitimens*, received from the ZFMK (leg. R. P. Bossett, Majinji, Nuanetsi, Rhodesia = Zimbabwe, 25. 1. 1968).

Types: Holotype (♀) and allotype (♂), from *E. anguitimens*, in BMNH; paratypes, from *E. anguitimens*, in BMNH and SAIMR, and from *E. rueppelli*, in BMNH.

Hypopharynx fully developed. Female much longer than male, in the studied specimens respectively 1.89—1.95 mm ($n = 2$; $\bar{x} = 1.92 \pm 0.3$; $V = 2.19$) and 1.57—1.62 mm ($n = 3$; $\bar{x} = 1.6 \pm 0.02$; $V = 1.81$) of total length. Tergum I of female enlarged and greatly prolonged backwards. Male genital sclerite very distinctive.

Head (Fig. 16) not much prominent at the temples, in the female with 0.4 mm of length ($n = 2$) by 0.54—0.55 mm of breadth ($\bar{x} = 0.55 \pm 0.01$; $V = 1.28$), cephalic index 1.35—1.38 ($\bar{x} = 1.37 \pm 0.02$; $V = 1.54$); and, in the male, 0.33—0.36 mm ($n = 3$; $\bar{x} = 0.35 \pm 0.26$; $V = 4.32$) by 0.48—0.5 ($\bar{x} = 0.49 \pm 0.01$; $V = 2.43$), cephalic



Figs. 1—2: *Myrsidea eurocephali* n. sp., thorax and abdomen of male (1) and female (2). Scale = 0.25 mm. All drawings by S. Lankhorst.

index 1.39–1.45 ($\bar{x} = 1.42 \pm 0.02$; $V = 2.18$). Clypeal margin usually smoothly rounded. Anterolateral margins moderately swollen backwards. Hypopharynx fully developed. Preocular seta 10 (see Th. Clay 1966, 1969) with 54–65 μ of length in the female ($n = 4$; $\bar{x} = 59.25 \pm 2.39$; $V = 8.09$) and 77 μ in the male ($n = 2$), and seta 11 respectively with 92–107 μ ($\bar{x} = 98.75 \pm 3.2$; $V = 6.48$) and 88–92 μ ($\bar{x} = 90 \pm 1.16$; $V = 2.57$); ratio 10/11 0.56–0.62 in the female ($\bar{x} = 0.6 \pm 0.01$; $V = 4.17$) and 0.62–0.67 in the male ($\bar{x} = 0.64 \pm 0.01$; $V = 5.43$). Gular plate light brown, with the anterior transversal arms slightly diverging backwards, converging anteriorly to the subgenal sutures and surrounding the lighter, large oval, sitophoral area. Postoccipital suture very narrow, brown, without anterior prolongations. Temples not broad, moderately bent backwards.

Thorax with the pronotum developed, mainly in the female; width 0.35–0.36 mm ($n = 2$; $\bar{x} = 0.36 \pm 0.01$; $V = 1.97$) in the female and 0.3–0.32 mm ($n = 3$; $\bar{x} = 0.31 \pm 0.01$; $V = 3.23$) in the male, with 2–3 short anterolateral setae and 3 + 3 long setae on the posterior margin. Metanotum greatly developed, large and wide, in the female with 0.57–0.61 mm of breadth ($n = 2$; $\bar{x} = 0.59 \pm 0.02$; $V = 4.75$), having the anterior margin straight, the lateral subconcave, the posterior subconvex, with 11–13 ($\bar{x} = 12 \pm 1$; $V = 11.78$) long, posterior and 2 very short posterolateral setae, and the postero-outer angles rounded, with 1 very long seta; in

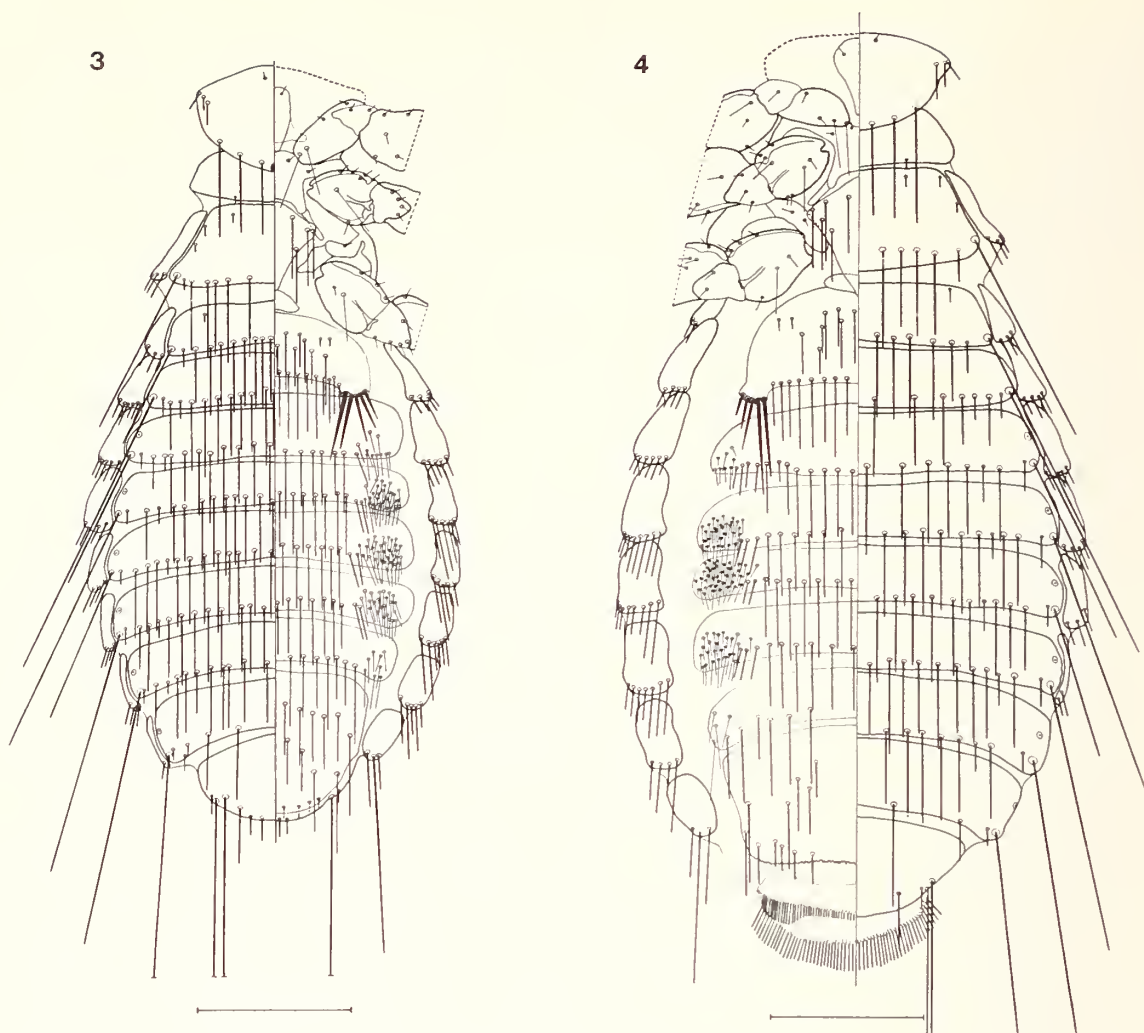
the males, less developed, with 0.43–0.48 mm of breadth ($n = 3$; $\bar{x} = 0.46 \pm 0.02$; $V = 6.26$), also with 11–13 long posterior setae and, on each side, 1 very short posterolateral seta. Metasternal plate brown, lozange-shaped, broader and the apex slightly produced in the female, normal and narrower in the male, with 1 anterior and 3 anterolateral setae (♀ , ♂).

Abdomen oval, in the female with 1.02–1.07 mm of length ($n = 2$; $\bar{x} = 1.05 \pm 0.02$; $V = 3.35$) by 0.75–0.79 mm of breadth ($\bar{x} = 0.77 \pm 0.02$; $V = 3.64$); and, in the male, 1.52–1.62 mm ($n = 3$; $\bar{x} = 1.6 \pm 0.02$; $V = 1.81$) by 0.85–0.86 mm ($\bar{x} = 0.66 \pm 0.58$; $V = 0.7$). In the female, tergum modified, enlarged and greatly prolonged backwards, with the posterolateral margins sinuous, round behind; terga II–V narrowed and arched medianly, less on V; terga VI–VIII of the female and I–VIII of the male normal. Tergal setae of the female ($n = 2$): terga I and VI 13–14 marginal setae ($\bar{x} = 13.5 \pm 0.5$; $V = 5.24$), II 13–16 ($\bar{x} = 14.5 \pm 1.45$; $V = 14.63$), III 14–17 ($\bar{x} = 15.5 \pm 1.45$; $V = 13.68$), IV 16, V 15–16 ($\bar{x} = 15.5 \pm 0.5$; $V = 4.56$), VII 5–7 ($\bar{x} = 6 \pm 1$; $V = 23.57$), VIII 4–5 ($\bar{x} = 4.5 \pm 0.5$; $V = 15.71$), and total 96–118 ($\bar{x} = 107 \pm 11$; $V = 14.54$); and, of the male ($n = 3$): tergum I 13–14 ($\bar{x} = 13.67 \pm 0.33$; $V = 4.22$), terga II and VII 14–16 ($\bar{x} = 14.67 \pm 0.67$; $V = 7.88$), III 14–15 ($\bar{x} = 14.33 \pm 0.33$; $V = 4.03$), IV 16–18 ($\bar{x} = 16.67 \pm 0.67$; $V = 6.93$), V 16–17 ($\bar{x} = 16.67 \pm 0.33$; $V = 3.46$), VI 16–18 ($\bar{x} = 17 \pm 0.58$; $V = 5.88$), VIII 9–10 ($\bar{x} = 9.33$; $V = 6.18$), and total 116–120 ($\bar{x} = 117.33 \pm 1.33$; $V = 1.97$). Sternite II very enlarged in the female, with the posterolateral angles pedunculate, less enlarged in the male, and with numerous scattered anterior setae and 14–16 moderate marginal setae (♀ , ♂); aster of the female with 5 + 5 or 5 + 6 stout spine-like setae on the posterolateral, not pedunculate, angles of the sternite, the inner one much longer, and, in the male, 5 + 5, the inner less longer, also on not pedunculate angles; sternites III–VII without anterior setae and with a continuous row of short to moderately long marginal setae, a few (6–8) in the female, numerous (16–20) in the male; sternites III–VI with lateral brushes of small setae, incipient on segments III (♂) or III and VII (♀), relatively scarce on segments IV–VI of the female, more numerous in the male. Pleurites relatively wide in the female and less in the male, narrowing backwards, without anterior setae; inner pleural setae VIII slightly longer than the outer ones. Male genitalia: inwardly directed terminal arm of the basal plate short; parameres relatively feeble, gently divergent; genital sclerite very distinctive, widened, rounded and with a pair of short processes in front (when in situ), elongate and attenuated backwards. Vulvar margin moderately serrated along all its extension; anal fringe (♀) as in fig. 2.

Myrsidea prionopsis n. sp.

(Figs. 3, 4, 8, 12, 13, 17 and 21)

Material examined. BMNH: 1 ♂ , 1 ♀ , from “*Prionops plumata*” [= *P. plumata poliocephala* (Stanley)] (Chicualcuala, Limpopo River, Port. East Africa = Mozambique, 13. 7. 1953, BM 1954–474); 1 ♂ , from *P. plumata angolica* Grote (M/L 123, Luanshya, N. Rhodesia = Zambia, 3. 7. 1955, BM 1956–310). SAIMR: 5 ♂ , 3 ♀ , from “*P. plumata*” [= *P. plumata poliocephala*], respectively 2 ♂ , 1 ♀ (Z. M. 1414/18, Chicualcuala, Limpopo River, Port. East Africa = Zululand, S. Africa, 7. 3. 1965); 2 ♂ , 2 ♀ , from “*Prionops plumata*” [= *Prionops plumata poliocephala*] (leg. Eastwood & Downes, Beit. Bridge Distr., Rhodesia = Zimbabwe. 5. 8. 1970).



Figs. 3–4: *Myrsidea prionopsis* n. sp., thorax and abdomen of male (3) and female (4). Scale = 0.25 mm.

Types: Holotype (♂), from *P. plumata angolica*, in BMNH; paratypes (♂, ♀), from *P. plumata poliocephala*, in BMNH and SAIMR.

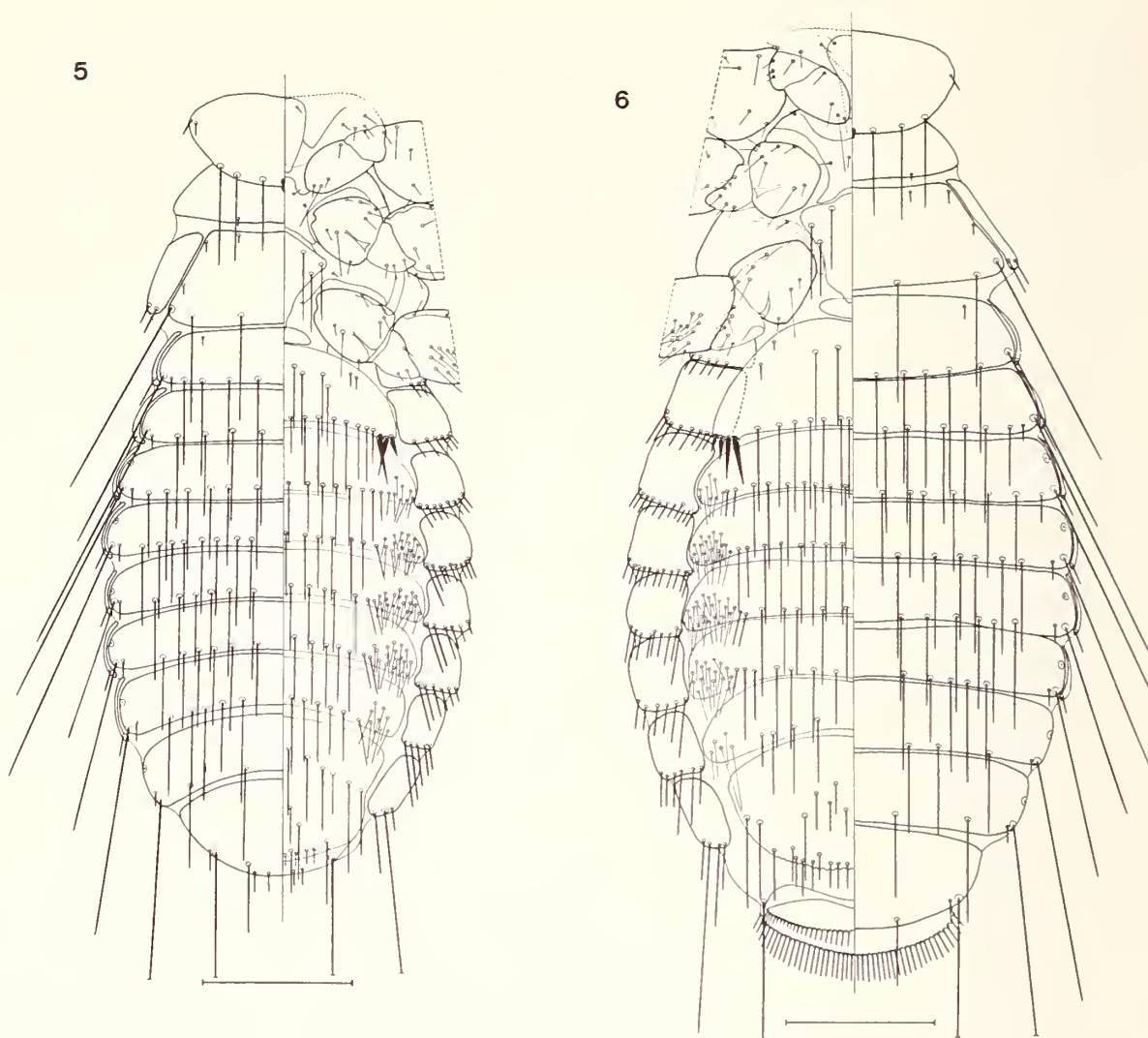
Hypopharynx slightly reduced. Female not much longer than male, in the measured specimens from *P. plumata poliocephala* respectively 1.63–1.82 mm ($n = 3$; $\bar{x} = 1.73 \pm 0.05$; $V = 5.5$) of total length in the female and 1.55–1.84 mm ($n = 5$; $\bar{x} = 1.6 \pm 0.02$; $V = 2.43$) in the male; and, in the male from *P. plumata angolica*, 1.6 mm. Tergum I of female normal, not arched or prolonged backwards. Male genital sclerite very distinctive.

Head (Fig. 17) prominent at the temples, in the females from *Prionops plumata poliocephala* with 0.32 mm of length ($n = 3$; $\bar{x} = 0.32$) by 0.51–0.52 mm of breadth ($\bar{x} = 0.52 \pm 0.003$; $V = 1.17$), cephalic index 1.59–1.63 ($\bar{x} = 1.6 \pm 0.01$; $V = 1.43$); and, in the males, 0.3–0.33 ($n = 5$; $\bar{x} = 0.31 \pm 0.01$; $V = 4.78$) by 0.46–0.49 mm ($\bar{x} = 0.47 \pm 0.01$; $V = 2.78$), cephalic index 1.42–1.53 ($\bar{x} = 1.49 \pm 0.02$; $V = 3.02$); and in the male from *P. plumata angolica*, 0.33 mm by 0.46 mm, cephalic index 1.39. Clypeal margin smoothly roundish. Anterolateral margins almost regularly swollen. Hypopharynx slightly reduced. Preocular seta 10 with 54–61 μ of length in the female ($n = 3$ setae; $\bar{x} = 58.67 \pm 2.33$; $V = 6.89$) and 50–61 μ in the male ($n = 8$; $\bar{x} = 56.89 \pm 1.43$; $V = 7.12$) from *P. plumata poliocephala*; seta 11 with 92–100 μ in the female of the same host ($\bar{x} = 96 \pm 2.31$; $V = 4.17$); ratio 10/11 respectively

0.59–0.64 ($\bar{x} = 0.61$; $V = 3.76$) and 0.52–0.68 ($\bar{x} = 0.6 \pm 0.02$; $V = 9.12$). In the male from *P. plumata angolica* the seta 10 measured 57 at one side and 61 at the other ($\bar{x} = 59 \pm 2$; $V = 3.01$); ratio 10/11 0.62–0.64 ($\bar{x} = 0.63 \pm 0.01$; $V = 1.75$). Gular plate light brown, wide, with the transversal arms irregularly rounded, encircling the lighter subtriangular sitophoral area. Postoccipital sutures very short, light brown. Temples not broad, bent backwards.

Thorax with the prothorax of the specimens from *P. plumata poliocephala* measuring 0.3–0.33 mm of breadth in the female ($n = 3$; $\bar{x} = 0.31 \pm 0.01$; $V = 4.79$), 0.29–0.33 mm in the male ($n = 5$; $\bar{x} = 0.3 \pm 0.01$; $V = 5.59$), with 3 anterolateral short and 3 + 3 posterior moderately long setae. Metanotum moderately developed, somewhat more in the female, which measured 0.48–0.5 mm of breadth ($n = 3$; $\bar{x} = 0.49 \pm 0.01$; $V = 2.04$), than in the male, with 0.4–0.45 mm ($n = 5$; $\bar{x} = 0.43 \pm 0.01$; $V = 4.63$); posterior margin sinuous in the female, bordered by 4 + 4 (5 + 5 in the male) moderately long and 1 short (very short in the male) posterior setae, and with 1 very long posterolateral seta in both sexes. Metasternal plate brown to dark brown, with 3 anterior and 2 (in ♀) or 1 (in ♂) moderately long posterolateral setae. Male from *P. plumata angolica*, 31 mm of breadth in prothorax and 0.43 mm in metathorax. So, the dimensions of the thorax (as well as the abdomen's) are within the range of those from *poliocephala*.

Abdomen oval, wide, in the female with 1.11–1.26 mm of length ($n = 3$; $\bar{x} = 1.17 \pm 0.05$; $V = 6.75$) by 0.67–0.76 mm of breadth ($\bar{x} = 0.72 \pm 0.03$; $V = 6.5$); males from *P. plumata poliocephala* with 0.88–0.95 mm of length ($n = 5$; $\bar{x} = 0.62 \pm 0.01$; $V = 2.26$), and 0.88 mm in that from *P. plumata angolica*. In the female, tergum I normal, not arched or prolonged backwards, with the posterior margin straight or slightly concave; terga II–IV a little narrower than II and III. Tergal marginal setae continuous, slightly interrupted medianly, in the female with 8–12 on tergum I ($n = 4$; $\bar{x} = 10.5 \pm 0.87$; $V = 16.5$), 10–15 on II ($\bar{x} = 12.25 \pm 1.11$; $V = 17.71$), 10–15 on III ($\bar{x} = 13.25 \pm 1.11$; $V = 8.37$), 13–18 on IV ($\bar{x} = 16.25 \pm 1.11$; $V = 13.64$), 16–19 on V ($\bar{x} = 17.75 \pm 1.11$; $V = 7.09$), 14–20 on VI ($\bar{x} = 15.5 \pm 1.32$; $V = 15.12$), 11–14 on VII ($\bar{x} = 12.5 \pm 0.87$; $V = 13.86$) and 2–5 on VIII ($\bar{x} = 3.5 \pm 0.87$; $V = 49.49$), total 86–111 ($\bar{x} = 98.61 \pm 0.98$; $V = 1.76$); and, in the male, 9–13 marginal setae on tergum I ($n = 5$; $\bar{x} = 11.4 \pm 0.81$; $V = 15.94$), 12–14 on II ($\bar{x} = 13.2 \pm 0.37$; $V = 6.34$), 13–18 on III ($\bar{x} = 15.8 \pm 0.97$; $V = 13.72$), 14–20 on IV ($\bar{x} = 17.2 \pm 1.53$; $V = 19.89$), 16–23 on V ($\bar{x} = 18.6 \pm 1.21$; $V = 14.53$), 16–22 on VI ($\bar{x} = 18.4 \pm 1.03$; $V = 12.5$), 10–15 on VII ($\bar{x} = 12.6 \pm 1.03$; $V = 18.27$) and 4–6 in VIII ($\bar{x} = 4.6 \pm 0.4$; $V = 19.84$), total 102–126 ($\bar{x} = 111.8 \pm 4.35$; $V = 8.7$), and, in the male from *angolica*, 12 tergal marginal setae on terga I and VII, 13 on II, 14 on III, 18 on IV–V, 19 on VI and 5 on VIII, total 111, within the same limits. Sternite II very enlarged in the female, with the posterolateral angles pedunculate in the female, not enlarged nor pedunculate in the male. Sternite II with 2 anterolateral short sternal setae, and, in the female, 9–12 scattered anterior setae ($n = 2$; $\bar{x} = 10.5 \pm 2.12$; $V = 20.2$) and 17 moderate marginal setae, and, in the male, 10–15 scattered setae ($n = 6$; $\bar{x} = 12.33 \pm 1.75$; $V = 14.2$) and 13–16 marginal setae ($\bar{x} = 15 \pm 0.45$; $V = 7.3$); aster with 5 + 5 stout spine-like setae, the 2 inner ones much longer (♀) or longer (♂) than the outer ones (in the male from *P. plumata angolica*, respectively 12 scattered anterior setae and 14 marginal



Figs. 5–6: *Myrsidea tchagrae* n. sp., thorax and abdomen of male (5) and female (6). Scale = 0.25 mm.

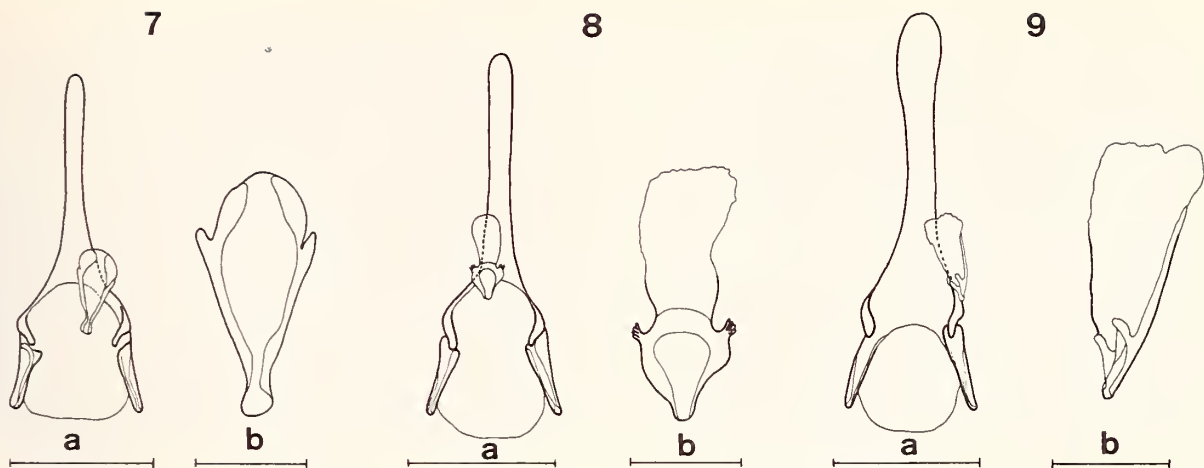
ones). Sternites III–VII without anterior setae, with a continuous row of moderate marginal setae, more numerous in the male, and with lateral bushes of small setae, incipient on segment III, numerous on segments IV–VI and scarce on segment VII. Pleurites narrow in segments I–III of the male, less in the female, and widening backwards in the following, without anterior setae; inner pleural seta VIII much longer (♂) or more or less longer (♀) than the outer. Male genitalia: inwardly directed terminal arm of the basal plate relatively short, robust, tapering posteriorly; parameres relatively feeble, somewhat divergent, tapering backwards; genital sclerite very distinctive, with a pedunculate little tuff on each side. Vulvar margin entirely serrated, moderately at the middle, feebly at the extremes. Anal fringe (♀) as in fig. 4.

Myrsidea tchagrae n. sp.

(Figs. 5, 6, 9, 14, 15, 18 and 22)

Material examined. SAIMR: 2 ♂, 3 ♀, from “Tchagra senegala” [= *T. senegala orientalis* (Cabanis)], respectively 1 ♂, 1 ♀, (Buzi, Port. East Africa = Mozambique, 14. 11. 1961) and 1 ♂, 2 ♀, (leg. R. P. Bovvett, Masandellas, Rhodesia = Zimbabwe, 19. 9. 1968).

Types: Holotype (♂, from Buzi) and paratypes (1 ♂, 3 ♀, in SAIMR).



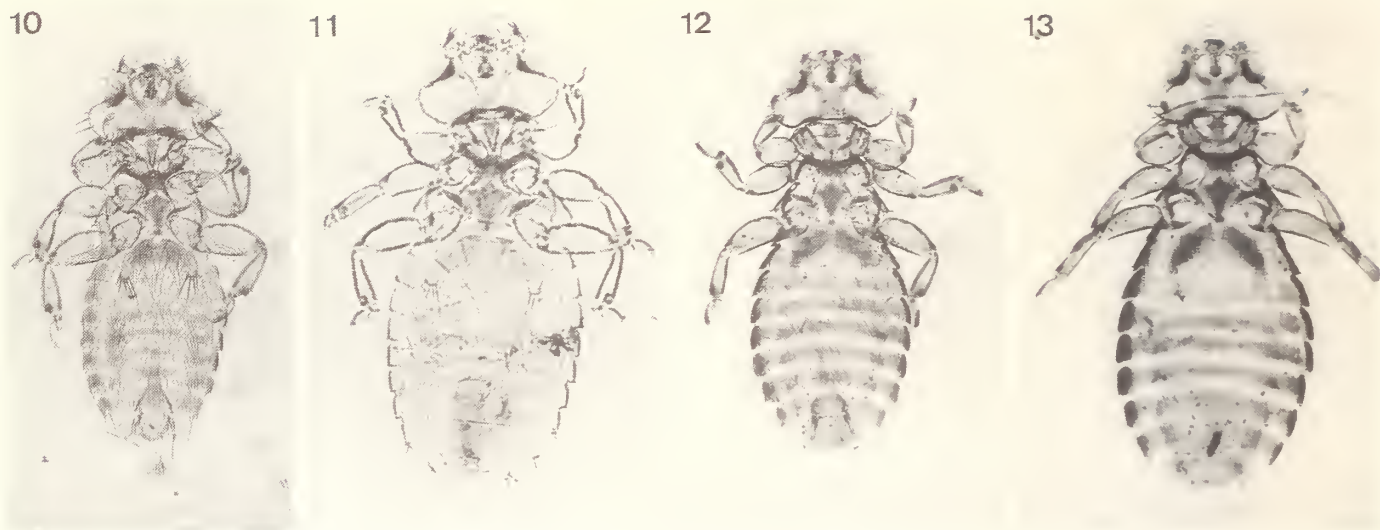
Figs. 7–9: Male genitalia (a) and detail of genital sclerite (b) of *Myrsidea eurocephali* n. sp. (7), *Myrsidea prionopsis* n. sp. (8), *Myrsidea tchagrae* n. sp. (9). Scales are 0.20 mm (a) and 0.05 mm (b).

Hypopharynx slightly reduced. Female longer than male, in the studied material respectively 1.8–2.1 mm ($n = 3$; $\bar{x} = 1.97 \pm 0.09$; $V = 7.78$) of total length in the female and 1.5–1.74 mm ($n = 2$; $\bar{x} = 1.62 \pm 0.12$; $V = 10.49$) in the male.

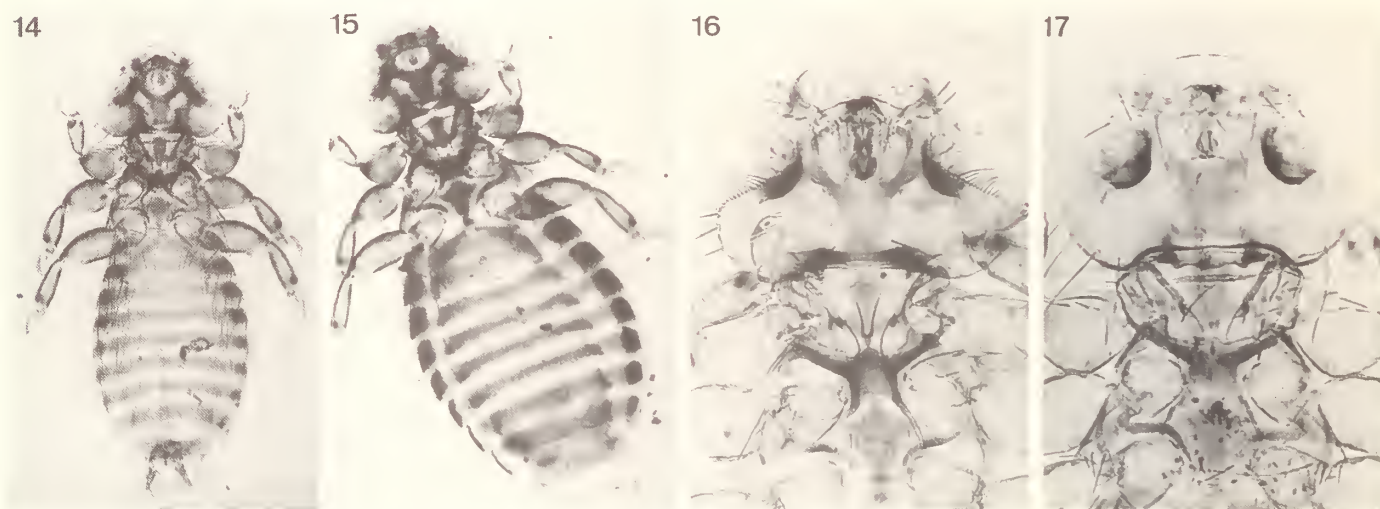
Head (Fig. 18) prominent at the temples, in the female with 0.33–0.39 mm of length ($n = 3$; $\bar{x} = 0.37 \pm 0.02$; $V = 8.72$) by 0.54–0.6 mm of breadth ($\bar{x} = 0.57 \pm 0.02$; $V = 5.41$), cephalic index 1.53–1.64 ($\bar{x} = 1.57 \pm 0.04$; $V = 3.89$); and, in the male, 0.31–0.36 mm ($n = 2$; $\bar{x} = 0.34 \pm 0.03$; $V = 10.45$) by 0.48–0.54 mm ($\bar{x} = 0.51 \pm 0.03$; $V = 8.24$), cephalic index 1.5–1.55 ($\bar{x} = 1.53 \pm 0.03$; $V = 2.3$). Clypeal margin smoothly roundish. Anterolateral margins moderately swollen. Hypopharynx slightly reduced. Preocular seta 10 with 77–80 μ of length in the female ($n = 4$; $\bar{x} = 77.75 \pm 0.75$; $V = 1.93$) and 69–84 μ in the male ($n = 3$; $\bar{x} = 77.67 \pm 4.48$; $V = 10$); seta 11 with 92–100 μ in the female ($\bar{x} = 95 \pm 1.19$; $V = 9.3$) and 96–100 μ in the male ($\bar{x} = 97.33 \pm 1.33$; $V = 2.37$); ratio 10/11 respectively 0.8–0.84 ($\bar{x} = 0.82 \pm 0.01$; $V = 2.56$) and 0.69–0.88 ($\bar{x} = 0.8 \pm 0.06$; $V = 12.14$). Gular plate brown to dark brown, with the median base wide, mostly forward, and the transversal arms converging to the tentorial and the subgenal sutures and surrounding the lighter sitophoral area, suboval elongate in the female and circular in the male. Postoccipital suture relatively extended and prominent on each side by darker triangular projections. Temples broad, rounded, not bent backwards.

Thorax: Prothorax with 0.33–0.36 mm of breadth in the female ($n = 3$; $\bar{x} = 0.35 \pm 0.02$; $V = 4.86$) and 0.31–0.32 mm in the male ($n = 2$; $\bar{x} = 0.32 \pm 0.01$; $V = 2.22$), with 1–3 anterolateral short setae and 3 + 3 posterior long setae. Metanotum moderately developed, measuring 0.52–0.59 mm of breadth in the female ($n = 3$; $\bar{x} = 0.56 \pm 0.04$, $V = 6.43$) and 0.4–0.45 mm in the male ($n = 2$; $\bar{x} = 0.43 \pm 0.03$; $V = 8.24$), with the anterior and lateral margins feebly concave and the posterior a little sinuous, with 2 + 2 posterior long setae and 1 very long posterolateral seta. Metasternal plate brown (\varnothing , σ) to very dark (\varnothing), more or less lozange-shaped, enlarging backwards in the female, with 3 anterolateral setae.

Abdomen oval, enlarged in the female, with 1.02–1.26 mm of length ($n = 3$; $\bar{x} = 1.14 \pm 0.07$; $V = 14.82$) by 0.76–0.82 mm of breadth ($\bar{x} = 0.81 \pm 0.04$; $V =$



Figs. 10–13: *Myrsidea eurocephali* n. sp., male (10), female (11); *Myrsidea prionopsis* n. sp. from *Prionops plumata poliocephala*, male (12), female (13). All photographs by J. Tendeiro.



Figs. 14–17: *Myrsidea tchagrae* n. sp., male (14), female (15); Head and thorax of male *Myrsidea eurocephali* n. sp. (16) and *Myrsidea prionopsis* n. sp., holotype (17).

7.65); and, in the male, 0.8–0.95 mm ($n = 2$; $\bar{x} = 0.88 \pm 0.08$; $V = 12.11$) by 0.6–0.64 mm ($\bar{x} = 0.62 \pm 0.02$; $V = 4.52$). In the female, tergum I normal, with gently rounded posterior margin, broader than I–VII. Tergal setae interrupted medianly in the female, with 8–11 on tergum I ($n = 3$; $\bar{x} = 9.33 \pm 10.88$; $V = 16.37$), 8–10 on II ($\bar{x} = 9 \pm 0.58$; $V = 11.11$), 10–14 on III ($\bar{x} = 12.33$; $V = 1.2$), 8–13 on IV ($\bar{x} = 11.33 \pm 1.67$; $V = 25.47$); 8–14 on V ($\bar{x} = 11.33 \pm 1.76$; $V = 26.96$), 9–12 on VI ($\bar{x} = 10.33 \pm 0.88$; $V = 14.79$), 5–9 on VII ($\bar{x} = 7.67 \pm 1.73$; $V = 30.12$) and 4 on VIII ($n = 3$), total, 70–85 ($\bar{x} = 75.33 \pm 2.97$; $V = 11.13$); and, in the male, 8 on the terga I and VI ($n = 1$, indiscernible in the other male), 13 on II ($n = 1$); 14 on III ($n = 1$), 9 on IV and V ($n = 1$), 9–10 in VII ($n = 2$; $\bar{x} = 9.5 \pm 0.4$; $V = 7.44$) and 2–5 on VIII ($n = 2$; $\bar{x} = 4 \pm 2$; $V = 7.44$), total, 73 ($n = 1$). Sternite II very enlarged in the female, with the posterolateral angles slightly pedunculate and with 2 + 2 moderately long paramedian setae, 2 anterolateral very short setae and 14 moderately long marginal setae, aster with 3–4 relatively short stout spine-like setae ($n = 3 \times 2$; $\bar{x} = 3.17 \pm 0.16$; $V = 12.69$) +



Figs. 18—19: Head of male *Myrsidea tchagrae* n. sp. (18) and *Myrsidea seguyi* Tendeiro, 1958, holotype (19).



Figs. 20—23: Male genitalia of *Myrsidea eurocephali* n. sp. (20), *Myrsidea prionopsis* n. sp. (21), *Myrsidea tchagrae* n. sp. (22) and *Myrsidea seguyi* Tendeiro, 1958 (23).

1 outer short seta; and, in the male, normal, not enlarged, with 4 + 4 paramedian setae, 2 anterolateral very short setae, and aster with 2—3 relatively short stout setae ($n = 2 \times 2$; $\bar{x} = 2.25 \pm 0.25$; $V = 22.22$) + 1 outer seta with half the length of the inner ones. Sternites II—VII without anterior setae and with a continuous row of moderate marginal setae and (\varnothing , σ) lateral brushes of small setae, numerous in segments IV—VI, scarcer in III and VII. Pleurites I—IV very wide in the female and wide in the male, narrowing to the V—VIII segments, without anterior setae; inner pleural seta VIII (\varnothing , σ) much longer than the outer. Male genitalia: inwardly terminal arm of the basal plate moderately thick and relatively short; parameres robust, straight, regularly narrowing backwards; genital sclerite with a large subtriangular vertical plate and a pair of divergent aliform projections (finger-like and a little distorted in fig. 9b, reproduced from an example from “*Tchagra senegala*” [= *T. senegala rufofusca* (Neumann) (?)], Dundo, Angola, 16. 4. 1963, not seen by Tendeiro. Vulvar margin strongly serrated along the greater part of its extension; anal fringe (\varnothing) as in fig. 6.

Discussion

The three species of *Myrsidea* here studied were taken, following the systematic classification of the Laniidae by Rand (1960), from shrikes of two subfamilies, Prionopinae and Malaconotinae: in the Prionopinae, of the genera *Eurocephalum* Smith and *Prionops* Vieillot, respectively *Myrsidea eurocephali* n. sp., parasitic on *Eurocephalum anguitimens* Smith and *E. rueppelli* Bonaparte, and *M. prionopsis* n. sp., on *Prionops plumata angolica* Grote and *P. plumata poliocephala* (Stanley); and in the Malaconotinae, of the genus *Tchagra* Lesson, *Myrsidea tchagrae* n. sp., on *T. senegala orientalis* (Cabanis) and *T. senegala rufofusca* (Neumann) (?).

Two species of *Myrsidea* had been described till now from hosts of the subfamily Laniinae, genera *Corvinella* Lesson and *Lanius* Linnaeus, respectively *M. seguyi* Tendeiro, 1958, from *Corvinella m. melanoleuca* (Jardine), and *M. abhorrens* Zlotorz-zycka, from *Lanius collurio* Linnaeus.

Séguy (1914) erroneously included in the genus *Myrsidea* the species “*Menopon inaequale* Piaget, 1880”, from *Lanius collurio* Linnaeus, actually of the genus *Menacanthus* Neumann, 1912 (see Hopkins & Clay, 1952: 211 and 219). So, the first *Myrsidea* to be described from a Laniidae was *M. seguyi* Tendeiro, based on the examination of 1 ♂ (holotype) and 1 ♀ (allotype) taken from “*Urolestes m. melanoleucus*” [= *Corvinella m. melanoleuca* Jardine)], from Mozambique. Ledger (1980: 64) stated that “no comparative details are provided in the description” of 1958. Later, with Clay’s (1966: 370) inclusion of “*Lanimenopon* Zlotorz-zycka, 1964” in the synonymy of *Myrsidea*, its type-species, “*Lanimenopon abhorrens*”, from *Lanius excubitor* Linnaeus, of Poland, became the second species of the genus known from shrikes.

Myrsidea seguyi is readily separable by: 1. The form and structure of the head (Fig. 19), with the anterior transversal arms of the gular plate strongly divergent; 2. the sternite II, the aster with three strong spine-like setae, the two inner ones much longer and more robust than the outer; 3. the spine-like and relatively robust setae of sternal brushes IV—VI; and 4. the male genitalia, the genital sclerite (Fig. 23) of the same type as that of *Myrsidea picae* (Linnaeus, 1758), after Clay & Hopkins (1950) parasitic on *Pica p. pica* (Linnaeus), and, after Tendeiro (1955), on *P. pica melanotos* Brehm (Corvidae). Clay (1966: Plate 1, fig. 3) already indicated that *Myrsidea* from Laniidae have the same type of genital sclerite as some from Corvidae and exemplified this assertion with a photo of *M. picae*.

As defined in the original description, *Myrsidea abhorrens* has the aster of sternite II pedunculate and with three spine-like setae of unequal size; it is absent in the female.

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Zusammenfassung

Drei neue, auf afrikanischen Würgern parasitierende Federlingarten der Gattung *Myrsidea* werden benannt und beschrieben: *Myrsidea eurocephali* (Wirt: *Eurocephalus anguitimens*), *M. prionopsis* (Wirt: *Prionops plumata*) and *M. tchagrae* (Wirt: *Tchagra senegala*).

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