Description of a new species of the genus *Myrsidea* Waterston (Mallophaga, Menoponidae), from an African Laniidae,

Lanius excubitoroides Prévost & Des Murs (Aves, Passeriformes)

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(Recebido em 30-VI-1987)

A new species of the genus Myrsidea Waterston (Mallophaga, Menoponidae), M. ugandensis n. sp., off the Grey-backed Fiscal Shrike, Lanius excubitoroides Prévost & des Murs, is described. The new species has the male genital sclerite as in Myrsidea seguyi Tendeiro, 1958, off the Magpie-Shrike, Corvinella m. melanoleuca (Jardine) (Laniidae: Laniinae), and in M. picae (Linnaeus), off the Common Magpie, Pica p. pica (Linnaeus), and, after Tendeiro (1955), off the Iberian Magpie, P. pica melanotos Brehm (Corvidae). Differential diagnosis is made with these two species, as well as with the type species of "Lanimenopon", included by Th. Clay (1966: 330) in the genus Myrsidea, as M. abhorrens (Zlotorzycka, 1964), parasitic of the Great Grey Shrike, Lanius e. excubitor Linnaeus. In what concern the host of Myrsidea ugandensis, priority is confirmed to Lanius excubitoroides Prévost & Des Murs upon "L. excubitorius Prévost & des Murs", as established by Rand (1960), under the provisions of the International Code of Zoological Nomenclature.

INTRODUCTION

This paper must be published in French, with a correspondent title, as so was announced in the Yearbook of the activities of the «Instituto de Investigação Científica Tropical», of Lisboa, Portugal, to 1986. However, the continuity of the text with the descriptions of three species of the genus *Myrsidea* from the Shrikes (Klockenhoff & Tendeiro, in press) and with other problematic queries we are studying on the morphological, parasitological and phylogenetical rapports of the *Myrsidea* parasitic of Laniidae and of Corvidae and their hosts, brought us to present it in English.

Four species of Mallophaga assigned to the genus *Myrsidea* Waterston were successively described on the True Shrikes (Laniidae, *sensu* Sibley & Ahlquist 1985): 1 — *Myr*-

sidea seguyi Tendeiro, 1958, off Corvinella m. melanoleuca (Jardine); 2 — M. abhorrens (Zlotorzycka, 1964) (synonymy of Th. Clay, 1966), off Lanius collurio Linnaeus; 3 — Myrsidea sp. Klockenhoff & Tendeiro (in press), off Eurocephalum anguitimens Smith and E. rueppelli Bonaparte; and 4 — M. ugandensis n. sp., off Lanius excubitoroides Prévost et Des Murs. From these species, as we can deduce by the likeness of the respective male genital sclerites, Myrsidea seguyi and M. ugandensis are related between them and to M. picae (Linnaeus, 1758), off the Magpies, Pica p. pica (Linnaeus) and P. pica melanotos Brehm (Corvidae). With the tergum I of the female enlarged and greatly prolonged backward and the male genital sclerite very distinctif, Myrsidea sp., of Eurocephalum spp., belongs to a very different phylogenetic line.

Lanius excubitoroides Prévost & Des Murs. 1847: 99, was emended by the same authors (p. 170 and pl. 8) to excubitorius, «because of excubitorides Swainson, 1831, which, however, is not the same as excubitoroides» (Rand. 1960: 359). This name has priority under the provisions of the International Code of Zoological Nomenclature (3th ed., 1985), cumulatively by: 1 - the Art. 24, on Principles and Application of the Principle of the First Reviser in nomenclatural acts, Rand in this case; 2 — the Art. 57 (f), by which one letter difference between species-group names is sufficient to prevent homonymy; and 3 — according to the Art. 58, the different meaning of oides and ides avoiding the identity between excubitoroides and excubitorides. However, «excubitorius», yet being an injustified replacement name [Code, Art. 10 (g)], is more commonly used.

As example, Hall & Moreau (1970), without any reference to excubitoroides, erected the «Lanius excubitorius Superspecies», to be replaced by Lanius excubitoroides Superspecies, to the species «L. excubitorius» and L. cabanisi. After Moreau (1972), of native shrikes Africa has 9 Prionopinae, 36 Malaconotinae and 10 Laniinae and «Lanius excubitorius» is between the most likely competitors; in the Serengeti National Park the Laniidae are represented by two migrant, Lanius colurio and or/ isabellinus, and two native, «L. excubitorius» and «Urolestes melanoleucos». To Wolters (1977), the species included in the Lanius excubitoroides Superspecies correspond to the subgenus Neolanius Roberts, also L. excubitorius («Syn. excubitoroides Prévost & Des Murs, 1847, nicht präckkupiert durch L. excubitorides Swains., 1831, aber da von den Autoren in der gleischen Publikation zu excubitorius verändert, ungebräulich») and L. cabanisi Hart., 1906. More recently, Zach (1985) studied the behaviour and breeding biology of the co-operatively breeding «Lanius excubitorius» in Kenya.

Neumann (1927), in a short note on the nomenclature and «races» of «L. excubitorius», ignored L. excubitoroides.

Myrsidea ugandensis n. sp. (Photos 1, 2, 3, 5 & 7)

MATERIAL EXAMINED: BMNH: $2 \circ \delta$, $1 \circ \varphi$, from Lanius e. excubitorius» $\Gamma = Lanius$ e. ex-

cubitoroides Prévost & Des Murs] (coll. Meinertzhagen, no. 7763, Uganda, April 1936).

Types: Holotype (δ), allotype (Q) and paratype (1 δ) in British Museum (Natural History), London.

Hypopharynx fully developed. Female much longer than male, in the studied specimens respectively with 1.88 mm (n = 1) ($^{\circ}$) and with 1.54 - 1.86 mm (n = 2; x = 1.550 \pm 0.010; V = 0.903 %) ($^{\circ}$) of total length. Tergum I of female not modified.

Head: Clear, more in the male, prominent at the temples, in the male with 0.36 mm of length by $0.51 - 0.52 \, \text{mm}$ of breadth (n = 2) $x = 0.515 \pm 0.005$; V = 1.359), cephalic index $1.42 \cdot 1.44$ (x = 1.431 ± 0.013 ; V = 1.328); and, in the female, $0.38 \,\mathrm{mm}$ by $0.60 \,\mathrm{mm}$ (n=1), cephalic index 1,58. Clypeal margin roundish. Anterolateral margin moderately swollen. Hypopharynx fully developed. Preocular setae 10 and 11 (sensu Th. Clay, 1966, 1969) broken in the studied female; and, in the male, seta 10 with 77μ of length (n = 2) and seta 11 with 99-92 μ (n = 2; x = 91 ± 1; V = 1.554); ratio 10/11, 0.836-0.856 (n = 2; $x = 0.846 \pm$ \pm 0.007; V = 1.655). Gular plate ligth brown, a little darker in the female, with the transversal arms converging to the tentorial and the subgenal sutures and surrounding the lighter sitophoral area; 5-6 pairs of gular setae, the posterior one with the greater length characteristic of the genus (Th. Clay 1966: 330). Posterior occipital suture dark, relatively elongate, wider in the female and without prominent forward occipital sutures. Temples not broad, bent backwards.

Thorax: Pronotum developed in the female, with 0.31-0.33 mm of breadth in the male $(n=2; x=0.320\pm0.010; V=4.375)$ and 0.34 mm in the female, with 3 anterolateral short setae and 2 + 3 long setae on the posterior margin. Metanotum moderately developed, large and wide, with 0.45 mm and 0.56 mm of breadth respectively in the male (n = 2) and the female (n = 1); posterior margin bordered by 5 + 5 moderately long and 1 very short setae in the male, 4 + 4 moderately long and 1 short setae in the female, and 3 spines and 1 very long posterolateral seta in both sexes. Metasternal late plate light, wide lozange-shaped, in the male with 1 anterior and 5 posterolateral setae and, in the female, with 1 anterior and 3 posterolateral setae.

Abdomen: Oval, in the male with 0.81-0.83 mm of length (n = 2; \bar{x} = 0.820 ± 0.010; V = 1.707) by 0.60-0.64 mm of breadth (x = $=0.620\pm0.020$; V=4.516); and, in the female, 1.0 mm by 0.80 mm. Terga of male with posterior margin straight on segments I-III, progressively more a little convexed on IV-VIII. and the marginal setae not contable on terga I to III, 16 on tergum IV (n = 1), 12-14 on $V (n = 2; x = 13 \pm 1; V = 10.877), 13-16 \text{ on}$ VI $(n = 2; x = 14.5 \pm 14.5 \pm 1.5; V = 14.628),$ 10-12 on VII $(n = 2; x = 11 \pm 1; V = 1.414)$ and 4 on VIII (n = 2); and, in the female, 19 on tergum I, 21 on terga II and III, 17 on IV, 16 on V and VI, 10 on VII and 4 on VIII. Posterolateral angles of sternite II (ô, ♀) not pedunculate. Sternal setae: in the male, central anterior and marginal setae not contable on sternites I-III, and, respectively, on sternite IV, 4 and 9 (n = 1), on sternite V, 4-7 (n = 2; \bar{x} = 5.5 ± 1.5; \bar{V} = 38.564) and 11-12 ($\bar{x} = 11.5 \pm 0.5$; V = 6.148), on sternite VI, 3-9 (n = 2; $\bar{x} = 6 \pm 3$; V = 70.716) and 7-8 ($\bar{x} = 7.5 \pm 0.5$; V = 9.427), on sternite VII, 3-7 (n = 2; $\bar{x} = 5 \pm 2$; V = 56.560) and 7-8 ($\bar{x} = 7.5 \pm 0.5$; V = 9.427), on sternite VIII, 3-5 (n = 2; \bar{x} = 4 ± 1; V = 35.350); and, in the female (n = 1), 2 central anterior and 12 marginal setae on sternite I and, respectively, 7 and 13 on sternite II, 4 and 14 on sternite III, 4 and 12 on sternite IV, 2 and 12 on sternite V, 2 and 9 on sternite VI, 5 and 7 on sternite VII and 2 + 2 and 5 on sternite VIII. Aster (♂, ♀) with 3 spine-like stout setae, the inner two longer. Sternites III-VI with lateral brushes of spinous short setae, in the male with 4-7 on segment III (n = 4sides; $\bar{x} = 5.750 \pm 0.750$; V = 26.086), 12-13 on IV ($\bar{x} = 12.250 \pm 0.250$; V = 4.082), 13-16 on V ($\bar{x} = 14.750 \pm 0.629$; V = 8.529), 14-17 on VI ($\bar{x} = 15.750 \pm 0.629$; V = 8.080) and 3-7 on VII ($x = 5.250 \pm 0.854$; V = 32.533); and, in the female, with 4-5 on segment III $(n = 2 \text{ sides}; \bar{x} = 4.500 \pm 0.500; V = 15.711),$ 10-14 on IV and V ($x = 12 \pm 2$; V = 23.567), 4-14 on VI ($\bar{x} = 9.000 \pm 5.455$; V = 78.567) and 4 on VII ($\bar{x} = 4 \pm 0$; V = 0). Pleurites relatively wide in the female, less in the male, narrowing backwards, without anterior setae; inner pleural seta VIII (8) a little longer than the outer (both broken in ?). Male genitalia: inwardly terminal arm of the basal plate narrow, long, slightly rounded,

not tapering posteriorly; parameres robust, broader anteriorly and narrowing in the middle, with the inner margin more or less regularly concavous; genital sclerite as in *Myrsidea picae* (Linnaeus), from *Pica p. pica* (Linnaeus) and *P. pica melanotos* Brehm (Corvidae), and in *M. seguyi* Tendeiro, from *Corvinella m. melanoleuca* (Jardine) (Laniidae). Vulvar margin moderately serrated from end to end.

DISCUSSION

Besides other features, the new species Myrsidea ugandensis may be distinguished easily from the other species of the group by the following characters: 1 — from M. seguyi, by the form and structure of the head (fig. 8 and photos 9 and 10 of Tendeiro 1958, and photos 1-3 of this paper), in seguyi with the anterior transversal arms of the gular plate much darker and strongly divergent, and the aster of the sternite II and the sternal brushes IV-IV much more strong (photos 5 and 6): and 2 — from M. picae, by the hypopharynx fully developed, much less in picae and with the gular plate darker and its anterior transversal arms more divergent and dark (photos 3 and 4) and by the sternal brushes more dense.

According its description and iconography, Myrsidea abhorrens distinguishes by: the sexual dimorphism strongly marked; the temples large, bent posteriorly; the male abdomen oval, with transverse pigment bands on each segment, divided by light intersegmental lines. reaching and not delimited from them, and with the last segment bag-shaped and elongated; the asters present only in the male, with three spines of unequal size, on protuberances of sternite II; the male genitalia massive at the basis; the female abdomen much more elongated than that of the male, with the two first sternites bent backwards and the last segments with brown genital spot wide U-shaped.

ACKNOWLEDGEMENTS

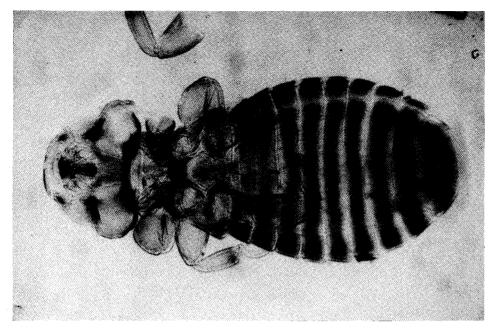
I am indebeted to Dr. Christopher H. C. Lyal and Miss Jenny Palmer, of the British Museum (Natural History), London, for the loan of the material.

Photos of the author.

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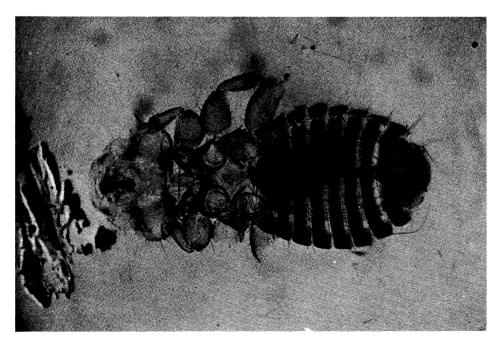


Photo 1 — Myrsidea ugandensis n. sp., &

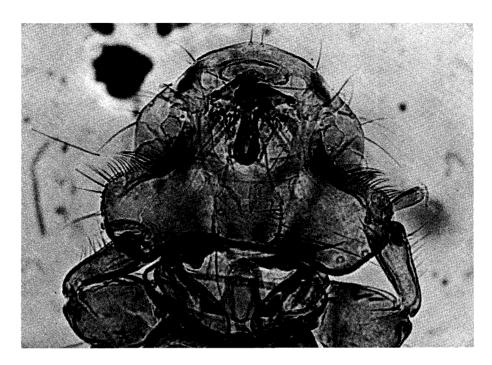


Photo $3-Myrsidea\ ugandensis\ n.\ sp.,\ \delta$. Head and prothorax of the holotype

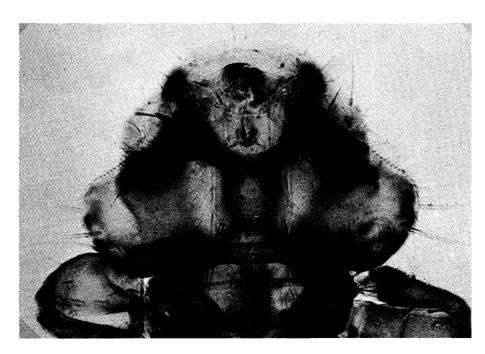


Photo $4-Myrsidea\ picae\ (Linnaeus),\ \delta$. Head. Specimen of $Pica\ pica\ melanotos\ Brehm$



Photo 6—Myrsidea seguyi Tendeiro, 3. Aster and sternal lateral brushes

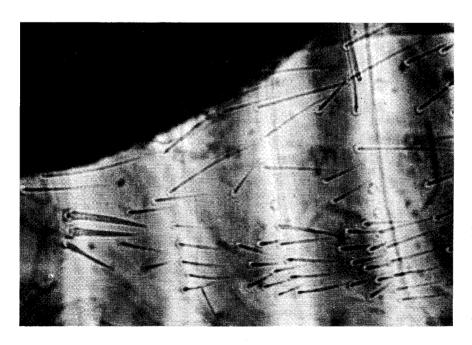


Photo 5-Myrsidea ugandensis n. sp., δ . Aster and sternal lateral brushes (detail)



Photo 8—Myrsidea picae (Linnaeus, 1758), specimen off Pica pica melanotos Brehm. Male genitalia

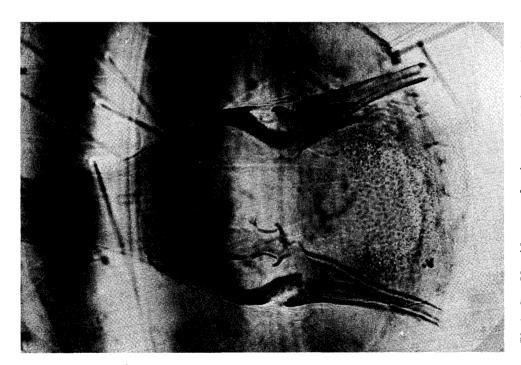


Photo 7 — Myrsidea ugandensis n. sp. Male genitalia